

PROFILING RESIDENTS BASED ON THEIR PERCEPTIONS AND ATTITUDE TOWARD SPORT EVENT: INSIGHTS FROM THE FIA WORLD RALLY CHAMPIONSHIP

Giacomo Del Chiappa

University of Sassari

Angelo Presenza

University of Molise

Murat Yücelen

Yeditepe University

This study aims at profiling residents based on their perceptions and attitude toward a motor sport event, namely the FIA World Rally Championship. A structured questionnaire was developed and responses from a convenience sample of 759 residents were collected face-to-face in Olbia (Sardinia, Italy), the main municipality involved in the event. A two-step cluster analysis was applied to the seven factors identified by running exploratory factor analysis on a list of 46 statements used to investigate residents' perceptions and attitudes. Results show that residents perceptions and attitudes are not homogeneous and that four clusters can be identified with significant differences based on their socio-demographic characteristics. "Supporters" is the biggest one, followed in decreasing order of size, by: "Neutrals", "Enthusiasts but culturally and environmentally concerned" and "Critics". Contributions to the body of knowledge and managerial implications are discussed and suggestions for further research are given.

Keywords: *Perceptions, impacts, motor sport event, socio-demographic characteristics, cluster analysis, Italy.*

INTRODUCTION

Events are an important motivator of tourism (Getz, 2008) and play a highly relevant role for any hosting destination (Hall, 1992), particularly for rural and peripheral destinations (Lee, Kyle and Scott, 2012). Researchers concur that sport events are an important vehicle for economic development, a way to develop destination brand awareness and image (e.g. Brown, Chalip, Jago and Mules, 2004), a stimulator for tourism demand and/or an expander of tourism seasonality, a lever to enhance the community pride and their spirit of hospitality (e.g. Getz, 2008; Ritchie, Shipway and Cleeve, 2010). This contributes to explain why destination marketers and policymakers have widely recognized sport events as integral tools in their destination marketing operations. Sport events, like any other type of events, provide long-term impacts on the hosting destination before, during and after the event is finished (e.g. Roche, 1994). Sometimes, residents might tend to glorify the positive impacts while ignoring or underestimating the negative ones, or vice versa (e.g. Kim, Gursoy and Lee, 2006).

Underestimating the power of public debate and support may result in time-consuming, often bitter battling over costs which is likely to be fueled by media criticism (Gursoy and Kendall, 2006). Hence, assessing the residents' perception and attitudes toward the positive and negative impacts of sport events, and integrating community interests into decision making are pivotal to develop local support (e.g. Kim and Walker, 2012; Konstantaki & Wickens, 2010; Prayag, Hosany, Nunkoo and Alders, 2013; Ritchie et al., 2009; Fotiadis, Vassiliadis, and Soteriades, 2016; Fotiadis, Vassiliadis, and Yeh, 2016; Fotiadis, Xie, Li, and Huan, 2016; Fu & Kapiki, 2016; Küçükaltan & Pirnar, 2016;) and to cope with the

principles of sustainability. The need to attain community support when organizing a sport event is essential, given that existing studies highlighted that the success of special events depend more on the enthusiasm of the local community and event organizers than on the unique nature of home-made attractions (Getz, 1993). Further, “research on residents attitudes and perceptions toward tourism is an essential point of departure for tourism planning, aimed at the provision of an enjoyable tourism product for both tourists and residents” (Presenza, Del Chiappa and Sheehan, 2013: 22).

Despite this, in the last few years there has been a lack of research aimed at adequately capturing residents’ perceived benefits and costs of hosting sport events (Kim, Jun, Walker and Drane, 2015). Further, it is also evident that the impacts may be evident when considering certain types of sport events. Hence, it could be argued that it is quite difficult to identify any generalizable patterns and knowledge that help to understand why certain impacts are more or less apparent at different events (Ohmann, Jones and Wilkes, 2006). That said, it could be argued that there is a need for carrying out impact studies in a variety of locations and considering different type of sport events (Ohmann et al, 2006; Nella & Christou, 2016; Slak Valek, 2015). Further, no published paper has precisely examined residents’ perceptions and attitudes in the context of a motor sport event. This study was therefore carried out with the aim of contributing to this relatively under-investigated tourism research area. Specifically, this paper aims at profiling a sample of 759 residents based on their perceptions and attitude toward the positive and negative externalities that the FIA World Rally Championship, a motor sport event hosted in Sardinia since 2004, generate over their city (Olbia). Further, it aims at verifying whether any significant differences exist among the clusters based on socio-demographic characteristics of respondents.

