

## Attendees' Perceptions of Social Impacts and Socially Sensitive Issues for An Air Show Special Event

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## **Attendees' Perceptions of Social Impacts and Socially Sensitive Issues for An Air Show Special Event**

### **Introduction**

Traditionally, studies of event and festival impacts have emphasized economic factors. However, the actual perceptions of residents and the societal benefits regarding the development of such tourist related phenomena are crucial to understand because it provides local authorities a more sustainable and holistic understanding of an event's impacts. Such knowledge can ultimately provide event planners meaningful implications on how to position and develop such events successfully. Perception and attitude of the local residents may not be driven only by economic benefits as a number of other factors come into play for large special events and festivals. The social benefits and costs of events and festivals also play an important role in the very lives of local residents because they provide important activities and entertainment outlets for both visitors and locals and they also further enhance the local host community's image. Therefore, this study seeks to include social impacts of such tourist events including non-economically related elements in order to provide more realistic insights of these impacts in a large regional event – The Great New England Air Show (GNEAS).

The purpose of this study was to use a well-established and validated social impact assessment instrument to measure the social impacts and attendees' perceptions of a large regional air show on the local community. To extend the current understanding of social impact studies, this study attempted to create a link between social impacts of GNEAS and individuals' sensitivity and tolerance toward social issues; 1) cultural diversity, 2) environmental issues, 3) personal safety, and 4) national security. By doing so, this study can establish an understanding of a relationship between individuals' sensitivity toward social issues and the domains of events' social impacts. To further the knowledge of individuals' social issue sensitivity, this study also examined group mean differences of perceived event quality and satisfaction based on the individuals' sensitivity toward social issues.

### **Literature Review**

With the growth of special events and festivals, researchers have noted the need to conduct more research on individual, behavioral, psychological and social factors in event tourism and on non-economic impacts of events (Getz and Page, 2015 ; Kim, et al. 2013). Social impact assessments, as a way to understand the effects of planned interventions in communities and the perceptions and ways these interventions happen, has been particularly emphasized (Estevas et al., 2012). In the tourism literature, accordingly, studies focusing on both economic and non-economic aspects of tourism development as well tourism events are not scarce. However, Getz and Page (2015) emphasized much of the research and applied work has been devoted to the economic impact of events that other outcomes have been neglected and a lack of well-developed measures of intangible impacts and event value have been overlooked or not fully researched. In fact, too often, by both practitioners and researchers the economic impact of tourism is the center of attention (Deery et al., 2012) and even Getz and Page (2015) admit that it is still generally easier and more politically effective to put event outcomes into monetary measurement terms. However, knowledge of perception and attitude of residents in tourist regions towards destination

development and mega-events has evolved over the years. Sharpley and Stone (2012) have suggested that “social-cultural impacts” may be the best way to label this broad category of research. Some of the more detailed research on social impacts was conducted by Gursoy, Kim, and Uysal (2004) where they focused on four major social areas: 1) community cohesiveness; 2) economic benefits; 3) social incentives; and 4) social costs.

## **Methodology**

### *Measurement*

The measurement items used in this study came from the adopted scales of Gursoy et al. (2004) on the perceived impacts of festivals and special events. The measurement scale encompasses four distinctive dimensions: 1) community cohesiveness; 2) economic benefits; 3) social incentives; and 4) social costs. Likert-type 7-point scales were used with anchors between *strongly disagree* (1), *neutral* (4), and *strongly agree* (7). To measure behavioral outcomes, this study employed measurement items from Oh, Fiore, and Jeoung (2007) and also compared the factors to two additional items that measure perceived quality and satisfaction respectively. Perceived quality was measured by two items on 7-point scales of poor (1) to excellent (7) and inferior (1) to superior (7). Overall satisfaction was measured on two scale items – a satisfaction scale of very dissatisfied (1) to very satisfied (7). To test group comparisons, this study also measured individuals’ feelings toward socially sensitive issues. These items were also measured with 7-point Likert-type scales anchoring between *not at all tolerant/ sensitive* (1) and *very tolerant/ sensitive* (7).

