

Available online at www.sciencedirect.com



TOURISM MANAGEMENT

Tourism Management 27 (2006) 957-967

www.elsevier.com/locate/tourman

Impacts of environmental values on tourism motivation: The case of FICA, Brazil

Hyounggon Kim^{a,*}, Marcos C. Borges^a, Jinhyung Chon^b

^aGraduate School of Hospitality and Tourism Management, Sejong University, Seoul 143-747, Republic of Korea ^bDepartment of Hospitality, Tourism, and Family & Consumer Sciences, Georgia Southern University, Statesboro, GA 30460, USA

Received 17 November 2004; accepted 17 September 2005

Abstract

The city of Goias, Brazil, recently launched the International Festival of Environmental Film and Video (FICA) in an attempt to increase tourism revenue and foster an awareness of environmental issues. As an initiative to help develop more effective marketing strategies, this study examined the festival attendees' sociodemographic/travel characteristics and psychological constructs (motivations and environmental values) using an on-site intercept survey. Specifically, this research examined festival attendees' motivational differences based on the level of their pro-environmental values, which were measured by the New Environmental Paradigm (NEP) scale. The results indicate that there are some significant motivational differences among the environmental concern groups: Low NEP group, Middle NEP group, and High NEP group. Social marketing approach is recommended for the development of environmentally friendly tourism events.

© 2005 Published by Elsevier Ltd.

Keywords: Festivals; New environmental paradigm; Tourism motivation; Special events management

1. Introduction

Over the last decades, festivals have been increasingly identified with community based-tourism development as they add vitality and enhance the appeal of a destination to tourists (Getz, 1991). Previous festival related research in the field of tourism reflects diverse perspectives: the economic benefits of staging festivals at the community level (Long & Perdue, 1990; Mehmetoglu, 2002); motivations of people to attend festivals and special events (Crompton & McKay, 1997; Dewar, Meyer, & Li, 2001; Formica & Uysal, 1998; Mohr, Backman, Gahan, & Backman, 1993), satisfaction by perceived authenticity (Chhabra, Healy, & Sills, 2003), cultural consumption patterns of festival visitors (Prentice & Andersen, 2003), and organizers' perceptions of the socio-economic impacts of festival (Gursoy, Kim, & Uysal, 2004). Since understanding visitor perception is central to building an effective marketing strategy, a considerable number of studies have focused on visitors' psychological constructs. The present paper also attempts to address the issue of festival attendees' particular psychological constructs: environmental value and motivation.

Getz (1991, p. 54) defines a festival as a "public themed celebration". Popular themes of the festivals include dance, film, music, the arts, crafts, indigenous cultural heritage, sporting events, and seasonal rites and agricultural products. Visitors participate in festivals primarily because they have a special interest in the products, events, heritage or tradition being celebrated, although there exists some degree of variation in their motivations (Zeppel & Hall, 1992). In other words, visitor participation may be closely related to shared values and experiences (Getz, 1991).

Values represent learned beliefs about preferred ways of being which serve as "guiding principles in the life of a person or other social entities" (Schwartz, 1994, p. 21). Specifically, they are considered to be (1) concepts or beliefs, (2) about desirable end states or behaviors, (3) that transcend specific situations, (4) guide selection or evaluation of behavior and events, and (5) are ordered by relative importance (Schwartz & Bilsky, 1987, p. 551). Values can

^{*}Corresponding author. Tel.: +82 2 3408 3825; fax: +82 2 3408 3047. *E-mail address:* hkim@sejong.ac.kr (H. Kim).

be distinguished from attitudes in that values represent abstract ideals that are not attached to any specific object, whereas attitudes focus on specific objects and situations (Rokeach, 1973). From this perspective, an attitude is the mental state induced by the application of a value to a specific object or situation. Also, values are likely to be more stable over time than attitudes as they tend to be more fundamental to an individual's cognitive system (Rokeach & Ball-Rokeach, 1989). Because of this, values have been viewed as the determinants of attitudes and behavior.

Within the context of tourism, it has been noted that the values tourists hold can affect their choice of destination (Muller, 1991) and vacation activity preferences (Crick-Furman & Prentice, 2000; Madrigal & Kahle, 1994). In particular, Gnoth (1997) discussed the formation of values and their role in motivation. According to his view, values arising from needs assist a person in evaluating the potential of situations or events to satisfy their values. In turn, the result of this evaluation may significantly influence the motivations that represent objective specific preference. He also points out that values are situation specific, which suggests that the immediate events or environment may determine the prominence of certain values.

The present study examined visitors to an environmental film festival in terms of their motivations and environmental values. The objective is to understand motivational differences by the perceived level of environmental values. The results of the study have significant marketing implications for festival managers in terms of staging environmentally friendly tourism events.

1.1. FICA

The International Festival of Environmental Film and Video (FICA hereafter) is staged annually for three days, beginning the second Wednesday of June in the city of Goias, the old state capital in the Goias state, Brazil. Located in the central part of Brazil, Goias has a population of approximately 30,000. The city was established in 1727. During the Portuguese colonial era, Goias served as a capital of the state. Now, it represents a form of urban structure and architecture characteristic of the colonial settlement of South America, and has been well publicized across Brazil as a heritage site. In 2001, UNESCO inscribed the historic center of the city as a world heritage site. The city is also concerned with environmental issues and expected to be the first city in Brazil to conceive and implement public environmental policies. The city's interest in environmental issues is also reflected in the slogan "Goias, 21st century: On the path towards sustainable development".

