Investigating the Relationship between Cost, Benefit and Attachment to the Environment by Mediating Behavioral Attitudes among Sports Tourists

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Abstract

Purpose: The examination, investigating and relationship between costs, benefit and attachment to the environment by mediating behavioral attitudes among sports tourists. **Method:** The population of the study consisted of all sports spectators of 27th Fajr Open and Esteghlal vs. Tractor rematch from 15th Persian Gulf Pro League. According to Kukran formula sample size was equal to 722 persons. 920 questionnaires distributed among population that 722 questionnaires were analyzed. In order to collect data a self-made questionnaire was used which it's validity confirmed by 5 sports teachers of Razi and Tehran university and variables reliability was calculated by using Cronbach's alpha coefficient which was equal to 0.89. Data analysis done by using the descriptive and inferential statistics include Kolmogorov–Smirnov, Pearson correlation, path analysis of structural equations, Regression and also AMOS-21 and SPSS-22. The results showed that environmental communication should be formed within the right framework, encourage people to Environmentally Responsible Behavior through a bonus is not necessarily effective and doesn't encourage sports spectator. **Results:** Result showed that spectators display more cooperation through targeting for enjoyment and are sensitive toward any perceived cost in the implementation of Environmentally Responsible Behavior. The result also showed if cooperation with Environmental Management System doesn't take too much time and totally doesn't interfere with their enjoyment of watching match, they will support it automatically. The results also suggest the need to design efficient equipment to ensure ease of use and as a result reducing the perceived cost associated with Environmentally Responsible Behavior. **Conclusions:** Sports event owners can encourage spectators to do the Environmentally Responsible Behavior by connecting with them and also induce this fact to spectators that associate with the event can assist them to experience higher quality events in the future.

Keywords: Sports events tourism, Environmentally-responsible behavior, Responsible tourism, Sports event

INTRODUCTION

Due to the continued growth in the number and extent of sports events globally, event sports tourism has become the highest profile product within sports tourism (weed, 2009:621). These events attract large number of visitors (both as spectators and participants) and have both direct and indirect impacts on the natural environment of host destinations. Because of the vast number of sport events held globally, the ecological footprint of sport is immense, but often goes unnoticed (Collins et al., 2009; Thibault, L. 2009). Knowledge from the field of tourism and sport, as well as the cross-cutting fields of sports tourism and event tourism, has to be explored in order to develop effective strategies to mitigate the negative environmental impacts associated with event sports tourism, along with the support of the consumers (event sports tourists). Furthermore, sport tourism is regarded as a "social, economic and cultural phenomenon arising from the unique interaction of activity, people and place" (weed & bull, 2004:37). This implies that one has to look beyond sport and tourism, and that it will be important to consider knowledge from other disciplines outside of sport and tourism to understand the phenomenon (hinch & Higham, 2011; weed, 2009).

Out of only 17 articles found within sport-related journals that directly address environmental sustainability (Mallen et al, 2011), a more three refer to sports participants' perspectives. Overall, the articles present a managerial (sports industry) perspective on the 'how' and 'why' of environmentally sustainable practices. A few articles revealed a focus on aspects of environmental management performance, including definitions, policy, organizational systems, programs and philosophy, but none addressed the sub-theme of 'participant education ', which could imply addressing participant perspectives. This is also true for their subsequent exploration of sport-related environmental sustainability research in journals outside sport related- journals, including business studies, environmental health and urban studies (Mallen et al., 2011). Though many of the themes could indirectly be related to management of participants and their environmental behavior, none of the articles provide management with a deeper understanding or explanation of their behavior. In a similar vein, Harris, Jago, Allen and Huyskens's (2001) also indicated that event managers (including sports events) require more knowledge on consumer needs and motivations. A substantial amount of

literature explores aspects such as the sports tourist experiences, motivations for participation, sport identities and levels of involvement in sport. However, these studies tend to focus on describing behavior, as opposed to providing an explanation of the processes leading to the behavior (Weed, 2009). Furthermore, there appears to be very little work on ERB of sport event spectators as sports tourists (Ngyen, lacono & Stratmann, 2011). For example, a meta – review of sports tourism research by Weed (2009) identifies a number of behavioral studies, but none of the mentioned studies have a specific focus on environmental attitudes or behavior. This study aims to draw selectively from various disciplines and subject areas to identify the factors that could facilitate and regulate environmentally responsible behavior (ERB) of sport event spectators as consumers within the event sports tourism sector.