RESIDENTS PERCEPTIONS AND ATTITUDE TOWARD SPORT EVENTS

During the last few decades, researchers have been concurring that understanding host communities' perceptions and attitude toward any type of tourism development is pivotal. Hence, such an approach is needed even in the field of event-based sport tourism (e.g. Waitt, 2003) where a clear assessment about the level of residents' support/opposition toward the event, and a deep understanding of the main antecedents that shape it, are certainly crucial (Hernandez, Cohen and Garcia, 1996) to the success of the event. The local community represents one of the main stakeholders, as it is the one most closely affected by the economic, environmental and socio-cultural impacts of sport tourism. A deep understanding of residents' perceptions and attitudes toward tourism development generated by organizing sport events is pivotal to obtain their further support (e.g. Ap, 1992). To ensure that the economic, socio-cultural and environmental benefits of tourism development outweigh the related costs, a collaborative policy making approach (Gray, 1989; Vernon, Essex, Pinder and Curry, 2005) and a democratic and participatory event planning (Jafari, 1990) among local authorities, government agencies, businesses and host communities is needed. This circumstance is also needed to ensure that the different types of stakeholders effectively interact among themselves, thus resolving conflicts, advancing a shared vision (Gursoy and Kendall, 2006; Jamal and Getz, 1995), jointly meeting visitor needs, and producing the experience that event spectators and residents consume alike.

That said, it is evident that in an attempt to acquire community support, destination marketers, policy makers and event planners should effectively assess residents' perceptions of the economic, socio-cultural and environmental externalities generated by the event, in order to ascertain that the positive ones outweigh the negative ones (e.g. Kim and Walker, 2012; Prayag et al, 2013). According to the social exchange theory (Ap, 1992) and its application in the context of event-based sport tourism (e.g. Waitt,

2003), residents will be more willing to support the event if they perceive that the positive impacts outweigh the negative ones.

The positive economic impacts of sport events include tax revenues, employment and source of income, increased publicity, potential investment in new infrastructure, urban regeneration, and the creation of new facilities that can be enjoyed by both visitors and residents (e.g. Kang & Perdue, 1994; Konstantaki and Wickens, 2010; Ritchie et al, 2009). Positive social impacts could include community pride, improved quality of life, strengthened local traditions and identity, and increased level of sports participation in sport activities (e.g. Ritchie et al, 2009). Positive environmental impacts could be related to the preservation of the physical environment and local heritage (e.g. Deccio and Baloglu, 2002).

As well as producing positive impacts and benefits to residents, it is evident that hosting sport events can also produce negative economic, social and environmental impacts. Negative economic impacts could be related to an increase in the prices of goods, services and property, thus generating an economic and social burden on the local community (e.g. Deccio and Baloglu, 2002); further, the perception of increased costs could make the destination less attractive for prospective visitors (e.g. Ritchie, 1984). Negative social impacts could be related to security issues over access to recreation facilities, traffic congestion, increase in petty crimes and noise pollution (e.g. Fredline, 2004; Kim et al, 2015; Kostantaki and Wickens, 2010; Ritchie et al, 2009). Finally residents are seriously concerned about environmental pollution, deterioration of air quality, increased soil and ground water contamination and destruction of existing ecosystems (e.g. Konstantaki and Wickens, 2010; Tatoglu and Erdal, 2002).

Prior literature found several factors affecting residents' attitude toward tourism. According to Faulkner and Tideswell (1997), these factors can be categorized as extrinsic and intrinsic. The former are related to the characteristics of the destination itself (e.g. the stage of tourism development and/or the degree of tourism

seasonality), while the latter refers to the characteristics of the host community members (e.g. socio-demographic characteristics, the geographical proximity to the tourist area, etc). Accordingly, in the current tourism literature devoted to the analysis of residents' perceptions and attitudes toward event-based sport tourism, intrinsic factors might be, among others, the socio-demographics characteristics (Kim and Walker, 2012; Konstantaki and Wickens, 2010) such as gender, age (Mason and Cheyne, 2000), social status (Ritchie et al, 2009), education, occupation and income (Waitt, 2003). Further, one could consider also the geographical proximity to the event and/ or tourist area (Fredline, Jago and Deery, 2003; Ritchie and Inkari, 2006), the length of residency, the community attachment (Gursoy and Kendall, 2006), and the degree of residents' involvement in the event planning (Bachleitner and Zins, 1999). For example, in prior studies, residents who lived closer to the venue were less supportive than those residents living further away (Mason and Cheyne, 2000; Ritchie et al, 2009) probably due to traffic congestion and parking issues identified by residents residing closer to the event area. Positive social impacts were perceived more positively by younger residents, living in the area for up to 3 years (Ritchie et al, 2009), thus partially disconfirming prior studies (e.g. Ap, 1992) showing that the further away people live from the tourism activity, the stronger the negative attitudes.

In current literature, it is widely recognized that grouping residents based on their perceptions and attitudes towards tourism might provide useful information to policy makers and tourism developers (e.g. Oviedo-Garcia, Castellanos-Verdugo, Martin-Ruiz, 2008). Despite this accord, few studies have adopted applied cluster analysis in the context of sport events.

METHODOLOGY

This study aims at profiling residents based on the perceptions they have of the impacts generated by the 2013 Federation Internationale de l'Automobile (FIA) World Rally Championship (WRC) (21 - 22 June 2013). WRC was established in 1973 and is widely regarded as the most challenging motorsport championship in the world. Sardinia has hosted Italy's FIA WRC since 2004. Sardinia's rugged island geology, rivers, coastlines, flora, and Mediterranean ecosystem offer a contrasting stage to the carbon-fuelled mechanical muscle of its WRC.