In conjunction with this long-term development goal, the city recently launched a festival called FICA. The first FICA festival was held in 1998. This project for a themed film festival, the first of its kind in Brazil, is an initiative of

the current State Government, aiming at increasing tourism revenues and fostering an awareness of environmental issues. In the first year, the festival brought together actors, directors and producers of environmental cinema and videos from more than 17 countries. Since 1998, FICA has become a forum for an international debate on the relationship between film-making and environmental issues. Other events are held simultaneously offering participants a variety of popular and environmentally focused activities. For instance, the Regional Policy Forum for the cinema is held that involves local filmmakers as well as executive legislative authorities. In addition, several short-term courses and workshops are offered during the festival. There are also photography and fine arts exhibitions focusing on the environmental and the archeological heritage of the region. The public also has an option of attending several plays, ethnic dance presentations, and shows with popular singers, that all take place in the main public square.

1.2. Tourism/festival motivation

A study of festival motivation is closely related to the study of tourism motivation since festival attendance is an important aspect of tourism. A motivation is often viewed as an internal factor that directs and integrates an individual's behavior (Iso-Ahola, 1980). There are three frequently used theoretical frameworks to explain tourism motivation. First, Maslow's (1970) needs of hierarchy model has affected a great number of tourist motivation studies (Chon, 1989; Pearce, 1982; Ryan, 1997). Second, Iso-Ahola's (1982) dichotomous model (seeking/escaping, personal/interpersonal) has provided another theoretical facet for tourist motivation study. Within this model, "escaping" motivation indicates the desire to leave everyday life, while "seeking" motivation indicates the desire to obtain intrinsic reward for future behaviors. These two motivational factors are also divided into two dimensions, namely, the personal dimension and the interpersonal dimension. This has been a popular model for tourist motivation studies (Crompton & McKay, 1997; Mannell & Iso-Ahola 1987; Ross & Iso-Ahola, 1991). Lastly, there has been an attempt to understand tourism motivations through the notion of disequilibrium (Crompton, 1979; Lee & Crompton, 1992). The argument is based on the assumption that human beings have a desire to keep the equilibrium state where no tension between expectation and performance arises. The disturbance of equilibrium within this theoretical framework is the impetus to take a course of action.

Studies on festival motives tend to focus more on identifying situation-specific motives from different festivals than on developing general theoretical structures. With the advent of newly launched festivals, festival markets are becoming increasingly diversified and understanding visitors' motives to attend the festival has become critical for festival managers when developing an effective marketing

strategy. Crompton and McKay (1997) studied visitor motivation within the festival content for the following reasons: (1) it allows matching the festival's program to visitors' needs; (2) it helps safeguard visitor satisfaction by increasing the chance of meeting the visitors' diverse needs; and (3) it warrants repeat visitation, which is essential for the viability of the festival. In sum, understanding the motivation of visitors allows festival managers to cater to the specific needs of target markets and to develop more appropriate marketing strategy. Consequently, there is a growing body of literature on festival motivation for different types of festivals. The range of festivals studied include the Travellers Rest County Corn Festival (Uysal, Gahan, & Martin, 1993), the Freedom Weekend Aloft Hot Air Balloon Festival (Mohr et al., 1993), Fiesta San Antonio (Crompton & McKay, 1997), Canadian Jazz Festival (Saleh & Ryan, 1993), three urban nature themed festivals (Scott, 1996), Umbria Jazz Festival (Formica & Uysal, 1996), a First Night Festival (Kerstetter & Mowrer, 1998), the Spoleto Festival (music festival) (Formica & Uysal, 1998), and the Harbin Ice Lantern and Snow Festival in China (Dewar, Meyer, & Li, 2001). These studies collectively show that the type or theme of the festival is a strong predictor of motives, which calls for further investigation on other types of festivals to better understand the association between the theme of the festival and visitor motives.

In addition, present festival motivation studies lack cultural diversity. A majority of the research has been conducted within the Western developed, while other countries lag behind them. Exceptions include the Moslem Cultural Festival at Jerash in Jordan (Schneider & Backman, 1996) and the Harbin Ice Lantern and Snow Festival in China (Dewar, Meyer, & Li, 2001). Both studies confirm the acceptable use of the motivational scale developed among festival attendees in North America in non-western cultural settings. However, given the small volume of crosscultural study on festival motives, there should be greater effort to research different types of festivals, as well as in different cultural settings, in order to better comprehend the variability of visitor motives.

1.3. New Environmental Paradigm (NEP)

Understanding people's environmental values has become increasingly important as environmental issues have become a central concern for policy makers and entrepreneurs. One of the most widely used environmental value construct may be the New Environmental Paradigm (NEP) scale. The NEP scale was originally developed by Dunlap and Van Liere (1978) in order to measure the public's fundamental views about nature and human's relationship to it. The development of this scale was stimulated by Pirages and Ehrlich's (1974) explication of Dominant Social Paradigm (DSP) which reflects the anti-environmental thrust of Western industrialized society. Although there is some ambiguity regarding the construct of the

scale, there has been a general consensus that this belief system plays a significant role in forming more specific environmental related attitudes and behaviors (Dunlap, 1991; Dunlap, Van Liere, Mertig, & Jones, 2000).

The original scale, which consists of 12 Likert-type items, focuses on beliefs about humanity's ability to upset the balance of nature, the existence of limits to growth for human societies, and humanity's right to rule over the rest of nature. Over the years, the NEP scale has been tested within diverse cultural contexts to measure a given population's environmental orientation. More recently, in response to enduring criticisms of the original construct of the scale, Dunlap et al. (1992) proposed the revised NEP scale that attempts to balance between pro and anti-NEP statements, as well as to broaden the content of the scale. This revised NEP scale consists of 15 items and has been used in recent research (Floyd, Jang, & Noe, 1997; Stern, Dietz, & Guagnano, 1995).

The relationship between environmental values and environmentally conscious behaviors has been repeatedly examined over the years. Roberts and Bacon (1997) found that environmental values measured through NEP scale were positively correlated with the reported environmentally conscious behaviors such as recycling, petitioning, and energy conservation. Schultz and Zelezny (1998, 1999) also examined the relationship between the pro-environmental orientation measured through the revised NEP scale and environmentally conscious behavior in five different countries (e.g., Mexico, Nicaragua, Peru, Spain, and the US). The results supported a significantly positive relationship between environmental orientation and environmentally conscious behavior, except in Nicaragua and Peru. Other studies also indicated a positive correlation between environmental values and environmentally conscious behaviors (Granzin & Olsen, 1991; Hines, Hungerford, & Tomera, 1987). In sum, there seems to be a general agreement that proenvironmental orientation may be a necessary condition to induce environmentally benign actions, although it may not be a sufficient determinant of behavior.

