

Selection Property, Satisfaction, and Behavioral Intention of Audiences of Sport Events

Jong-Sik Lim¹, Young-Hee Han² and Chun-Ho Yang^{*3}

¹Department of Physical Education, Kunsan National University, 558 Daehak-ro, Gunsan-si, Jeollabuk-do, 54150, Korea; sik1009@daum.net

²Department Taxation Namseoul University, 91 Daehak-ro, Seonghwan-eup, Seobuk-gu, Cheonan-si, Chungcheongnam-do, 31020, Korea; hanyh@nsu.ac.kr

³Department Marine Sports Han seo University, 46 Hanseo 1-ro, Haemi-myeon, Seosan-si, Chungcheongnam-do, 31962, Korea; healthyang@hanseo.ac.kr

Abstract

Objectives: We conducted this study to clarify the practical relationship between selection property, satisfaction, and the behavioral intention of sport event spectators. **Methods/Statistical Analysis:** The subjects of this study were 216 spectators of basketball games and volleyball games held by local communities in 2015, to which we distributed survey copies. For the data process, we conducted exploratory factor analysis, reliability verification, correlation analysis, and multiple regression analysis; and drew the following conclusions: **Findings:** First of all, the selection property of sports event spectators represented a positive correlation on all the satisfaction and sub-variables of behaviors, and satisfaction positively correlated with all the sub-variables of behavioral intention. Secondly, the opening environment among the selection properties positively influenced satisfaction. Third, the game environment and opening environment from the selection property positively influenced the intention to revisit and recommend. Fourth, satisfaction positively influenced the intention to revisit and recommend. **Application/Improvement:** Our conclusions indicate that sports events held by local communities require detailed marketing strategies, since the opening environment positively influences spectator satisfaction. In addition, satisfaction directly influences spectator behavioral intention. Therefore, an effort is required to improve the satisfaction of audiences, so that they will revisit, and recommend others to visit as well. On the other hand, we recommend a follow-up study to analyze more detailed difference of demographic characteristics, and seek a marketing strategy for them to achieve a better developmental outcome.

Keywords: Behavioral Intention, Marketing Strategies, Satisfaction, Selection Property, Sport Event Spectators

1. Introduction

Spectator Sport Events have established a new market due to diversification and the increasing numbers of individuals who participate in sport activities. Due to the trend of sports becoming a main public culture, sports activities have been spreading as health-related and leisure culture. Sport events in Korea have been rapidly growing. However, there has not been much vision or strategy in sports tourism¹. Major cities worldwide have concentrated professional physical facilities and tourism resources in areas to establish global sport tourism hubs. Developed countries have focused on developing policies

in connection with sport tourism. This is because hosting sport events significantly influences national and local development, including the political, economic, and cultural infrastructure². In developed countries, sport tourism takes up 34% in the entire tourism industry; however in Korea, it is only between 10 and 15%³.

Combining sport events with tourism/cultural products in specific areas promotes the economy, and also serves as an important means of local development³. Local communities in Korea have been seeking to attract domestic and foreign sport events to pursue brand value in these areas, which brings with it a wave effect on the local economy. Sport events in local communities are

* Author for correspondence

able to establish sport tourism infrastructure, expand training fields, and experience tourism by concentrating on previous facilities, promoting the private physical education industry, and expanding the sport industry⁴.

Local communities currently host sport events in a competitive atmosphere through promotion of the local economy by attracting sport tourists and local advertise. However, it has not been feasible to create various wave effects from the attraction of sport events that local communities expected, but only to derive the calculated economic effect⁵. Local communities are required to fully identify demographic characteristics of sport event audiences, participation motivation features, and characteristics of audiences in each type of sport, in order to maximize the effect of attracting sport events in the future.