For the purposes of this study, a survey was designed with statements/items sourced from previous published studies aimed at analyzing residents' perceptions and attitudes toward sport events (namely: Konstantaki and Wickens, 2010; Ohmann et al, 2006; Song, Xing and Chathoth, 2015; Ritchie et al, 2009). Specifically, it was composed of two sections. The first asked respondents about their general socio-demographic characteristics (gender, age, education, etc.) and about their general interest in rally as a sport (multiple choice). The second asked respondents to indicate their level of agreement with 46 statements used to investigate residents' perceptions of positive and negative impacts generated by the event and their willingness to support further development of tourism. Their answers were recorded on a 5-point Likert scale (1= strongly disagree, 5 = strongly agree). The questionnaire was pilot tested with a sample of 30 residents to verify the validity of its content and the comprehensibility of the questions and the adopted scale measurement. No concerns were reported in the pilot tests.

Data were collected in Olbia, the main venue of the 2013 WRC edition. In 2013, Olbia (North-East, Sardinia - Italy) had a total of 57.889 inhabitants. The city is not only the main venue of the 2013 WRC, but it is also the gateway for one of the most well-established marine tourism destinations in Italy and in the world, namely the Emerald Coast (Pulina, Meleddu and Del Chiappa, 2014).

Data were collected by means of face to-face interviews conducted by 10 trained interviewers directly supervised by the

authors. Only people aged 16 or above were asked to take part in the survey. Data were collected in the three weeks after the event (23 June – 14 July). A total of 1,200 potential respondents were approached by the interviewees, of which 759 accepted to fill out the survey, thus originating a response rate of 63.25%.

FINDINGS AND DATA ANALYSIS

Table 1 shows the socio-demographic characteristics of respondents. Most of them were reported to be females (58.9%), in the 26-35 (25.1%) or 36-45 (25.8%) age groups; administrative workers (42.3%) or freelance workers (22.3%); they reported to be working in the service sector (78.8%) or in tourism (8.8%), with no economic reliance on the rally event (95%), married/cohabiting (62.9%) and having a high school degree (53.6%). Further, the majority of them have resided in the municipality for more than 30 years (49%), not very close to the tourist areas (65.59% over 6 Km). In addition, 39.04% of respondents interact frequently with tourists in everyday life and are not members of any type of association (e.g. cultural, sport, etc.) (80.76%).

Table 1. Socio-demographic characteristics of the sample

Variable	%	Variable	%
Gender		University	13.3
Female	58.9	Post-Graduate	1.8
Male	41.1	Civil Status	
Age		Single	28.6
16-25	17.9	Married/cohabiting	62.9
26-35	25.1	Divorced/separated/widow	8.5
36-45	25.8	Sector	
46-55	15.3	Agriculture	1.6
56-65	7.4	Industry	10.8
> 65	8.6	Services	78.8
Occupation		Tourism	8.8
Employee	42.3	Annual income (Euro)	
Self-employed	22.3	> 10.000	13.2
Retired	8.8	10.000 - 19.999	15.9
Unemployed	10.5	20.000 - 29.999	7.7
Student	12.8	30.000 - 39.999	10.4
Other	3.3	40.000 - 49.999	2.1
Education		50.000 - 59.999	10.7
None	1.3	60.000 - 69.999	0.3
Primary	5.9	70.000 - 89.999	-
Middle	24	≥ 90.000	0.7

Diploma

53.6

Prefer not to answer

47.00

Out of the total sample, 63.5% of respondents reported not being interested in the rally at all or sporadically watching it on television with family and friends, 20% considered themselves as being highly involved with rally as a sport, whilst the remaining part of the interviewees reported being interested only when the rally event takes place in Sardinia. In addition, a significant percentage of respondents reported to have poor or no interaction with tourists visiting Sardinia for the purpose of attending the Rally event (40%). All that said it could be argued that the local community does not seem to be highly interested in, and directly involved with, the World Rally Championship.

For the purposes of the study, a factor-cluster analysis was adopted. Hence, an exploratory factor analysis, Principal Component Analysis and Varimax rotation were used to reveal the underlying factors in the data. As a result of a series of exploratory factor analyses, five items which destabilized the model by grouping under multiple factors were progressively dropped. Hence, seven factors were identified (57.33% of total variance) based on the remaining 41 items (Table 2).