Within tourism contexts, only a few studies have used the NEP scale despite its increasing potential for understanding tourists' fundamental environmental values. Jurowski, Uysal, Williams, and Noe (1995) noticed that the level of environmental values measured through the NEP scale influences support for conservation policy and preferences for recreational facilities in a national park. In a similar vein, Uysal, Jurowski, Noe, and McDonald (1994) reported that the level of environmental values affects trip and tourist characteristics. In addition, Silverberg, Backman, and Backman (1996) used the NEP scale for market segments of nature-based tourists. They proposed typologies based on environmental values, trip behavior and demographics. Thus, this study, through examining the relationship of the level of environmental values to motivations to attend the festival, also contributes to expanding the applicability of the revised NEP scale within the tourism and festival contexts.

2. Method

2.1. Questionnaire design

The questionnaire was designed to obtain data on sociodemographic characteristics of festival attendees, motivations for attending the FICA, and their environmental values. A list of motivational items was initially generated from previous literature according to its relevance (Schneider & Backman, 1996; Uvsal et al., 1993). Then the list was sent to several experts who are involved with the FICA for the validity check and further modification. This resulted in 20 motivational items. A 5-point Likert-type scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = stronglyagree) was utilized on these items. As a measure of environmental values, the revised NEP scale that consists of 15 items with a 5-point Likert-type scale was included in the questionnaire. The survey was first written in English, then translated into Portuguese, and then translated back to English by two separate individuals. The results from this process were checked for reliability.

2.2. Data collection

The survey was conducted at the city of Goias, Brazil, using an on-site intercept procedure for the entire period of festival (from June 13 to 17) in 2001. The direct face-to-face interview was administered by twelve local college students who were well-trained for the interview process. The interviewers working in pairs were located at the six principal entrance points of the festival. The survey crews contacted every nth person going past the intercept location. Visitors were approached as they left the site and were asked to complete a self-administered questionnaire. Participation was on a voluntary basis. In an attempt to obtain a reasonably representative sample, the survey was conducted for 5 days with an equal proportion of the time of day (morning, early afternoon, and early evening). By the end of the festival, 440 visitors were approached for the interview and a total of 422 usable questionnaires were collected, which resulted in a rejection rate of 4.1%.

3. Results

Data analysis procedure for this study followed several steps for different variables. Firstly, demographic and travel characteristics of FICA visitors were analyzed using descriptive statistics. Festival attendance motivations were grouped into five factors using principal components analysis as a data reduction strategy. The NEP scale was used as a composite measure. Quartiles were used to divide respondents into three groups, namely low NEP group, middle NEP group, and high NEP group. Analysis of variance (ANOVA) tests were conducted to analyze motivational differences based on these three levels of environmental concern groups. Additionally, a series of

correlation analyses were performed to examine the relationship between the FICA motivation factors and environmental values (NEP).

3.1. Demographic profile/travel characteristics

Descriptive analysis (Table 1) indicates that the gender proportion of the FICA respondents appears to be almost equal being male (51.5%) and female (48.5%). In terms of age distribution, the FICA appears to attract relatively young visitors, considering 64.3% were under 27 years and only about 5% were over 48 years of age. Education level seems to be closely related to the age proportion since the majority of the respondents were High school graduates (39%) and College students (33.3%).

The travel characteristics of the FICA respondents revealed that most participants attend as a part of a large group. About half of the respondents indicated that they attend the FICA with a group of 6 or more. They are more likely to be visiting the FICA with friends (46.0%), than family or organized groups. The statistics showed that 77% of total respondents were from outside the city area. Particularly, it was noted that about 95% of the visitors (outside the city area) were from Goias state, which indicates the FICA as a regional tourism attraction. More than half of the respondents were identified as repeat visitors (52.3%). Considering the relatively short history of the festival (4 years), this number implies a high proportion of repeat visitors among the FICA attendees (Table 2).

Table 1 Demographic characteristics

Attribute	Percent
Gender	(N = 412)
Male	51.5
Female	48.5
Age	(N = 409)
< 18	11.2
18–27	53.1
28–37	19.6
38–47	11.2
48-57	2.9
>57	2.0
Education	(N = 418)
Elementary school	2.2
High school	39
College	33.3
Bachelor degree	16.7
Upper bachelor	8.9
Income (the real R\$)	(N = 407)
< 1560	41.4
1560-2400	17.9
2400-4800	18.6
4800-7200	7.2
7200-12000	6.7
>12000	5.7

Table 2
Travel characteristics

Characteristic	FICA, Percent
Group size	(Mean = 12.3; median = 7)
1-3	18.7
4–6	30.4
>6	50.9
Group type	N = 387
Alone	9.6
Family	14.2
Friends	46.0
Family and friends	23.3
Other	6.9
Previous visit to FICA	N = 207, 52.3%
City residents	N = 96, 23.0%