Among the events, sport events are able to achieve these goals if hosting agents and participants share those together⁶. Considering that tourism in which all people directly or indirectly participate in or enjoy a specific place with particular goals is referred to as sport events⁷ sport events are regarded as one field of tourism where many people, including players, event associates, media, and audiences, participate in tourism activities while involving themselves in events⁸. Sport events are classified into spectator and participating types. Sport events can be classified depending on when, where, and who hosts them. Among them, spectator sport events not only provide the opportunity to enjoy leisure at a personal level among audiences, but also to improve life quality. Sport events are able to fulfill various desires of audiences while providing an opportunity for special experience and impressions that are hardly dealt with in their daily lives.

Selection properties of audiences of sport events are factors that are considered by audiences when deciding to watch sport events, and are important variables. In⁹ referred to selection properties as being major factors among event participants for selecting and participating in particular sport events among various sport events. Selection properties refer to criteria used when comparing awareness of problems, information seeking, evaluating others, and collecting information as a part of the decision-making process among participants⁹. In¹⁰ indicated that the selection property is important not only as a personal evaluation index of sport events, but also as an index for predicting consumer behavior in the future. A comprehensive approach to facilities, transportation, service, benefit, and the image of the hosting area of

a sport event is referred to as the selection property of audiences^{11,12}.

Satisfaction from a sport event is an inevitable concept of understanding and predicting the behaviors of spectators as a part of audience behavior¹³. Satisfaction is subjective evaluation at the personal level, and this evaluation is referred to as evaluation in psychological perspective involving expectation, attitude, emotion, and sentiment¹⁴. Satisfaction from sport events is a result of subjective judgment from sport events that people previously participated in, and is evaluated by personal emotion or criteria of value judgment¹⁴. In regard to this issue¹⁵ indicated that satisfaction factors of participants in sport events were benefits from participation, transportation, image, service, and facilities. In¹⁶ observed that the satisfaction determining factors of participants in sport tourism are event management, proceeding of games, audience facilities, support facilities, and convenience facilities. Therefore, it is necessary to establish systematic marketing strategies to satisfy audiences of sport events.

We conducted this study to clarify the relationship between selection property, satisfaction, and the behavioral intention of audiences of sport events as a fundamental resource to identify various desires and attitudes of audiences in sport events. Previous studies in dealing with selection property, satisfaction, and behavior intention in sport events have been conducted in regard to ocean sports^{17,18} while there have not been many studies dealing with local communities. Therefore this study aims to analyze the relationship between selection property, satisfaction, and behavioral intention of audiences in sport events for behavioral analysis to establish efficient marketing plans for domestic sport events that local communities are interested in.

2. Research Methods

2.1 Subjects of the Research

We selected the subjects of the research from spectators of the 48th volleyball game of elementary schools in the nation in fall 2015, and also the 2015 Korea-Japan professional basketball championship. We utilized stratified cluster sampling for the sampling of research subjects. We distributed a total 250 copies of the survey, and excluded 34 copies with inappropriate responses for the objective of the research or incomplete responses. We used a total of 216 copies of survey for the final analysis.

Table 1 shows the general characteristics of the research subjects.

2.2 Research Tools

We used the survey technique as a research tool to collect data to identify the selection property, satisfaction, and behavioral intention of sport events. The survey used in this study comprised three questions about demographic characteristics, eleven questions about selection properties as independent variables, two questions about satisfaction as dependent variables, and four questions about behavioral intention. In order to identify the appropriateness of data, we used orthogonal rotation (varimax) to conduct the exploratory factor analysis. Responses for the survey were given as Likert criteria with options of 'score 5 for strongly agree', 'score 4 for agree', 'score 3 for neutral', 'score 2 for disagree', and 'score 1 for strongly disagree'.

Table 1. Frequency of subject characteristics (%)

Variable	Groups	Frequency	%
Gender	Male	121	95
	Female	56	44.0
Age	10s or below	22	10.2
	20s	36	16.7
	30s	71	32.8
	40s or above	87	40.3
Spectator	Basketball competition	117	54.2
Games	Volleyball competition	99	45.8
Total		216	100

2.2.1 Selection Properties

In order to measure the selection properties in this study, we reorganized them according to the objective of this study and according to the previous studies by¹⁹⁻²² in dealing with participants in sport events. Selection properties comprise eleven questions, including six questions about the overall environment, three questions about the game environment, and two questions about the opening environment.