Table 2. Results of PCA and extracted factor names

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Survey Items*	Positive socio-cultural impacts	Positive economic impacts	Support to local projects and quality of life	Positive environmental	Negative environmental	Negative socio-cultural	Cost-benefit balance

*TOURISMOS: AN INTERNATIONAL MULTIDISCIPLINARY JOURNAL OF
TOURISM*

Volume 11, Number 5, pp. 26-51

UDC: 338.48+640(050)

impacts impacts impacts e

A23	.768		
A17	.744		
A22	.707		
A18	.692		
A16	.676		
A24	.644		
A28	.561		
A27	.535		
A19	.534		
A43	.519		
A25	.481		
A29	.416		
A5	.802		
A6	.795		
A7	.723		
A1	.648		
A9	.572		
A46	.453		
A4		.643	
A14		.608	
A12		.588	
A8		.542	

Giacomo del Chiappa, Angelo Presenza & Murat Yücelen

A3			.536				
A13			-.488				
A10			.453				
A2			-.452				
A32				.718			
A31				.690			
A35				.631			
A30				.523			
A38				.521			
A39					.840		
A40					.833		
A41					.765		
A37					.592		
A33						.777	
A34						.715	
A42						.514	
A15						.444	
A44							.716
A45							.659
<hr/>							
Eigenvalues	11.352	4.311	2.261	1.933	1.290	1.244	1.112
% of Variance	27.69	10.52	5.52	4.72	3.15	3.03	2.7
% Cumulative	27.69	38.2	43.73	48.45	51.6	54.63	57.33

Cronbach's Alpha	0.906	0.857	0.802	0.805	0.797	0.714	0.671
---------------------	-------	-------	-------	-------	-------	-------	-------

*Item numbers correspond with the survey items as presented in Table 3

The KMO-index (Kaiser-Myer-Olkin = 0.924) and the Bartlett's test of sphericity (.820) revealed an acceptable level of dataset reliability with significance at the <0.01 level, thus confirming that the obtained results adequately explain the data. Cronbach's alpha was then calculated (0.917) to test the reliability of the extracted factors; all values are around 0.7 or higher, thus suggesting that the factors are reliable (Table 2). Factor 7 was retained despite its alpha coefficient which is slightly below 0.7; this decision can be justified by the fact that the eigenvalue of item 7 can be considered acceptable and because the extracted factor was deemed to be meaningful for the purposes of the study.

The first component was named "Positive socio-cultural impacts" (27.69% of total variance) and comprises items describing the residents' perceptions toward the positive socio-cultural impacts generated by the event. "Positive economic impacts" (10.52% of total variance) includes items related to positive economic impacts that the event produces on the hosting destination in terms of job opportunities and increase in trade for local businesses. "Support to local projects and quality of life" (5.52% of total variance) contains items describing the positive support that hosting the event can generate by providing the host destination with money and opportunities to support local projects and contribute to the quality of life. "Positive environmental impacts" (4.72% of total variance) includes items describing the positive environmental impact that the event produces, such as allowing to preserve the environment, to enhance the landscape and to exploit the cultural heritage. "Negative environmental impacts" (3.15% of total variance) describes the residents' concerns toward the negative environmental impacts that the event can create in terms of pollution, over-production of garbage and noise. "Negative socio-cultural impacts" (3.03% of

total variance) is strictly related to residents' concerns toward the negative socio-cultural impacts that the WRC can create in terms of safety and security standards and in terms of host-guest interaction. Finally, "Cost-benefit balance" (2.7% of total variance) includes items related to the most important aspect of hosting a motor sport event i.e., the ability to generate a positive cost-benefit balance and to assure that the route infrastructure is able to cope with emergency situations

The scores of the five principal components were entered into a cluster analysis. According to Hair, Black, Babin, and Anderson (2009), a hierarchical cluster (Ward method – Manhattan distances) was performed, and four groups emerged. Then, a non-hierarchical method (k-means) was applied to factor scores defining four different groups of residents, namely: "Supporters" (cluster 3) "neutrals" (cluster 2), "Enthusiasts but culturally and environmentally concerned" (cluster 4), and "critics" (cluster 1) (Table 3).

**Table 3. Comparative analysis of the level of agreement of different groups of residents
(mean value)**

	Cluster 1	Cluster 2	Cluster 3	Cluster 4
Hosting FIA World Rally Championship...	Mean (N=146)	Mean (N=212)	Mean (N=250)	Mean (N=151)
F1: Socio-cultural impacts	-0.45	0.31	0.26	-0.42
F2: Economic impacts	0.07	-0.22	-0.14	0.47
F3: Investments and costs	-0.40	-0.16	0.51	-0.23
F4: Ambiance improvement	-0.48	0.69	-0.26	-0.07
F5: Environmental effects	-1.29	0.30	0.00	0.82
F6: Security	0.07	-0.05	-0.53	0.88
F7: Benefits of tourism development	-0.20	-0.66	0.35	0.54
A1: Increases job opportunities	2.95	3.08	3.47	3.65
A2: Generates a crowding out effect on other relevant projects	3.11	3.77	2.90	4.19
A3: Increases public investments and infrastructures	2.88	2.83	3.27	2.89
A4: Improves infrastructures (roads, water pipes etc.)	2.28	2.58	3.08	2.54
A5: Generates benefits for the economy of my city	3.25	3.33	3.62	3.97
A6: Generates benefits for the economy of my province	3.18	3.33	3.25	3.86
A7: Generates benefits for the economy of my region	2.99	3.39	3.28	3.69
A8: Increases private investments and infrastructures	2.88	3.12	3.18	2.79
A9: Increases trade for local businesses	2.86	3.17	3.35	3.25