3.2. Motives for FICA attendance

Before proceeding to explore the underlying patterns of the reported festival motivations, a correlation matrix for the motivational data, Kaiser-Meyer-Olkin measure of sampling adequacy, and the Bartlett test of sphericity were examined to determine the appropriateness of principal components analysis (data reduction procedure) for the collected motivational data. First, the close examination of the correlation matrix indicated that one motivation item Because the festival is unique was low (.55) in correlation, and thus dropped from further analysis. The Kaiser-Meyer-Olkin measure of sampling adequacy, which aims to examine if the strength of the relationship among variables is large enough to proceed a factor analysis, was .778, which is acceptable (Kaiser, 1974). Bartlett's test of sphericity (1950), which is to asses if the data contains significantly different factors given the relation between the number of observations and the number of variables, was also found to be significant (p < .00001). Both the tests indicated that data reduction by principal components analysis would be legitimate. Accordingly, principal components analysis with varimax rotation was performed on the 19 motivation items to identify underlying dimensions of the respondents' motivation to attend the FICA. An eigenvalue of 1.0 was used for factor extraction criterion and loadings of .50 were used for item inclusion (Stevens, 1996). This resulted in five factors that accounted for 60.81% of the total variance (Table 4). Factors were labeled based on the common characteristics when grouped together. Thus, they were labeled as Family Togetherness (Factor I), Socialization (Factor II), Site Attraction (Factor III), Festival Attraction (Factor IV), and Escape from Routine (Factor V). Eigenvalues of these factors ranged from 2.02 to 2.72, indicating a relatively equal explanation power of each factor for the total variance. In addition, Cronbach's α coefficients (a measure of internal consistency among the items) were examined for each factor in order to check the reliability of the data. They were either above the satisfactory level (above .70) or close enough to be accepted (.68 and .66) (Carmines & Zeller, 1979).

The results of the principal components analysis are somewhat similar to previous festival motivation studies. The most influential motivations appear to be related to family and social benefits. These findings concur with the results of some of the other festival motivation studies (Ralston & Crompton, 1988; Schneider & Backman, 1996; Uysal et al., 1993).

A series of T-tests and ANOVA tests were conducted to investigate if there is any sociodemographic effect on motivations. The results revealed that gender, the level of education, and the level of household income did not have any effect on motivation. However, some of the motivation factors seem to vary across age level. Particularly, in the case of younger groups (below age 37) who evaluated the Escape from Routine motivation factor significantly higher than the older group (38–47). This indicates that escaping motivation is more salient in relatively young visitors than in older visitors. In terms of the Festival Attraction factor, the age groups falling into the age category of 28-37 and 38-47 are statistically significantly higher than the age group of 18–27. This result implies that middle age groups are more interested in the contents and programs of the festival than the young age group. In the FICA study, the most important factor was Family Togetherness (14.34%), followed by Socialization (12.80%), which implies that a relatively high proportion of respondents came to the FICA for general recreation with family and friends (Table 3).

3.3. NEP scale

Descriptive statistics for each item are listed in Table 4. The eight odd-numbered items reflect a pro-environmental view whereas the seven even-numbered items indicate an anti-environmental view. The results show that mean scores for all of the pro-environmental items are above 3.0, indicating that the respondents of this study tend to have positive environmental values. Particularly, the most highly evaluated two items (Plants and animals have as much right as humans to exist: Humans are severely abusing the environment) show that the respondents of this study tend to emphasize the coexistence of human beings and nature while perceiving the current human practice on nature negatively. On the other hand, the examination of the anti-environmental items reveals rather mixed results. The mean scores for three items (out of 7 items) were above 3.0.

Human ingenuity will insure that we do not make the earth unlivable; The earth has plenty of natural resources if we just learn how to develop them; Humans will eventually learn enough about how nature works to be able to control it. There may be two possible explanations for this rather unexpected result. One is that the study respondents might be rather ambivalent in their environmental belief and have

Table 3 Factor analysis of motivations for attending the 2001 FICA

Factor label	Factor loading	Eigenvalue	% of variance	Coefficient α
Family togetherness		2.72	14.34	.80
To visit friends and relatives	.782			
To spend time with someone special	.594			
To bring my family closer together	.874			
So the family could do something together	.856			
Socialization		2.43	12.80	.68
Because I enjoy festival crowds	.626			
To be with people of similar interest	.673			
To meet new people from different places	.611			
To be with my friends	.671			
Site attraction		2.27	11.96	.74
Because it is a good opportunity to visit Goias	.744			
To enjoy historical sights at Goias	.799			
To increase my knowledge of local culture at Goias	.758			
Festival attraction		2.10	11.09	.66
To enjoy environmental related films	.784			
Because I am concerned with environmental issues	.697			
Because I like films	.656			
To learn more about nature	.545			
Escape from routine		2.01	10.60	.70
To get away from the demands of life	.778			
To have a change from daily routine	.810			
To enjoy the night life	.558			
Total variance explained			60.81	

Table 4 Descriptive statistics for revised New Ecological Paradigm scale items for FICA

^a Do you agree or disagree that:		^b SD (%)	^b MD (%)	^b U (%)	^b MA (%)	^b SA (%)	Mean	SD
1	We are approaching the limit of the number of people that the earth can support.	13.6	17.5	21.1	26.7	21.1	3.24	1.33
2	Humans have the right to modify the natural environment to suit their needs.	33.5	21.7	11.1	23.1	10.6	2.55	1.42
3	When humans interfere with nature, it often produces disastrous consequences.	6.6	9.5	13.0	25.9	45.0	3.93	1.24
4	Human ingenuity will insure that we do not make the earth unlivable.	12.4	13.9	28.0	26.5	19.2	3.26	1.26
5	Humans are severely abusing the environment.	6.1	3.3	8.1	20.4	62.1	4.29	1.14
6	The earth has plenty of natural resources if we just learn how to develop them.	4.5	7.1	12.6	22.7	53.0	4.12	1.15
7	Plants and animals have as much right as humans to exist.	3.4	5.6	7.0	14.6	69.4	4.41	1.06
8	The balance of nature is strong enough to cope with the impacts of modern industrial nations.	50.2	14.7	13.4	11.4	10.2	2.16	1.41
9	Despite our special abilities, humans are still subject to the laws of nature.	4.5	3.4	12.9	29.7	49.6	4.16	1.06
10	The so-called "ecological crisis" facing human kind had been greatly exaggerated.	30.8	13.9	14.9	20.1	20.1	2.84	1.53
11	The earth is like a spaceship with very limited room and resources.	16.5	15.3	18.7	25.1	24.4	3.25	1.40
12	Humans were meant to rule over the rest of nature.	47.6	17.3	14.5	13.5	7.0	2.15	1.33
13	The balance of nature is very delicate and easily upset.	3.4	7.0	14.3	34.0	41.3	4.02	1.07
14	Humans will eventually learn enough about how nature works to be able to control it.	14.0	15.0	29.0	28.0	14.0	3.13	1.23
15	If things continue on their present course, we will soon experience a major ecological catastrophe.	4.9	5.6	7.5	21.2	60.8	4.27	1.12