The results of exploratory factor analysis turned out to be KMO=.931, sphericity examination of Bartlett, and $\chi^2=1535.489$, $p<.000$. The loading of each factor showed .727~.824, and the total variance of the three factors was 74.52%. The significance levels (Cronbach's α) of the criteria turned out to be overall environment (.880), game environment (.873), and opening environment

(.874). Table 2 shows that they therefore turned out to be relatively reliable tools.

Table 2. Factor analysis of item

Item	A	B	C	h ²
item1	.764	.119	.332	.709
item2	.732	.192	.333	.684
item3	.750	.368	.169	.727
item4	.744	.309	.226	.700
item5	.760	.349	.117	.714
item6	.727	.319	.162	.730
item7	.281	.314	.824	.856
item8	.286	.388	.778	.837
item9	.321	.757	.265	.747
item10	.338	.727	.306	.736
item11	.289	.759	.307	.754
Eigen value	6.604	1.091	1.596	
Variance %	60.034	9.013	5.417	
Cumu. %	60.034	69.046	74.464	
Reliability	.880	.873	.874	

KMO=.931, $\chi^2=1535.489$, $df=55$, $p=.000$.

2.2.2 Behavioral Intention

In order to measure the behavioral intention in this study, we reorganized previous studies dealing with behavioral intention according to the objectives of this study, based on the studies by²³⁻²⁵. We made a total of four questions, including two questions about intention to revisit, and two questions about intention to recommend for behavioral intention.

The results of our exploratory factor analysis were KMO=.815, sphere city examination of Bartlett, $\chi^2=489.950$, and $p<.000$. The loading of each of the factors was maintained at .808~.934, and the total variance of the two variables was 86.1%. The significance level of the criteria (Cronbach's α) turned out to be .865 for the intention to revisit, and .874 for the intention to recommend. Table 3 shows that they therefore turned out to be relatively reliable tools.

Table 3. Exploratory factor analysis on behavioral intention

Item		h ²
item1	.934	.354
item2	.819	.336
item3	.280	.891
item4	.372	.808
Eigen value	2.991	1.455
Variance %	74.767	11.372
Cumu. %	74.767	86.139
Reliability	.865	.874

KMO=.815, $\chi^2=489.950$, $df=6$, $p=.000$.

2.3 Data Collection

This study was conducted by visiting the location with three researchers who were educated about the survey in advance by reviewing the data related to literature analysis. After explaining the notes of attention to research subjects, copies of the survey were distributed. Subjects filled the distributed copies of the survey by self-administration, and we immediately collected completed copies of the survey.

2.4 Data Process

After excluding copies with incomplete responses, we entered the data available with analysis in the computer, and processed the data. We used the SPSS 20.0 statistical program to conduct exploratory factor analysis, reliability analysis (Cronbach's α), descriptive statistical analysis, correlation analysis, and multiple regression analysis. At this time, the significance level was $\alpha=.05$.

3. Research Results

3.1 Results of Correlation Analysis

According to the results of correlation analysis in Table 4 the overall environment positively correlated with satisfaction ($r=.466$), intention to revisit ($r=.490$), and intention to recommend ($r=.461$). The game environment positively correlated with satisfaction ($r=.474$), intention to revisit ($r=.535$), and intention to recommend ($r=.505$). The opening environment positively correlated with satisfaction ($r=.526$), intention to revisit ($r=.530$), and intention to recommend ($r=.487$). Satisfaction positively correlated with the intention to revisit ($r=.700$), and intention to recommend ($r=.698$).

Table 4. Results of correlation analysis

	A	B	C	D	E	F
A	-					
B	.771***	-				
C	.701***	.777***	-			
D	.466***	.474***	.526***	-		
E	.490***	.535***	.530***	.700***	-	
F	.461***	.505***	.487***	.698***	.779***	-

*** $p<.001$.

3.1 Relationship between Selection Property and Satisfaction

According to the results of multiple regression analysis

in Table 5 the influence of the selection property of the audience of sport events on satisfaction was statistically significant ($F=29.656$, $p<.001$). The entire explanatory power turned out to be about 29.7% ($R^2=.297$) of all the variables. According to the Beta value as a relative influential power of selection property on satisfaction, there was a positive influence on the opening environment ($\beta=.357$, $p<.001$).