Giacomo del Chiappa, Angelo Presenza & Murat Yücelen

A10: Increases the income of local people	2.40	3.02	3.15	2.87
A12: Generates money to support and sustain local projects	2.32	2.83	3.21	2.93
A13: Increase the price to which product and services can be sold	3.49	3.42	2.90	4.16
A14: Enhances the quality of life of residents	2.21	2.82	3.15	2.68
A15: Influences the way I can manage my daily life	3.19	3.65	2.76	4.33
A16: Allows to meet new people and to experience new cultures	2.90	3.32	3.47	3.20
A17: Increases the number of cultural and recreational activities	2.56	3.10	3.36	2.79
A18: Revitalizes local traditions and authenticity	2.55	3.29	3.38	2.85
A19: Enhances the quality of local tourism/commercial infrastructure	2.74	3.36	3.51	3.20
A22: Brings residents and visitors together and facilitate their dialogue	2.79	3.43	3.37	3.19
A23: Enhances social and cultural life for local people	2.62	3.38	3.35	2.82
A24: Builds community pride and identity	2.76	3.59	3.40	2.97
A25: Enhances the quality of public services	2.32	3.29	3.18	2.88
A27: Generates greater participation in sports	2.65	3.53	3.19	2.95
A28: Makes my city a more interesting place in which to live and work	2.38	3.25	3.08	2.63
A29: Spreads the tourism seasonality of our destination	3.16	3.58	3.26	3.42
A30: Enhances the conservation and exploitation of cultural heritage	2.32	3.24	3.02	2.56
A31: Enhances physical and socio-cultural	2.29	3.37	2.90	2.88

settings

A32: Enhances rural setting and landscape	2.16	3.34	2.81	2.72
A33: Increases low-level crimes	3.51	3.16	2.96	4.42
A34: Generates safety/security issues in the city	3.17	2.99	3.07	4.35
A35: Enhances security standards of the city	2.76	3.26	2.95	2.61
A37: Generates traffic congestion and parking problems	2.09	2.98	2.90	3.81
A38: Enhances environmental protection	2.25	2.81	2.88	2.37
A39: Increases environmental pollution	1.86	3.27	2.94	3.74
A40: Leads to an increase in noise levels which will disturb residents	1.84	3.20	2.84	3.84
A41: Increases significantly the waste/garbage	1.94	3.28	2.90	3.83
A42: Encourage the wrong type of people/visitors to the area	3.15	3.68	2.95	4.32
A43: Enhances local residents' spirit of hospitality	3.04	3.28	3.39	3.23
A44: Routes cope with emergency services	2.28	2.48	3.12	3.09
A45: Generates more benefits than costs	2.89	2.88	3.31	3.48
A46: Makes me willing to support further tourism development	3.76	3.38	3.91	4.28

“Supporters” is the largest group (32.9%) mostly made up of females (67.2%) belonging to the 36-50 age group (45.6%), administrative workers (34.4%) or retired with a high school diploma (62.8%). Overall, they reported to have a moderate (42.4%) or very little (34.8%) interaction with tourists; 62.9% of them do not have interaction with tourists visiting Sardinia with the purpose of attending the Rally. On the whole, they believe the rally event is

economically and socio-culturally beneficial and support a further tourism development of the city.

“Neutrals” (27.9%) are mostly females (57.5%) belonging to the 20-35 age groups (38.7%) with a high degree (45.3%), administrative workers (46.2%), with a low level of interaction both with tourists in general (44%) and tourists attending the event especially (52.8%). They express a relatively neutral position regarding both positive and negative impacts, and they appear to be not willing to support a further tourism development.

“Enthusiasts but culturally and environmentally concerned” (19.9%) are mostly males (55.6%), belonging to the 21-40 age groups (58.3%), with a high degree (48.3%) or university degree (22.5%), administrative workers (51%). Further, they reported to have a moderate (27.8%) or high (30.5%) level of interaction both with tourists in general (53.6%) and tourists attending the event especially (53.6%). Overall they seem to be enthusiastic about the positive economic impacts generated by the event. However, they seem to be skeptical about the positive socio-cultural and environmental impacts, and quite concerned about the negative ones that the event creates in the same area. Despite these issues, they demonstrate the highest level of support for further tourism development.

Finally, “Critics” (19.2%) are mostly females (61.6%), aged 18-35 (50.6%), with high degree (55.5%), administrative workers (41.1%), with a low level of interaction with both tourists in general (45.9%) and tourists attending the Rally (66.4%). They score low on almost all the items describing the positive impacts that the event can generate and are particularly concerned about the safety and security issues during the rally.

Finally, a series of chi-square analyses were conducted in order to assess whether significant differences exist among the four clusters based on socio-demographic parameters. Significant differences were found based on gender ($\chi^2=20.895$, $p=0.000$), age ($\chi^2=80.822$, $p=0.000$), civil status ($\chi^2=22.611$, $p=0.031$), education

($\chi^2=38.251$, $p=0.001$), occupation ($\chi^2=45.366$, $p=0.000$), contact with tourists in everyday life ($\chi^2=40.660$, $p=0.002$), and contact with tourists visiting Sardinia with the purpose of attending the Rally event ($\chi^2=18.265$, $p=0.000$).