^aQuestions wording: "We would like your opinions on a wide range of environmental issues. For each of the statements, please indicate the extent to which you agree or disagree by checking the appropriate response."

bSD = Strongly Disagree, MD = Moderately Disagree, U = Uncertain, MA = Moderately Agree, SA = Strongly Agree.

some level of anthropocentrism. The other is that the wording of those three items may not be clearly structured in such a way to represent anti-environmental orientation. The close examination of those three items indicates that they are rather future-oriented optimistic evaluation of human endeavor in relation to nature, which may not be necessarily translated into anti-environmental view, as suggested by Dunlap and his colleagues (1992). However, at this point, it is not possible to draw any kind of definite conclusion on this issue without further empirical evidence. More systematic research which specifically focuses on this aspect of NEP scale will be necessary to help clarify this issue in the future. Despite the mixed results on several items, an overall mean rating (3.59 when seven antienvironmental items were reverse coded) for the entire items indicates that the respondents of this study have proenvironmental values.

The level of environmental values identified in this study was compared to the results of the previous studies that adopted the revised NEP scale in order to better understand FICA visitors' environmental values. To the best of authors' knowledge, there is no published research assessing Brazilian population's environmental values using the revised NEP scale. Thus, Schultz and Zelenzny's (1999) study that was conducted in 14 North and South American countries was used as an alternative reference point in this study. In their study, the mean rating of the revised NEP scale ranged from 3.67 (United States) to 4.11 (Canada). The mean rating (3.59) of the FICA attendees is found to be the lowest in comparison with other 14 countries. This rather unexpected result may be due to the research population. Schultz and Zelenzny's (1999) study employed college students in a classroom setting, whereas this study examined the general festival visitors. Although one may assume that such different research population and research setting may have significantly affected the study results, it is not possible to provide any definite answer for this conjecture particularly at this point of research.

There are some ongoing debates regarding the dimensionality of the NEP scale (Dunlap et al., 1992). However, since the purpose of this paper does not reside in examining the dimensionality of the NEP scale but in measuring the level of pro-environmental values, it is deemed to be desirable to treat it as one composite measure of proenvironmental orientation. As indicated, the revised NEP scale includes seven items worded in a manner that disagreement indicates a pro-environmental orientation. Thus, these seven items were reverse coded and summed up with the other eight items for the composite score (Floyd et al., 1997). Greater agreement with each item was interpreted as greater endorsement of the NEP, implying greater pro-environmental values. This scoring procedure resulted in a range of 36 (lowest level of concern) to 72 (greatest level of concern). Quartiles were used to create three environmental concern groups. The low 25% and high 25% quartiles were used to break the sample into three environmental concern groups. Specifically, respondents with scores of 49 or below were considered low on environmental concern; respondents with environmental scores of 59 or above were considered high on environmental concern; the middle 50%, those with scores between 50 and 58, were considered as having moderate levels of concern. In addition, a series of *T*-tests and ANOVA tests were employed to find if there were any sociodemographic effects on the NEP score. The results indicated that none of the sociodemographic variables used in this study affects the level of environmental values measured through the NEP scale.

3.4. Differences in motivations by environmental concern aroups

The results from the ANOVA, comparing motivations across environmental concern groups, are shown in Table 5. Most of the motivation factors did not reveal significant statistical differences across the environmental concern groups. Only one motivation factor (Festival Attraction) was found to be statistically different across three groups. A post hoc test, LDS, revealed that the high level environmental group rated higher on the Festival Attraction factor than the medium and low level environmental groups. This implies that more environmentally conscious people are likely to attend the FICA because of the program content of the festival (environmental related films and issues). This, in turn, indicates a possible relationship between the level of environmental concern and the Festival Attraction motivation factor. Thus, Pearson correlation analysis was performed on five motivation factors and the composite measure of the NEP scale (Table 6). The results also revealed a significantly positive correlation between the Festival Attraction factor and the level of environmental values, indicating that people who hold higher environmental values are likely to be attracted by the contents of the FICA more than other factors.

4. Discussion

This study examined several psychological constructs of festival (FICA) participants. The psychological constructs examined in this study include motivations and environmental values. The results of this study showed that the motivational structures of attending the FICA are similar to other festival motivation studies that were conducted primarily within the Western cultural contexts. The environmental values measured by the revised NEP scale showed that a majority of festival participants hold proenvironmental values although the level of pro-environmental values seems to be lower than the ones reported by Schultz and Zelezny (1999). It was conjectured that this rather unexpected result may be due to different research population and setting, although it is not empirically proven at this point. In relation to the festival motivation and the level of environmental values, this study showed

Table 5 Variations in motivations of three levels of environmental consciousness (ANOVA)

Motivation factors	Grouping by the NEP score					
	Low	Medium	High	F-ratio	Prob >	
Factor I (Family Togetherness)	.063	013	150	.789	.455	
Factor II (Socialization)	.055	083	.168	1.415	.245	
Factor III (Site Attraction)	080	.032	.115	.649	.523	
Factor IV (Festival Attraction)	268	013	.303 ^a	5.642	.004	
Factor V (Escape from Routine)	.175	095	059	1.649	.194	

^aIndicates a significant difference at the level of .01.