### *Data collection*

This study was made possible by the Galaxy Community Council of the Westover Air Force Reserve Base in Chicopee, MA that commissioned and partially funded the study. Data had been collected in 2008 for the previous air show that examined the economic impacts of the event in the local community. The need in this commissioned study was to expand the research efforts to examine a number of factors – economic impact, social impact, brand experience and social media impacts. The data were collected over a three week period immediately post event of the GNEAS held in May 2015. A data base of attendees and their respective email addresses was compiled from the previous air shows held at Westover in 2008 and at the Westfield International Air Show held in 2015. The Galaxy Community Group also compiled and enhanced the data base by registering attendees at the GNEAS for purposes of information exchange and the purchase of premium seating at the event through their web site. In total, approximately 8,638 individuals were emailed a survey through the Qualtrics™ platform. Of those, 3,068 were started, 309 were bounced due to expired email addresses and 2,459 were finished with enough information to complete the analysis for various research components. Each individual was randomly assigned to one of the five different surveys during the first three weeks of the post event period. The survey was emailed on Tuesday, May 19<sup>th</sup> and follow-up reminders were emailed on Thursday, May 21<sup>st</sup>, Tuesday, May 26<sup>th</sup>, Tuesday, June 2<sup>nd</sup> and Tuesday, June 9<sup>th</sup>. The survey ended on Sunday, June 14<sup>th</sup>, 2015.

The research team generated a survey questionnaire that had five subsets of surveys. The social impact study was one of the five survey questionnaires. Of the total of 2,459 completed surveys, 380 participants (15.5%) completed the social impact study. After eliminating all incomplete or

incorrectly completed responses, a total of 324 surveys (a completion rate of 85.2%) were used for the final analyses.

### *Analysis*

Using the social impact scale, this study first ran principal component factor analysis (varimax rotation) to confirm the dimensionalities of the scale. Since the scale was validated in previous studies including the initial study context and research conducted by Gursoy et al., (2004), this study further confirmed the use of a four factor solution to confirm the dimensions. To check reliability of the scale, this study used a threshold of .7 in terms of Cronbach's Alpha. Followed by a factor analysis, this study recoded the four items social sensitivity items that measured special social issues to examine the differences across different groups on the 7-point scales to three distinct groups ("1 to 3" scores were recoded to "1" *not at all tolerant/ sensitive*; "4" was recoded to "2": *neutral*; "5 to 7" scores were recoded to "3": *very tolerant/sensitive*). Once groups were created, one-way ANOVA was conducted to assess group differences.

### **Selected Findings**

#### *Demographic profile of respondents*

Air shows tend to be more heavily represented by male attendees and this study reflected this distribution. Of the 324 individual respondents to the survey, approximately 70% were male and 30% were female. The highest proportion of respondents indicated that they have a household income ranging from \$50,000-99,999 (41.5%). Approximately 67.1% of respondents mentioned that they are married and 48.8% had completed a college education and 21.4% indicated that they acquired post graduate education. The mean age of the respondents was 55 years old.

#### *Factor Analysis of the Social Impact Scale*

To check the dimensionality of the social impact scale, a total of 19 items were used for the factor analysis. After dropping three items that loaded poorly, this study used 16 items for the further analyses. In accordance with the previous studies (Gursoy et al., 2004), this study found four dimensions, namely *community cohesiveness*, *economic benefits*, *social incentives*, and *social costs*. Principal component factor analysis demonstrated that 75.81% of the total variance was explained by these factors. All factors except *community cohesiveness* factor showed higher than 1 eigenvalue and factor loadings were all over .66. The grand mean scores of each construct were 6.05 for community cohesiveness, 5.16 for economic benefits, 6.05 for social incentives, and 3.31 for social costs respectively. Cronbach's alpha values showed that all items have high levels of scale reliability and all registered values were higher than .86, above the recommended threshold of .70 (Nunnally, 1978). Table 2 contains the measurement items and properties including the means, standard deviations and loading measures.

Of the measures to social sensitivity; sensitivity to national security (mean 5.79, S.D.=1.48) held the highest measure of 5.79 followed closely by sensitivity to personal safety (mean = 5.65, S.D.=1.42). Sensitivity measures to cultural diversity (mean =5.25, S.D. = 1.49) and environmental issues (mean 4.75, S.D.= 1.39) were lower. The measures of perceived quality held a reliability

coefficient between the two scales of .95 and likewise the two scales for satisfaction were found to be highly reliable (coefficient = .95). Overall perceived quality on the poor-excellent scales resulted in a mean of 5.57 (S.D. = 1.30) and inferior-superior scale with mean rating of 5.55 (S.D. = 1.25). Overall satisfaction with the event was also overall rated high. On the satisfaction scale, the overall mean was 5.60 (S.D. = 1.29) and on the delighted-terrible scale the rating was 5.53 (S.D.=1.33). Table 1 contains the sensitivity measures and standard deviations.