METHOD

Due to the nature of the research and its target, this research is a practical research in terms of goal and result and also is a field research. Data analysis done by using the descriptive and inferential statistics include Kolmogorov–Smirnov, Pearson correlation, path analysis of structural equations, Regression and also AMOS-21 and SPSS-22.

RESULTS

Table 1 shows the Descriptive indicators of variables and also Table 2 shows the Cronbach's alpha for reliability examination.

Table1: Descriptive indicators of variables

Variable	Minimum	Maximum	Average	Standard deviation
Attendance Motivation	18	56	40.09	5.78
Behavioral Attitude	8	56	45.79	9.35
Behavioral Benefit	2	6	4.52	1.15
Behavioral Cost	4	12	7.24	2.04
Environmental Management System	7	21	15.74	2.61
Future Intention	8	28	18.29	4.27
Perceived Behavioral Control	3	12	8.55	1.55
Place Attachment	3	12	8.33	1.92
Situational Intention	22	48	34.80	4.25
Subjective Norms	7	21	14.82	2.43

Table 2: The Cronbach's alpha for reliability examination

Variable	Sample Size	Number of items	Cronbach's alpha
Attendance Motivation	722	14	0.75
Behavioral Attitude	722	8	0.89
Behavioral Benefit	722	2	0.48
Behavioral Cost	722	4	0.58
Environmental management System	722	7	0.66
Future Intention	722	7	0.80
Perceived Behavioral Control	722	3	0.38
Place Attachment	722	3	0.67
Situational Intention	722	12	0.59
Subjective Norms	722	7	0.49

To examine the relationship between variables Pearson correlation test was used which has shown in table 3.

Variable	1	2	3	4	5	6	7	8	9	10
Attendance Motivation	1									
Behavioral Attitude	0.03	1								
Behavioral Benefit	0.18	0.14	1							
Behavioral Cost	0.33	-0.13	0.19	1						
Environmental management System	0.22	0.28	0.38	0.25	1					
Future intention	0.43	0.11	0.09	0.28	0.24	1				
Perceived Behavioral Control	0.33	0.09	0.10	0.18	0.21	0.30	1			
Place Attachment	0.42	0.13	0.07	0.16	0.19	0.23	0.15	1		
Situational Intention	0.38	0.20	0.15	0.19	0.24	0.56	0.27	0.24	1	
Subjective Norms	0.25	0.15	0.36	0.38	0.54	0.32	0.32	0.15	0.26	1

Result showed that there is correlation coefficient between place Attachment and Behavioral Attitude which is equal to 0.13. Result showed that there is correlation coefficient between Perceived Behavioral Control and Environmental Management System which is equal to 0.21. The result also showed that: there is no significant correlation between Behavioral Attitude and Attendance Motivation; between Future Intention and Behavioral Benefit; between Perceived Behavioral Control and Behavioral Attitudes; and between Place Attachment and Behavioral Benefit.

Conceptual Model of Environmentally Responsible Behavior (ERB)
The conceptual model has shown in diagram 1 shows the relationship between studied variables which are causative factors of Environmentally Responsible Behavior (only significant effects has drawn). The aim is to create a model that through the display elements of Environmentally Responsible Behavior for owners and organizers of sport events, help them in developing or modifying environmental management strategies to overcome dangerous attitudinal- behavioral gap in this area.
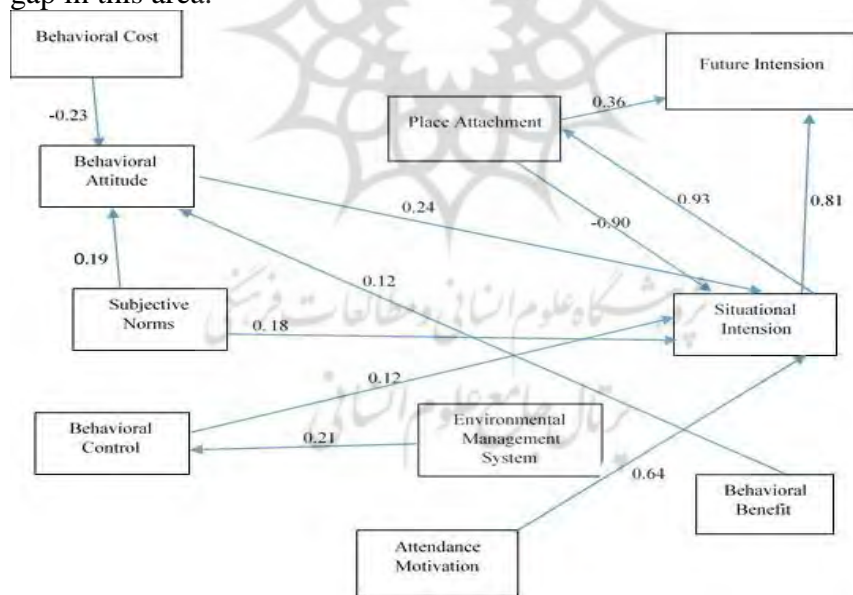

Diagram 1: Proposed model of research

For examination the proposed model, it's structural section examined by fitting indexes. Table 3 shows the fitting indexes of proposed model.