Table 6 Correlation analysis between motivation factors and NEP scores

	FICA motivation factors	NEP
1	Family togetherness	.00
2	Socialization	.00
3	Site attraction	.00
4	Festival attraction	.19 ^a
5	Escape from routine	.00

^aIndicates a significant correlation at the level of .01.

that a segment of FICA visitors who were identified as a high NEP group were more likely to attend the festival because of the unique contents of the festival than the visitors who were low on the NEP scale. This result suggests several marketing and management implications for the city of Goias and the FICA.

Although festivals and special events are often considered to be alternative tourism that is more benign to the destination's socio-cultural or natural environment (Weiler & Hall, 1992), some negative impacts are predictable. Most of all, festivals tend to involve a considerable number of visitors in a limited geographical space for a relatively short period of time, as maximizing the number of visitors is often equated with the a higher level of success from an economic perspective. This inherent congestion can lead to the possibility of environmental degradation of a host community. The long-term success of community-based tourism (e.g., festivals) depends not only on the maximum economic benefits but also on the protection of the natural environment in which tourist experiences take place (Johnson, Snepenger, & Akis, 1994). Although the FICA is an attempt to bring tourism and subsequent economic benefits to the city of Goias, the equally important goal is to enhance the level of environmental consciousness through the events. That is, the issue facing the FICA and the city of Goias is to develop a competitive and sustainable festival that is in harmony with the environment, which will serve the long-term viability of the city of Goias as a tourism destination. This study was meant to help achieve the objective by developing effective marketing and planning strategies.

A social marketing approach may provide a useful framework for the FICA and other community based special tourism events. Social marketing is "the application of commercial marketing technologies to the analysis, planning, execution, and evaluation of programs designed to influence voluntary behavior of target audiences in order to improve their personal welfare and that of their society" (Andreason, 1995, p. 7). The concept of social marketing has been rarely discussed within tourism context. However, several researchers hinted the effectiveness of the social marketing strategy to ensure the long-term prosperity of a destination in both national, regional, and community levels as local environmental and cultural resources become increasingly valued and their sustainability tends to be perceived as a core function of tourism marketing (Buhalis, 2000; King, McVey, & Simmons, 2000). Thus, the rational for implementing social marketing approach to destination development is to balance the host society's long-run environmental interests, sociocultural structures, and the expectations of customers. The social marketing approach for the FICA seems to be beneficial because of its reciprocal relationship with the city of Goias in which the festival takes place. The city of Goias preserves unspoiled natural environments as well as numerous valuable historic (17 century colonial architects) resources which have been inscribed as UNESCO's world heritage. It is in the very heritage center of the city that the main activities of the FICA take place during the festival period. Thus, some environmental degradation and adverse sociocultural impact may occur because of sudden influxes of visitors to the sensitive area of the city. Considering that the long-term viability of the FICA as well as the city of Goias as a tourism destination is closely related to the well-protected cultural and natural resources. The successful implementation of an effective marketing strategy that can help achieve the sustainability of city's resources is deemed to be of utmost importance. The results of this study show several marketing implications relevant to meet this important task.

The results indicated that the level of FICA attendants' environmental values is positively associated with the one motivation factor *Festival Attraction*, which consists of four items: *to enjoy environmental related films*; *because I*

am concerned with environmental issues; because I like films; and to learn more about nature. This suggests the possible linkage between the theme of the festival, attendees' certain values, and motivation to attend the festival. Specifically within this study, the results imply that people with higher environmental values are more likely to attend the FICA because of the environmental issue oriented program of the festival than other perceived motivating attractions. Although this study did not examine whether the positive environmental values necessarily lead to environmentally friendly behaviors during the festival, previous studies collectively indicate the positive association between environmental values and environmentally friendly behavior. Thus, the implication of the study results can be extended to visitor behaviors. One of the most important tasks that the FICA faces is to reduce the potentially negative environmental consequences of festival crowds. This problematic goal may be accomplished by adopting a strategy that can increase the level of environmental consciousness or induce a more environmentally conscious segment of people into the festival. The positive association between pro-environmental values and the motivation Festival Attraction suggests the importance of festival contents in bringing more environmentally conscious visitors to the FICA (possibly engaged in more proenvironmental behaviors during the festival).

However, at this stage, the majority of visitors to the FICA appear to be more attracted by the general recreation function of the festival than its contents. As shown in the results, the primary motivation factors of the FICA visitors were Family Togetherness and Socializing. Motivations related to the theme of the festival seem relatively less prominent compared to other motivational factors, which suggests that the theme of the FICA plays a less central role in attracting visitors than conventional recreation functions (socialization among friends and family). This may be related to the relatively short history (4 years at the time of the survey) of the festival. It is possible to infer that the contents of the festival may not have been well publicized to the public, and thus played a less salient role in stimulating visitors' needs. Thus, the FICA may have attracted more casual visitors who are likely to come in to the festival for recreational purposes, and were not necessarily concerned with festival content. Therefore, festival managers of the FICA need stronger promotion of the festival contents (e.g., environmental films, environmental forums, and so on) to stimulate a certain aspect of visitor motivation. This program oriented promotion strategy will help increase the public awareness about the theme of the FICA and attract tourists who have a more genuine interest in the content of the festival and high level of environmental values. This, in turn, will help induce more environmentally friendly behaviors during the festival and achieve the primary mission of the FICA.