**Table 1: Measurement Items and Properties**

<b>Construct and Measurement Items</b>	<b>Mean</b>	<b>S.D</b>	<b>Loadings</b>
<b>Community Cohesiveness</b> (Eigenvalue: .81, Variance explained: 5.39%, Reliability coefficient: .86 )			
Generate revenues for civic projects.	5.90	1.12	.66
Enhances the community image.	6.06	1.05	.81
Builds community pride.	6.17	1.09	.79
<b>Economic Benefits</b> (Eigenvalue: 1.01, Variance explained: 6.72%, Reliability coefficient: .91)			
Helps to create employment opportunities here locally.	5.28	1.33	.83
Serves to increase the standard of living.	4.94	1.42	.84
Encourages locals to develop and provide new facilities and services.	5.24	1.36	.80
<b>Social Incentives</b> (Eigenvalue: 6.71, Variance explained: 44.73%, Reliability coefficient: .89)			
Provides more recreational and entertainment opportunities.	6.06	.99	.77
Offers family-based recreational and entertainment activities.	6.23	.85	.75
Helps foster relationships between local residents, the host base and visitors/guests.	5.84	1.19	.71
Is educational -- makes people aware of services and missions of host organizations.	6.17	1.04	.75
Enhances community image to outsiders -- visitors and guests to our area.	5.97	1.15	.71
<b>Social Costs</b> (Eigenvalue: 2.85, Variance explained: 18.97%, Reliability coefficient: .87)			
Puts too much pressure on local services such as police, fire and safety officials.	4.53	1.52	.73
Increase the level of crime in the area.	2.71	1.41	.88
Brings too many undesirable people in the local community.	2.58	1.37	.89
Stresses the local environment too much with added traffic, pollution and waste management issues.	3.42	1.73	.86

Principal component analysis with varimax rotation on the social impacts (n=324).

*Note: 7-point Likert-type scales were used with anchors between *Strongly disagree* (1), *Neutral* (4), and *Strongly agree* (7).*

Perceived Quality (Reliability coefficient: .95)		
Poor : Excellent	5.57	1.30
Inferior : Superior	5.55	1.25
Satisfaction (Reliability coefficient: .95)		
Very dissatisfied : Very satisfied	5.60	1.29
Terrible : Delighted	5.53	1.33
<b>Feelings about Socially Sensitive Issues</b> (Reliability coefficient: .82)		
Tolerant to cultural diversity	5.25	1.49
Sensitive to environmental issues	4.75	1.39
Sensitive to personal safety	5.65	1.42
Sensitive to national security	5.79	1.48

### *Comparisons of residents' perceptions on the social impact factors for different groups*

One-way ANOVA was applied to test group mean based on the four social issue sensitivity items: *cultural diversity, environmental issues, personal safety, and national security*. Based on the grouping of cultural diversity, group mean differences were only significantly different for community cohesiveness, social costs, perceived quality, and satisfaction. The mean score indicated that the people who were not tolerant with cultural diversity tend to have the lowest mean scores for social cost dimensions, yet people who were tolerant of cultural diversity had a propensity to have higher ratings of perceived quality and satisfaction of GNEAS. In terms of the groups divided based on the sensitivity of environmental issues, individuals who were highly sensitive about environmental issues had highest mean scores in community cohesiveness, perceived quality, and satisfaction domains and had lowest mean scores in the social cost dimension. When the group mean differences were examined on personal safety related concerns, people who were highly concerned with individual safety issues tended to score highly on community cohesiveness, social incentives, perceived quality, and satisfaction dimensions. Interestingly, converse results were found when group means were compared based on the sensitivity of national security. For those who were least sensitive about national security tended to have highest mean scores in terms of perceived event quality and satisfaction. When group means were compared across male and female respondents, there were no significant group mean differences on these issues. Finally when groups were compared across household income level, only the \$200k or more income group held lower mean scores in community cohesiveness, economic benefits, and social incentives domains. However, this group had the highest mean score in the social costs dimension.