Table 5. Relationship between selection property and satisfaction

	B	SE	β	t	Tolerance
Constant	.989	.306		3.232***	
Overall environment	.197	.118	.157	1.677	2.638
Game environment	.091	.128	.075	.709	3.382
Opening environment	.401	.107	.357	3.764***	2.698

$R^2=.325$, $F=33.902$, $p=.001$. *** $p<.001$.

3.2 Relationship between Selection Property and Behavioral Intention

3.3.1 Relationship between Selection Property and the Intention to Revisit

According to the results of multiple regression analysis in Table 6 the influence of selection property of audiences of sport events on the intention to revisit was statistically significant ($F=33.902$, $p<.001$). Their entire explanatory power turned out to be about 32.5% ($R^2=.325$) of all the variables. According to the beta value as a relative influential power of selection property on the intention to revisit, there was a positive influence on the game environment ($\beta=.240$, $p<.05$) and opening environment ($\beta=.255$, $p<.01$).

Table 6. Relationship between selection property and the intention to revisit

	B	SE	β	t	Tolerance
Constant	.490	.328		1.496	
Overall environment	.173	.126	.126	1.371	2.638
Game environment	.317	.138	.240	2.304*	3.382
Opening environment	.317	.114	.255	2.749**	2.698

$R^2=.325$, $F=33.902$, $p=.001$. * $p<.05$, ** $p<.01$

3.3.2 Relationship between Selection Property and Intention to Recommend

According to the results of multiple regression analysis in Table 7 the influence of the selection property of the audience of sport events on the intention to recommend was statistically significant ($F=27.833$, $p<.001$). Their entire explanatory power turned out to be about 28.4% ($R^2=.284$) of all the variables. According to the beta value as a relative influential power of selection property on the intention to recommend, there was a positive influence on the game environment ($\beta=.249$, $p<.05$), and the opening environment ($\beta=.206$, $p<.05$).

Table 7. T Relationship between selection property and intention to recommend

	B	SE	β	t	Tolerance
Constant	.455	.366		1.243	
Overall environment	.186	.141	.125	1.319	2.638
Game environment	.357	.154	.249	2.324*	3.382
Opening environment	.274	.128	.206	2.149*	2.698

$R^2=.284$, $F=27.833$, $p=.001$. * $p<.05$, *** $p<.001$.

3.4 Relationship between satisfaction and Behavioral Intention

3.4.1 Relationship between Satisfaction and the Intention to Revisit

According to the results of regression analysis in Table 8 the influence of satisfaction of audiences of sport events on the intention to revisit was statistically significant ($F=205.040$, $p<.001$). Their entire explanatory power turned out to be about 49.0% ($R^2=.490$). According to the beta value as a relative influential power of satisfaction on the intention to revisit, there was a positive influence on satisfaction ($\beta=.700$, $p<.001$).

Table 8. Relationship between satisfaction and the intention to revisit

	B	SE	β	t	Tolerance
Constant	.819	.204		4.009***	
Satisfaction	.765	.053	.700	14.319***	1.000

$R^2=.490$, $F=205.040$, $p=.001$. *** $p<.001$.

3.4.2 Relationship between Satisfaction and Intention to Recommend

According to the results of regression analysis in Table 9 the influence of the satisfaction of sport events spectators on the intention to recommend was statistically significant

($F=202.486$, $p<.001$). Their entire explanatory power turned out to be about 48.7% ($R^2=.487$). According to the Beta value as a relative influential power of satisfaction on the intention to recommend, there was a positive influence on satisfaction ($\beta=.698$, $p<.001$).