DISCUSSION, CONCLUSION AND IMPLICATIONS

The aim of this study was to deepen the scientific debate about residents' perceptions and attitudes toward a motor sport event. The cluster analysis applied to the scores of the seven factors identified through the exploratory factor analysis ("positive socio-cultural impacts", "positive economic impacts", support to local projects and quality of life", "positive environmental impacts", "negative environmental impacts", "negative socio-cultural impacts", "cost-benefit balance") showed that residents' perceptions and attitudes are not homogenous. Specifically, four clusters were identified: "supporters", "neutrals", "enthusiasts but culturally and environmentally concerned" and "critics", among which "supporters" was the largest segment. In this sampling universe the majority of the respondents support or are enthusiastic about the event and would be willing to support a further tourism development in the city. Despite this finding, supporters and enthusiasts are nevertheless quite concerned about the social negative externalities and particularly the environmental impacts. This latter point could be explained by referring to the relevant role that natural resources exert in determining the destination image, reputation and competitiveness not only for Olbia but also for Sardinia as a whole (Brida, Del Chiappa, Meleddu and Pulina, 2014).

Findings revealed that significant differences do exist between clusters, based on gender, age, civil status, education, occupation, contact with tourists in everyday life, and contact with tourists visiting Sardinia with the purpose of attending the Rally event. This result is consistent with previous studies which report that socio-demographic variables exert a moderating effect on residents'

perceptions and attitudes. However, our study reveals somewhat contradictory findings. For example, although results confirm that age moderates residents' perceptions (e.g. Mason and Cheyne, 2000), in this study, youngest residents were the most critical with respect to the impacts of the event and not the more supportive as suggested by other studies (e.g. Konstantaki and Wickens, 2010). This result may be in accordance with academic research reporting young people and females expressing a stronger responsibility regarding the environment (e.g. Ballantine and Eagles, 1994). Overall, our results also suggest that when analyzing residents' perceptions toward event-based sport tourism, attention should also be given to personal values of respondents rather than focusing only on their socio-demographic characteristics. Indeed, as suggested by Williams and Lawson (2001), focusing just on the moderating factors of socio-demographic characteristics might render findings of cluster analysis very site-specific, hardly generalizable and linked more to the town in which respondents live, rather than to cluster membership.

These findings are relevant for both researchers and practitioners. On the one hand, they contribute to the current scientific debate about residents' perceptions and attitude toward event-based sport tourism by providing insights into a specific geographical context (Italy, Sardinia) and from a specific type of sport event (i.e. motor sport event) to which very few studies have been devoted. Furthermore, this study, similarly to what is suggested by previous research, calls for further research focusing more on assessing the moderating effect that non-related socio-demographic variables (e.g. community attachment, personal values, ecocentric attitude, etc) exert on residents' perceptions and attitudes.

On the other hand, the presented findings provide destination marketers, policymakers and event organizers with a basis for a focused approach to event planning. Results highlight that the majority of respondents are not highly interested in such a renowned worldwide Rally event that takes place in their community. Hence,

practitioners should make a greater effort to promote and communicate the event to the whole community by emphasizing more the benefits that it brings to the destination. Furthermore, given that respondents seem to be concerned about the negative socio-cultural and environmental externalities of the event (noise, security issues, traffic congestion, etc.) policy makers should devise and implement tangible actions and policies to actually deal with residents' concerns. Finally, findings highlight the relevant role that internal marketing and communication should play in an effort to increase the favourableness of residents' attitudes toward tourism (e.g. Madrigal, 1995). The proactive use of internal marketing operations would allow destination marketers and policy makers to better communicate relevant issues to residents in order to increase the overall support for the event (Ritchie et al, 2009). Based on the results of this study, these messages should be tailored taking into account the socio-economic and demographic characteristics of the different segments of residents.

In spite of the theoretical and managerial contributions, this study does have its limitations. First, it is highly site-specific and based on a convenience sample, thus findings cannot be generalized. Further, this study did not assess the moderator effect that non-related socio-demographic variables could exert on residents' perceptions and attitudes. These aspects would merit attention in future research. Beyond the limitations, it is important to assess whether, and the extent to which, residents' perceptions and attitudes toward the event change or remain static over time as a consequence of the internal marketing operations and/or actual policies and strategies adopted by the policy makers and event planners. Hence, it would be interesting to repeat the data collection over time with the aim of developing a longitudinal study.

ACKNOWLEDGEMENT

The authors are grateful to the anonymous reviewers for their valuable help and suggestions in enhancing the quality of the manuscript.