### **Conclusion and Discussion**

The results of this study indicated that diverse dimensions of social impacts of a festival could be perceived differently depending on the different segments of attendees and their sensitivity to social issues. A substantial amount of tourism impact studies have examined the impacts of tourism on local communities; however, few studies have examined attendees by their sensitivity measures to current important socially sensitive issues such as personal safety, national security,

environmental issues or cultural diversity. Most social impact studies tended to measure or compare groups based on demographic characteristics, yet, group comparisons based on socially sensitive issues may provide more insights that have not yet been examined. This study, hence, examined multi-aspects of group comparisons in terms of the social impacts of a large regional event and compared them across current and highly sensitive social issues. By doing so, this study found that when individuals rated social issues such as cultural diversity, environmental issues, personal safety, and national security, they tended to have higher levels of awareness in all social impact dimensions as well as perceived quality and satisfaction level. This study additionally found that people with income levels in excess of \$200,000 tended to have lower levels of the event social impact perception in all domains. This might indicate that attendees with high income perhaps see more social costs involved in the regional events rather than the benefits it brings to the community.

**Table 2: ANOVA for Comparison of GNEAS Attendee Perceptions on the Social Impact Factors by Social Sensitivity**

	Not Tolerant (n=18)	Neutral (n=120)	Tolerant (n=186)	F-value	Sig.
by tolerance to cultural diversity					
Community Cohesiveness	5.83	5.86	6.19	4.96	.01
Economic Benefits	5.04	5.09	5.21	.44	.64
Social Incentives	5.92	5.98	6.15	2.61	.08
Social Costs	3.08a	3.36b	3.66c	7.66	.001
Perceived Quality	5.42b	5.18a	5.82c	10.29	.000
Satisfaction	5.36b	5.13a	5.87c	13.10	.000
by sensitivity to environmental issues	Not Sensitive (n=38)	Neutral (n=134)	Sensitive (n=152)	F-value	Sig.
Community Cohesiveness	5.87b	5.86a	6.25c	6.90	.001
Economic Benefits	4.87	5.11	5.27	1.68	.19
Social Incentives	5.89	5.99	6.15	2.06	.13
Social Costs	3.45b	3.58c	3.04a	6.85	.001
Perceived Quality	5.45b	5.27a	5.84c	8.12	.000
Satisfaction	5.32b	5.22a	5.93c	12.53	.000
by sensitivity to personal safety	Not Sensitive (n=12)	Neutral (n=80)	Sensitive (n=232)	F-value	Sig.
Community Cohesiveness	5.25a	5.90b	6.14c	6.28	.002
Economic Benefits	4.31a	5.28c	5.16b	3.144	.04
Social Incentives	5.43a	5.90b	6.14c	5.58	.004
Social Costs	3.16	3.42	3.73	6.27	.002
Perceived Quality	5.25b	5.03a	5.76c	11.36	.000
Satisfaction	5.17b	4.96a	5.80c	14.29	.000

By sensitivity to national security	Not Sensitive (n=13)	Neutral (n=71)	Sensitive (n=240)	F-value	Sig.
Community Cohesiveness	6.15	5.86	6.09	1.74	.18
Economic Benefits	5.15	5.23	5.13	.14	.87
Social Incentives	6.17	5.86	6.11	2.37	.10
Social Costs	3.13a	3.17b	3.81c	7.21	.001
Perceived Quality	5.92c	4.83a	5.76b	17.50	.000
Satisfaction	5.81c	4.87a	5.76b	14.78	.000

Note: a, b, and c indicate the source of significance difference (c > b > a)

**Table 3: ANOVA for Comparison of GNEAS Attendee Perceptions on the Social Impact Factors by Sex and Household Income**

by Sex	Male (n=221)	Female (n=93)	t-value	Sig.
Community Cohesiveness	6.02	6.12	.85	.40
Economic Benefits	5.14	5.19	.34	.73
Social Incentives	6.05	6.07	.26	.80
Social Costs	3.24	3.45	1.32	.19
Perceived Quality	5.61	5.46	1.01	.31
Satisfaction	5.60	5.47	.86	.39

by Household income	Less than \$25k	\$25k-\$49,999	\$50k-\$99,999	\$100k-\$149,999	\$150k-\$199,999	\$200k-more	F-value	Sig.
Community Cohesiveness	6.46c	6.12b	6.12b	5.82b	5.88b	5.79a	1.79	.12
Economic Benefits	5.75c	5.42c	5.22c	4.98b	5.00b	4.25a	2.42	.04
Social Incentives	6.35b	6.21b	6.08b	6.00b	5.94b	4.98a	3.34	.006
Social Costs	3.09a	3.25a	3.35b	3.21a	3.44b	4.06c	.87	.50
Perceived Quality	5.75	5.43	5.72	5.48	5.23	5.19	1.15	.34
Satisfaction	6.00	5.48	5.63	5.48	5.36	5.38	.70	.62

Note: a, b, and c indicate the source of significance difference (c > b > a)

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