The promotion strategy oriented toward the environmental theme of the FICA may have a branding effect on the host society, the city of Goias. In relation to the effectiveness of environmental branding for tourism attraction, Mihalič (2000, p. 67) comments that "Systematic environmental branding would be a natural way to manage the environmental recognition of the tourism product/destination. An environmental brand would give the customer both environmental information and confidence when purchasing, and would help destination managers to manage the environmental expectation and perceptions of the visitors." The usefulness of this image making strategy appears to be even more promising for the long-term viability of the FICA and the city of Goias. Currently, the FICA is the largest special event in the city of Goias that attracts hundreds of thousands of visitors outside the city area. One of the major functions of special events and festivals resides in inducing a certain image of the host society in a relatively short period of time (Getz, 1991). The induced image, in turn, is likely to affect visitors' expectation, satisfaction, and destination behaviors (Ashworth & Goodall, 1988; Bigné, Sánchez, & Sánchez, 2001). Although the city of Goias has long been known for a heritage tourism destination that offers a weekend getaway, if the marketers successfully promote the FICA as a touristic icon of the city, the environmentally friendly image of the city will be more prominent in the minds of potential visitors. This can lead to forming visitors' expectations about the city as a tourism destination and consequently have an effect of inducing more environmentally benign visitors or environmentally conscious behaviors within the destination. This promotion strategy, that links the FICA and the city of Goias, will be a crucial step for them to remain as a viable tourist destination.

It is apparent from this study that future research is needed to better understand the behaviors of festival visitors. This study did not incorporate behavioral consequences of the psychological constructs: environmental values and motivations. Although it is often acknowledged that values are the primary antecedents of subsequent behaviors, there may be other factors that mediate behaviors, such as situational constraints. For this reason, future research needs to incorporate behavioral aspects to better understand the festival visitors and to present more substantial marketing strategies. In addition, this study examined only one aspect of personal values (e.g., environmental values), although substantial literature supports the existence of multiple values within the tourism context. As suggested, the themes of the festivals may have a close relationship with the prominence of one or multiple aspects of personal values. Therefore, future research needs to explore if and how different themes of festivals affect particular domains of personal values. In turn, the relationship between the prominent domains of personal values, other psychological constructs and behavioral consequences needs to be examined in order to better comprehend the role of the festival theme in affecting visitor characteristics and experiences.

A festival is a special form of tourism where managers tend to have more control over its development compared to other types of tourism destination development. This may increase the potential to develop the festival as a tourism attraction that contributes to building an environmentally and socially friendly tourism attraction. This possibility warrants further attention to festivals and special events tourism for an effective community development strategy.

References

- Andreason, A. (1995). Marketing social change: Changing behavior to promote health, social development, and the environment. San Francisco: Jossev-Bass.
- Ashworth, G., & Goodall, B. (1988). Tourist images: Marketing considerations. In B. Goodall, & G. Ashworth (Eds.), *Marketing in the tourism industry: The promotion of destination regions* (pp. 213–238). London: Croom Helm.
- Bartlett, M. S. (1950). Tests of significance in factor analysis. *British Journal of Psychology*, 3, 77–85.
- Bigné, J., Sánchez, M., & Sánchez, J. (2001). Tourism image, evaluation variables and after purchase behavior: Inter-relationships. *Tourism Management*, 22, 607–616.
- Buhalis, D. (2000). Marketing the competitive destination of the future. *Tourism Management*, 21, 97–116.
- Carmines, E. G., & Zeller, R. A. (1979). *Reliability and validity assessment*. Newbury Park, CA: Sage University Papers.
- Chhabra, D., Healy, R., & Sills, E. (2003). Staged authenticity and heritage tourism. *Annals of Tourism Research*, 30(3), 702–719.
- Chon, K. S. (1989). Understanding recreational traveler's motivation, attitude and satisfaction. *Revue de Tourisme*, 1, 3–7.
- Crompton, J. (1979). Motivations for pleasure vacations. *Annals of Tourism Research*, 6, 408–424.
- Crompton, J. L., & McKay, S. L. (1997). Motives of visitors attending festival events. Annals of Tourism Research, 24(2), 425–439.
- Crick-Furman, D., & Prentice, R. (2000). Modeling tourists' multiple values. Annals of Tourism Research, 27(1), 69–92.
- Dewar, K., Meyer, D., & Li, W. L. (2001). Harbin, lanterns of ice, sculptures of snow. *Tourism Management*, 22, 523-532.
- Dunlap, R. E. (1991). Public opinion in the 1980s: Clear consensus, ambiguous comment. *Environment*, 33(8), 10–37.
- Dunlap, R. E., & Van Liere, K. D. (1978). The "new environmental paradigm": A proposed measuring instrument and preliminary results. *Journal of Environmental Education*, 9, 10–19.
- Dunlap, R. E., Van Liere, K. D., Mertig, A. G., & Jones, R. E. (2000). Measuring endorsement of the New Ecological Paradigm: A revised NEP scale. *Journal of Social Issues*, 56(3), 425–442.
- Dunlap, R. E., Van Liere, K. D., Mertig, A. G., Jones, R. E., Catton Jr., W. R., & Howell, R. E. (1992). Measuring endorsement of an ecological worldview: A revised NEP scale. *Paper presented at the* annual meeting of the Rural Sociological Society, Pennsylvania State University, State College, PA.
- Floyd, M., Jang, H., & Noe, F. P. (1997). The relationship between environmental concern and acceptability of environmental impacts among visitors to two US national park settings. *Journal of Environmental Management*, 51, 391–412.
- Formica, S., & Uysal, M. (1996). A market segmentation of festival visitors: Umbria Jazz Festival in Italy. *Festival Management and Event Tourism*, *3*(1), 175–182.
- Formica, S., & Uysal, M. (1998). Market segmentation of an International Cultural-Historic Event in Italy. *Journal of Travel Research*, *36*(4), 16–24.
- Getz, D. (1991). Festivals, special events, and tourism. New York: Van Nostrand Reinhold.