References

- Ap, J. (1992). Residents' perceptions on tourism impacts. *Annals of Tourism Research*, Vol. 19, No.4, pp. 665-690.
- Bachleitner, R. & Zins, A. (1999). Cultural tourism in rural communities: The residents' perspective. *Journal of Business Research*, Vol. 44, No.3, pp.199-209.
- Ballantine, J.L., & Eagles P.F. (1994). Defining Canadian ecotourists. *Journal of Sustainable Tourism*, Vol. 2, No.4, pp. 210–214.
- Brida, J.G., Del Chiappa, G., Meleddu, M. & Pulina, M. (2014). A comparison of residents' perceptions in two cruise ports in the Mediterranean Sea. *International Journal of Tourism Research*, Vol. 16, No. 2, pp. 180-190.
- Brown, G., Chalip, L., Jago, L. & Mules, T. (2004). Developing Brand Australia: examining the role of events. In N. Morgan and A. Pritchard (Eds.) *Destination Branding: Creating the Unique Destination Proposition*, Burlington, MA: Elsevier Butterworth-Heinemann.
- Deccio, C. & Baloglu, S. (2002). Non host community resident reactions to the 2002 Winter Olympics: The spillover impacts. *Journal of Travel Research*, Vol. 41, No.1, pp. 46-56.
- Faulkner, B. & Tideswell, C. (1997). A framework for monitoring community impacts of tourism. *Journal of Sustainable Tourism*, Vol. 5, No. 1, pp. 3-28.
- Fotiadis, A., Vassiliadis, C. & Soteriades, M. D. (2016a) The preferences of participants in small-scale sport events: A conjoint analysis case study from Taiwan. *Tourism: An International Interdisciplinary Journal*, Vol. 64, No 2, pp: 175 - 187.
- Fotiadis, A., Vassiliadis, C. & Yeh, S. (2016b) Participant's preferences for small-scale sporting events: a comparative analysis of a Greek and a Taiwanese cycling event. *EuroMed Journal of Business*, Vol. 11, No 2, pp:232 - 247.

- Fotiadis, A., Xie, L., Li, Y. & Huan, T.-C. T. C. (2016c) Attracting athletes to small-scale sports events using motivational decision-making factors. *Journal of Business Research*, Vol. 69, No. 11, pp:5467-5472.
- Fredline, E. (2004). Host community reactions to motorsport events: The perception of impact on quality of life. In B. Ritchie and D. Adair (Eds) *Sport tourism: Interrelationships, impacts and issues*, Clevedon: Channel View Publications.
- Fredline, E., Jago, L. & Deery, M. (2003). The development of a generic scale to measure the social impacts of events. *Event Management*, Vol. 8, No. 1, pp. 23-37.
- Fu, J., & Kapiki, S. (2016). Reengineering knowledge for e-tourism and hospitality Curricula. *Journal of Tourism, Heritage & Services Marketing*, Vol. 2, No. 2, pp. 23-32. doi:10.5281/zenodo.376345
- Getz, D. (1993). Festival and Special Events. In M.A. Khan, M.D. Olsen and T. Var (Eds) *Encyclopedia of hospitality and tourism*, New York, NY: Van Nostrand Reinhold.
- Getz, D. (2008). Event tourism: Definition, evolution, and research. *Tourism Management*, Vol. 29, No. 1, pp. 403-428.
- Gray, B. (1989). *Collaborating: finding common ground for multiparty problems*, San Francisco: Jossey-Bass.
- Gursoy, D. & Kendall, K. W. (2006). Hosting mega events e modeling locals support. *Annals of Tourism Research*, Vol. 33, No. 3, pp. 603-623.
- Hair, J.F., Black, W.C., Babin, B.J. & Anderson, R.E.(2009). *Multivariate Data Analysis* (7th ed.). Upper Saddle River, NJ, Prentice Hall.
- Hall, R. (1992). The strategic analysis of intangible resources. *Strategic Management Journal*, Vol. 13, No. 2, pp. 135-144.
- Hernandez, A., Cohen, J. & Garcia, L.H. (1996). Residents' Attitudes toward an instant resort enclave. *Annals of Tourism research*, Vol. 23, No. 4, pp. 755-779.
- Jafari, J. (1990). Research and scholarship: The basis of tourism education. *Journal of Tourism Studies*, Vol. 1, No. 1, pp. 33-41.
- Jamal, T.B. & Getz, D. (1995). Collaboration theory and community tourism planning. *Annals of Tourism Research*, Vol. 22, No.1, pp. 186-204.
- Kang, Y.S., & Perdue, R. (1994). Long-term impact of a mega-event on international tourism to the host country: a conceptual model and the