Table 3: Fitting indexes of proposed model

Fitting Indexes	Amount
X^2	48.20
Significance Level	0.001
Degree of Freedom	16
X^2/df	3.01
Goodness of Fit Index	0.97
Adjusted Goodness of Fit Index	0.92
Normed Fit Index	0.94
Comparative Fit Index	0.96
Incremental Fit Index	0.96
Tucker Lewis Index	0.88
Root Mean Square Error Of Approximation	0.072

The result of Table 3 shows that the proposed model of research has acceptable fitting indexes. Direct Standard and non-Standard coefficients of Paths have shown in Table 4.

Table 4: Direct Standard and non-Standard coefficients of Paths

paths	Standard Coefficient	Non-Standard Coefficient	Standard Error	Significance Level
Environmental Management System to Behavioral Control	0.21	0.12	0.03	0.001
Behavioral cost to Behavioral Attitude	-0.23	-1.05	0.24	0.001
Subjective Norms to Behavioral Attitude	0.19	0.74	0.22	0.001
Behavioral Benefit to Situational Intention	-0.07	-0.27	0.23	0.22
Behavioral Benefit to Behavioral Attitude	0.12	0.96	0.43	0.02
Attendance Motivation to Situational Intention	0.64	0.47	0.06	0.001

Environmental Management System to Situational Intention	0.11	0.18	0.11	0.12
Subjective Norms to Situational Intention	0.18	0.31	0.12	0.009
Behavioral Control to Situational Intention	0.12	0.33	0.16	0.04
Place Attachment to Future Intention	0.36	0.75	0.15	0.001
Situational Intention to Future Intention	0.81	0.80	0.16	0.001
Behavioral Attitude to Future Intention	-0.10	-0.04	0.02	0.07
Place Attachment to Behavioral Attitude	0.002	0.01	0.32	0.97
Place Attachment to Situational Intention	0.90	1.99	0.39	0.001
Situational Intention to Place Management	0.93	0.42	0.06	0.001
Behavioral Attitude to Situational Intention	0.24	0.11	0.04	0.007

The results of Table 4 shows that Standard coefficient of path from Behavioral Cost to Behavioral Attitude is equal to -0.23 which is significant in P<0.001 level, therefore we can say Behavioral Cost have negative effect on Behavioral Attitude. The results Shows that Standard coefficient of path from Behavioral Benefit to Behavioral Attitude is equal to 0.12 which is significant in P<0.02 level, Therefore we can say Behavioral Benefit have positive effect on Behavioral Attitude. The Results suggest that Standard coefficient of path from Place Attachment to Behavioral Attitude is equal to -0.002 which isn't significant in P<0.97 level, Therefore we can say Place Attachment doesn't have significant effect on Behavioral Attitude.

In order to predict a variable according to another variable, we use Simultaneous Regression analysis.

Table 5: Prediction of Perceived Behavioral control based on Environmental Behavior Control

Criterion Variable	Model Summary	Predictor Variable	B	β	t	Significance
Perceived Behavioral Control	R=0.21 R²=0.04 P=0.001	Environmental Management System	0.12	0.21	4.17	0.001

The results of simultaneous Regression analysis which have shown in Table 5 suggest that 4 percent of Perceived Behavioral Control predict by Environmental Management System. According to the results of the Table, impact factor of Environmental Management System to predict the Perceived Behavioral Control is equal to 0.21.

Table 6: Prediction of Behavioral Attitude based on Place Attachment, Behavioral Cost …

Criterion Variable	Model Summary	Predictor Variable	B	β	t	Significance
Behavioral Attitude	R=0.30 R²=0.09 P=0.001	Place Attachment	0.64	0.13	2.63	0.009
		Behavioral Cost	-1.12	-.025	-4.60	0.001
		Behavioral Benefit	0.95	0.12	2.23	0.03
		Subjective Norms	0.68	0.18	3.18	0.002

The results of simultaneous Regression analysis which have shown in Table 6 suggest that 9 Percent of Behavioral Attitude predict by Place Attachment, Behavioral Cost, Behavioral Benefit and Subjective Norms. According to the results of the Table impact factor of Place Attachment to predict the Behavioral Attitude is equal to 0.13, impact factor of Behavioral Cost to predict the Behavioral Attitude is equal to -0.25, impact factor of Behavioral Benefit to predict the Behavioral Attitude is equal to 0.12 and impact factor of Subjective Norms to predict the Behavioral Attitude is equal to 0.18, so prediction power of Behavioral Cost is more than other variables.