- Gnoth, J. (1997). Tourism motivation and expectation formation. Annals of Tourism Research, 24, 283–304.
- Granzin, K. L., & Olsen, J. E. (1991). Characterizing participants in activities protecting the environment: A focus on donating, recycling, and conservation behavior. *Journal of Public Policy & Marketing*, 10, 1–27.
- Gursoy, D., Kim, K., & Uysal, M. (2004). Perceived impacts of festivals and special events by organizers: An extension and validation. *Tourism Management*, 25, 171–181.
- Hines, J. M., Hungerford, H. R., & Tomera, A. N. (1987). Analysis and synthesis of research on responsible environment behavior: A metaanalysis. *Journal of Environmental Education*, 18, 1–8.
- Iso-Ahola, S. (1980). Social psychology of leisure and recreation. Dubuque, IA: Wm. C. Brown.
- Iso-Ahola, S. (1982). Towards a social psychology of tourism motivation: A rejoinder. *Annals of Tourism Research*, 9, 256–261.
- Johnson, J. D., Snepenger, D. J., & Akis, S. (1994). Resident perceptions of tourism development. Annals of Tourism Research, 21(3), 629–642.
- Jurowski, C., Uysal, M., Williams, D. R., & Noe, F. P. (1995). An examination of preferences and evaluations of visitors based on environmental attitudes: Biscayne Bay National Park. *Journal of Sustainable Tourism*, 3, 73–86.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39, 31–36
- Kerstetter, D., & Mowrer, P. (1998). Individuals' reasons for attending First Night, a unique cultural event. Festival Management and Event Tourism, 5, 139–146.
- King, B., McVey, M., & Simmons, D. (2000). A societal marketing approach to national tourism planning: Evidence from the South Pacific. *Tourism Management*, 21, 407–416.
- Long, P. T., & Perdue, R. R. (1990). The economic impact of rural festivals and special events: Assessing the spatial distribution of expenditures. *Journal of Travel Research*, 28(4), 10–14.
- Lee, T. H., & Crompton, J. L. (1992). Measuring novelty seeking in tourism. *Annals of Tourism Research*, 19, 732–751.
- Madrigal, R., & Kahle, L. (1994). Predicting vacation activity preferences on the basis of value system segmentation. *Journal of Travel Research*, 13(3), 22–28.
- Mannell, R., & Iso-Ahola, S. (1987). Psychological nature of leisure and tourist experiences. *Annals of Tourism Research*, 14, 314–331.
- Maslow, A. (1970). *Motivation and personality* (2nd ed.). New York: Harper.
- Mehmetoglu, M. (2002). Economic scale of community-run festivals: A case study. *Event Management*, 7(2), 93–102.
- Mihalič, T. (2000). Environmental management of a tourist destination: A factor of tourism competitiveness. *Tourism Management*, 21(1), 65–78.
- Mohr, K., Backman, K., Gahan, L., & Backman, S. (1993). An investigation of festival motivations and event satisfaction by visitor type. Festival Management and Event Tourism: An International Journal, 1(3), 89–97.
- Muller, T. E. (1991). Using personal values to define segments in an international tourism market. *International Marketing Review*, 8, 57–70.
- Pearce, P. (1982). *The social psychology of tourist behaviour*. Pergamon: New York.
- Pirages, D. C., & Ehrlich, P. R. (1974). Ark II: Social response to environmental imperatives. San Francisco: Freeman.
- Prentice, R., & Andersen, V. (2003). Festival as creative destination. Annals of Tourism Research, 30(1), 7–30.
- Ralston, L., & Crompton, J. L. (1988). *Motivation and emotions*. Englewood Cliffs, NJ: Prentice-Hall.
- Roberts, J. A., & Bacon, D. R. (1997). Exploring the Subtle Relationships between Environmental Concern and Ecologically Conscious Consumer Behavior. *Journal of Business Research*, 40, 79–89.
- Rokeach, M. (1973). *The nature of human values*. New York: Free Press. Rokeach, M., & Ball-Rokeach, S. (1989). Stability and change in American value priorities, 1968–1981. *American Psychologist*, 44, 775–784.
- Ross, E., & Iso-Ahola, S. (1991). Sightseeing tourists' motivation and satisfaction. Annals of Tourism Research, 18, 226–237.

- Ryan, C. (1997). The tourist experience: A new introduction. London: Cassell.
- Saleh, F., & Ryan, C. (1993). Jazz and knitwear: Factors that attract tourists to festivals. *Tourism Management*, 14(4), 289–297.
- Scott, D. (1996). A comparison of visitors' motivations to attend three urban festivals. Festival Management and Event Tourism, 3(3), 121–128.
- Schneider, I. E., & Backman, S. J. (1996). Cross-cultural equivalence of festival motivations: A study in Jordan. Festival Management and Event Tourism, 4, 139–144.
- Schultz, P. W., & Zelezny, L. C. (1998). Values and proenvironmental behavior: A five-country survey. *Journal of Cross-Cultural Psychology*, 29(4), 540–558.
- Schultz, P. W., & Zelezny, L. C. (1999). Values as predictors of environmental attitudes: Evidence for consistency across 14 countries. *Journal of Environmental Psychology*, 19, 255–265.
- Schwartz, S. (1994). Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, 50(4), 19–45.
- Schwartz, S., & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, 53, 550–562.

- Silverberg, K. E., Backman, S., & Backman, K. (1996). A preliminary investigation into the psychographics of nature based travelers to the South-Eastern United States. *Journal of Travel Research*, 14(2), 19–28
- Stern, P. C., Dietz, T., & Guagnano, G. A. (1995). The new ecological paradigm in social–psychological context. *Environment and Behavior*, 27, 723–743.
- Stevens, J. (1996). Applied multivariate statistics for the social sciences. Mahwah, NJ: Lawrence Erlbaum Associates.
- Uysal, M., Gahan, L., & Martin, B. (1993). An examination of event motivations: A case study. Festival Management and Event Tourism: An International Journal, 1(1), 5–10.
- Uysal, M., Jurowski, C., Noe, F. P., & McDonald, C. D. (1994). Environmental attitude by trip and visitor characteristics. *Tourism Management*, 15(4), 284–294.
- Weiler, B., & Hall, C. M. (1992). Special interest tourism. London: Belhavan Press.
- Zeppel, H., & Hall, C. M. (1992). Arts and Heritage Tourism. In B. Weiler, & C. M. Hall (Eds.), *Special interest tourism* (pp. 47–68). London: Routledge.