- case of the 1988 Seoul Olympics. *Journal of International Consumer Marketing*, Vol. 6, No.(3-4), pp. 205-225.
- 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*, Vol. 27, No.1, pp. 86-96.
- Kim, W. & Walker, M. (2012). Measuring the social impacts associated with Super Bowl XLIII: preliminary development of a psychic income scale. *Sport Management Review*, Vol. 15, No. 1, pp. 91-108.
- Kim, W., Jun, H.M, Walker, M. & Drane, D. (2015). Evaluating the perceived social impacts of hosting large-scale sport tourism events: Scale development and validation. *Tourism Management*, Vol. 48, No. 1, pp. 21-32.
- Konstantaki, M. & Wickens, E. (2010). Residents' perception of environmental and security issues at the 2012 London Olympic Games. *Journal of Sport and Tourism*, Vol. 15, No. 4, pp. 337-357.
- Küçükaltan, E., & Pirnar, I. (2016). Competitiveness factors of a tourism destination and impact on residents' quality of life: The Case of Cittaslow-Seferihisar. *Journal of Tourism, Heritage & Services Marketing*, Vol. 2, No. 1, pp. 22-29. doi:10.5281/zenodo.376332
- Lee, J., Kyle, G. & Scott, D. (2012). The Mediating Effect of Place Attachment on the Relationship between Festival Satisfaction and Loyalty to the Festival Hosting Destination. *Journal of Travel Research*, Vol. 51, No.6, pp. 754-767.
- Madrigal, R. (1995). Residents' perceptions and the role of government. *Annals of tourism research*, Vol. 22, No.1, pp. 86-102.
- Mason, P. & Cheyne, C. (2000). Residents' attitude to proposed tourism development. *Annals of Tourism Research*. Vol. 27, No.2, pp. 391-411.
- Nella, A., & Christou, E. (2016). Extending tourism marketing: Implications for targeting the senior tourists' segment. *Journal of Tourism, Heritage & Services Marketing*, Vol. 2, No. 1, pp. 36-42. doi:10.5281/zenodo.376336
- Ohmann, S., Jones, I. & Wilkes, K. (2006). The Perceived Social Impacts of the 2006 Football World Cup on Munich Residents. *Journal of Sport & Tourism*, Vol. 11, No.2, pp. 129-152.
- Oviedo-Garcia, M.A., Castellanos-Verdugo, M. & Martin-Ruiz, D. (2008). Gaining residents' support for tourism and planning. *International Journal of Tourism Research*, Vol. 10, No.2, pp. 95-109.

- Prayag, G., Hosany, S., Nunkoo, R. & Alders, T. (2013). London residents' support for the 2012 Olympic Games: The mediating effect of overall attitude. *Tourism Management*, Vol. 36, No.1, pp. 629-640.
- Prezenza A., Del Chiappa G. & Sheehan L. (2013). Residents' engagement and local tourism governance in maturing beach destinations. Evidence from an Italian case study. *Journal of Destination Marketing & Management*, Vol. 2, No. 1, pp. 22-30.
- Pulina, M., Meleddu, M. & Del Chiappa, G. (2013). Residents' choice probability and tourism development. *Tourism Management Perspectives*, Vol. 5, pp. 57-67.
- Ritchie, B. & Inkari, M. (2006). Host community attitudes toward tourism and cultural tourism development: the case of the Lewes District, Southern England. *International Journal of Tourism Research*, Vol. 8, No.1, pp. 27-44.
- 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*, Vol. 14, No.1, pp. 143-167.
- Ritchie, J.B. (1984). Assessing the impact of hallmark events: conceptual and research issues. *Journal of Travel Research*, Vol. 23, No.1, pp. 2-11.
- Roche, M. (1994). Mega-events and urban policy. *Annals of Tourism research*, Vol. 21, No.1, pp. 1-19.
- Slak Valek, N. (2015). Tourism expenditure according to mode of transportation: A comparative study between 2009 and 2012 *Journal of Tourism, Heritage & Services Marketing*. Vol. 1, No. 1, pp. 3-9. doi:10.5281/zenodo.376250
- Song, Z., Xing, L. & Chathoth, P.K. (2015). The effects of festival impacts on support intentions based on residents' ratings of festival performance and satisfaction: a new integrative approach. *Journal of Sustainable Tourism*, Vol. 23, No.2, pp. 316-337.
- Tatoglu, E., Erdal, F., Ozgur, H. & Azakli, S. (2002). Resident attitudes toward tourism impacts: The case of Kusadasi in Turkey. *International Journal of Hospitality & Tourism Administration*, Vol. 3, No.3, pp. 79-100.
- Vernon, J., Essex, S., Pinder, D. & Curry, K. (2005). Collaborative policymaking. Local sustainable projects. *Annals of Tourism Research*, Vol. 32, No.2, pp. 325-345.

Waitt, G. (2003). Social impacts of the Sydney Olympics. *Annals of Tourism Research*, Vol. 30, No.1, pp. 194-215.

Williams, J. & Lawson, R. (2001). Community issues and residents opinions of tourism. *Annals of Tourism Research*, Vol. 28, No.2, pp. 269-290.

SUBMITTED: January 2016

REVISION SUBMITTED: May 2016

ACCEPTED: August 2016

REFEREED ANONYMOUSLY

Giacomo Del Chiappa (PhD) is assistant professor of marketing at the Department of Economics and Business, University of Sassari (Italy), and senior research fellow, School of Tourism and Hospitality, University of Johannesburg, South Africa. His research is related to destination governance and branding, consumer behavior, and digital marketing.

Angelo Presenza (PhD) is an assistant professor of management at the Department of Economics, Management, Institutions and Society and Business, University of Molise (Italy), and Associate Researcher at the Institute for Service Industry Research (IRISS). His research is related to destination governance and management, and innovation management.

Murat Yücelen (PhD) is assistant professor of management, organization and strategy at Yeditepe University (Istanbul, Turkey), Faculty of Commerce, Department of Tourism and Hotel Management. His research interests include knowledge management and organizational learning, business strategy and corporate governance