Table 9. Relationship between satisfaction and intention to recommend

	B	SE	β	t	Tolerance
Constant	.604	.222		2.713**	
Satisfaction	.828	.058	.698	14.230***	1.000

$R^2=.487$, $F=202.486$, $p=.001$ *** $p<.001$

4. Discussion

We conducted this study to clarify the practical relationship between selection property, satisfaction, and behavioral intention of sports events spectators. The selection property of sport events spectators in this study turned out to be positively correlated with satisfaction, and all the sub-variables of behavioral intention. Satisfaction positively correlated with all the sub-variables of behavioral intention. The selection property of sport events spectators indicates how much expectation is fulfilled prior to selecting sport events. Sport events are as diverse as the desires of audiences.

In¹² implied that selection property and satisfaction are correlated, by observing that the selection property indicated the importance of features when consumers made their selection, while the satisfaction property was recognized after use. Behavioral intention is referred to as the will to a specific service or re-purchase as a result variable of the decision-making process. The selection property and behavioral intention in this study are positively correlated. Therefore, it seems to be possible to derive continuous participation from audiences, if comprehensively considering the intention, preference, and goals of audiences.

In²⁵ observed that the satisfaction and behavioral intention of visitors to local festivals were very significantly related. Therefore, local communities should fulfill the satisfaction of audiences, and actively seek for managerial measures to serve the role of creating potential demand, as well as the revisiting of audiences to derive continuous visiting from them. In this study, the opening environment positively influenced the satisfaction among sub-variables of the selection property, and the game environment and opening environment positively influenced the intentions

to revisit and recommend. The overall environment in this study did not influence satisfaction or behavioral intention at all. When attracting sport events from local communities, it seems that if preparing for the overall environment from the planning stages, overall environment, satisfaction, and behavioral intention might be influenced. In particular, environmental improvement, including the identification of various desires according to audiences, configuration of economic circumstances, introduction of tourism products in connection to areas, and exploration of famous restaurants might improve the satisfaction level of audiences.

In other words, local communities are expected to establish the cornerstone of successful sport events if creating the advertisement strategies in connection with cultural tourism resources and promotion in economic situations. Kang & In²⁶ observed that food, guidance, promotion, advertisement, and configuration of convenient facilities were reported as elements to improve satisfaction in their study dealing with the influence of event evaluation factors of festival event consumers. Therefore, their research supports the result of this study.

Among the attraction of sport events by local communities, the environmental factor has been an important element in this study. Finally, local communities attracting sport events are required to consider accessibility with transportation, and make an effort to improve the accommodation, restaurants, and environment at hosting places to derive positive behavioral intention of audiences, and satisfy them. The ultimate goal of sports event spectators is to enjoy themselves. As shown in this study, the game environment directly and positively influences the behavioral intention. Therefore, local communities are required to establish a flexible cooperative system with hosting organizations for the competition as an effort to improve the game environment. In¹¹ and²⁷ indicated that satisfaction of participants in sport events influenced their intention to revisit and recommend, and hence their research supports the results of this study.

5. Conclusion and Suggestion

We conducted this study to clarify the practical relationship between selection property, satisfaction, and the behavioral intention of sport event spectators. The subjects of this study were 216 spectators of basketball games and volleyball games held by local communities

in 2015, to which we distributed survey copies. For the data process, we conducted exploratory factor analysis, reliability verification, correlation analysis, and multiple regression analysis; and drew the following conclusions: First of all, the selection property of sports event spectators represented a positive correlation on all the satisfaction and sub-variables of behaviors, and satisfaction positively correlated with all the sub-variables of behavioral intention.

Secondly, the opening environment among the selection properties positively influenced satisfaction. Third, the game environment and opening environment from the selection property positively influenced the intention to revisit and recommend. Fourth, satisfaction positively influenced the intention to revisit and recommend. Our conclusions indicate that sports events held by local communities require detailed marketing strategies, since the opening environment positively influences spectator satisfaction. In addition, satisfaction directly influences spectator behavioral intention. Therefore, an effort is required to improve the satisfaction of audiences, so that they will revisit, and recommend others to visit as well. On the other hand, we recommend a follow-up study to analyze more detailed difference of demographic characteristics, and seek a marketing strategy for them to achieve a better developmental outcome.

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