Table 7: Prediction of Place Attachment based on Situational Intention

Criterion Variable	Model Summary	Predictor Variable	B	β	t	Significance
Place Attachment	R=0.22 R²=0.05 P=0.001	Situational Intention	0.10	0.22	4.48	0.001

The results of simultaneous regression analysis which have shown in Table 7 suggest that 5 percent of Place Attachment predict by Situational Intention and impact factor of Situational Intention to predict the Place Attachment is equal to 0.22.

Table 8: Prediction of Future Intention based on Place Attachment and Situational Intention

Criterion Variable	Model Summary	Predictor Variable	B	β	t	Significance
Future Intension	R=0.57 R²=0.32 P=0.001	Place Attachment	0.25	0.11	2.61	0.009
		Situational Intention	0.53	0.53	12.25	0.001

The results of simultaneous regression analysis which have shown in Table 8 suggest that 32 percent of Future Intention predict by Place Attachment and Situational Intention. According to the results of the Table impact factor of Place Attachment to predict the Future Intention is equal to 0.11 and impact factor of Situational Intention to predict the Future Intention is equal to 0.53, therefore prediction power of Situational Intention is more than Place Attachment.

Table 9: Prediction of Situational Intention based on Behavioral Benefit, Environmental Management System

Criterion Variable	Model Summary	Predictor Variable	B	β	t	Significance
Situational Intension	R=0.47 R²=0.22 P=0.001	Behavioral Benefit	0.06	0.02	0.34	0.73
		Environmental Management System	0.06	0.04	0.64	0.52
		Perceived Behavioral Control	0.31	0.11	2.24	0.03
		Subjective Norms	0.17	0.10	1.72	0.09
		Attendance Motivation	0.21	0.29	5.36	0.001
		Behavioral Attitude	0.07	0.15	3.13	0.002
		Place Attachment	0.09	0.04	0. 84	0.40

The results of simultaneous Regression analysis which have shown in Table 9 suggest that Behavioral Benefit, Environmental Management

System, Perceived Behavioral Control, Subjective Norms, Attendance Motivation, Behavioral Attitude and Place Attachment altogether predict 22 percent of Situational Intention changes. The impact factor of Perceived Behavioral Control, Attendance Motivation and Behavioral Attitude respectively are 0.1, 0.29 and 0.15 so these variables can predict Situational Intention but other variables can't predict it lonely.

DISCUSSION

Sports tourism is one of the sectors of the tourism industry that is growing quickly and sports event tourism is one of the most prominent topics in this industry. Since the sports events have different effects, sports event owners face some challenges. In recent years environmental effects of sports events has been more and more examined. However few number of sports studies focused on behavioral drivers. This study focused on identification the most important behavioral drivers.we examined the relationship between Behavioral drives to help the organizers of sporting events to adopt better strategies to reduce the environmental footprint of events.

The results showed that environmental communication should be formed within the right framework, encourage people to Environmentally Responsible Behavior through a bonus is not necessarily effective and doesn't encourage sports spectator. Result showed that spectators display more cooperation through targeting for enjoyment and are sensitive toward any perceived cost in the implementation of Environmentally Responsible Behavior. The result also showed if cooperation with Environmental Management System doesn't take too much time and totally doesn't interfere with their enjoyment of watching match, they will support it automatically. The results also suggest the need to design efficient equipment to ensure ease of use and as a result reducing the perceived cost associated with Environmentally Responsible Behavior.

CONCLUSIONS

It seems that sports event owners can encourage spectators to do the Environmentally Responsible Behavior by connecting with them and also induce this fact to spectators that associate with the event can assist them to experience higher quality events in the future.

Future studies can examine the mediator effects of other variables on the relationships between the variables of present study. It is also possible to investigate demographic variables such as age, gender, income and education levels.

Other elements that can be measured include the event place (nature around the event place); event infrastructure (stadiums or outdoor location, urban or rural); travel characteristics (day vs. night visitors, foreign visitors vs. internal).

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