The Relationship among Service Quality, Satisfaction, and Future Attendance Intention: The Case of Shanghai ATP Masters 1000

Yinghui Zhang[1], Donghun Lee[2,*], Lawrence W. Judge[2], James E. Johnson[2]

[1]School of Economic and Management, Shanghai University of Sport, Shanghai, 200438, China
[2]School of Physical Education, Sport and Exercise Science, Ball State University, Muncie, IN, 40736, USA

Abstract Little attention has been paid to the role of cross culture in predicting audiences' attendance intention. Therefore, this study was primarily designed to identify the cultural difference in two groups (Chinese audience and foreign audience) pertaining to the perception of service quality, satisfaction and future attendance intention and their relationships at an international tennis event in China. The results indicated that the Chinese audience evaluated service quality and overall satisfaction significantly higher than the foreign audience. Among eleven service quality factors, Grandstand Environment and Official Website services were the most influential factors of satisfaction perceived by Chinese audiences; while, Content of Game and Parking services were significantly related to the satisfaction perceived by foreign audiences. Content of Game in the Chinese group and Grandstand Environment in the foreign group were significantly associated with future attendance intention. Our data suggest that the sports managers and marketers must establish and implement different strategies that are designed specifically to target local and foreign audiences that attend a mega sporting event while providing an attractive and entertaining game for both groups as the key to success.

Keywords Service Quality, Audience Satisfaction, Future Attendance Intention, Cross Culture

1. Introduction

Tennis is one of the most popular sports in many countries, resulting in a booming global market with huge commercial value. A recent report from IEG (International Events Group, 2013) revealed that the worldwide tennis sponsorship spending demonstrated sustainable growth from 581 million US dollars in 2009 to 667 million US dollars in 2012, and it is expected to set a new record of 708 million US dollars in 2013. China has also witnessed a significant change in the size of the tennis market in the past decade. According to data gathered through a 2009 survey of the Chinese Tennis Association (CTA), the number of people playing tennis in China has reached 8.12 million, and subsequently tennis facilities have increased at an annual rate of 12%. Likewise, international tennis events have become very attractive to the public in China. Shanghai ATP (Association of Tennis Professionals) Masters 1000 is the only ATP Masters 1000 event in Asia. This event has become very popular in Shanghai and across the nation since its inaugural launching in 2009. The

organizing committee announced the Shanghai ATP Masters 1000 attracted approximately 148,000 fans who attended the event. Launching a large scope event, such as the ATP Masters 1000 has escalated the growth rates of participation, as well as consumption of related products across the nation. For example, the number of people owning tennis equipment and playing tennis at least once a week in Shanghai has increased from 540,000 in 2006 to 920,000 in 2012. This has generated an estimated 245 million US dollars of tennis-related products/services (Zhu, 2012).

Attendance is one of the critical criteria through which the success of a sporting event can be measured, as was the case for the Shanghai Masters. In order for the Shanghai Masters to be successful, management personnel must learn the characteristics of sports audiences and develop effective event management strategies. For continued growth of the Shanghai Masters, it is imperative to understand, maintain, and improve audience support and loyalty. To accomplish this, it is necessary to investigate the audiences' perception of service quality and satisfaction with the event along with their future attendance intentions.

Scholars in various disciplines have commonly found that service quality positively influences the satisfaction while subsequently impacting future intentions (Kim, LaVetter, & Lee, 2006; Koo et al., 2009; Yoshida & James,

2010). Surprisingly, there is a lack of research in which sport marketing researchers examine perceptions of service quality, satisfaction, future intention, and their relationships in a cross-culture perspective. Yoshida and James performed one of the few cross-cultural studies on service quality and consumer satisfaction. Yoshida and James tested a model explaining relationships among service quality, core product quality, game and service satisfaction, and future intentions toward professional baseball audiences in Japan and college football spectators in America. They found that game satisfaction had a significant impact on behavioural intentions across the two settings (Japan and America), while the service satisfaction-behavioural intentions relationship was significant only in Japan. Yoshida and James presented a possible explanation for the variance in findings across the two groups to be associated with spectators' different attitudes toward different sporting events. That is, spectators may continue supporting their favourite college football teams regardless of service (dis) satisfaction with the game, but spectators of another sport, such as professional baseball, may base their responses on service outside of the actual game. Therefore, to more accurately examine cross-cultural differences, examiners may benefit from considering data comparability as Chun, Gentry, and McGinnis (2004) suggested. Chun et al. focused on fan ritualization from a cross-cultural perspective in American and Japanese baseball fans. It would be proper to select a comparative research domain, such as fans of sporting events of the same type or the same sports in different cultures. In this context, the current study investigated the audience's behaviours cross-culturally by examining the differences between Chinese and foreign audiences of an international tennis sporting event in China. More specifically, this study aimed to explore the differences regarding the perceptions of service quality, overall satisfaction, and future intention. Additionally, this study aimed to examine cross-cultural difference between the Chinese and foreign audiences by measuring the difference of the relationships between service quality, satisfaction and future intention across these two groups.

The Chinese scholars have dedicated their research to that of audience behaviour during the last decade when the sports event industry began to embrace dramatic development in China (Wang, 2013; Wang, 2012; Zhan et al., 2011; Zhu, 2011). However, a lack of empirical research on service quality of sporting events and factors affecting consumers' intention to watch the game live was indicated (Cao & Zhang, 2011; Huang, Zhang, & Zhao, 2010). The feedback from this study will help managers better understand the audiences' evaluations of service quality, the impact of satisfaction on future intentions, and the differences between domestic and foreign audiences. Consequently, making strategic improvements to increase game attendance will occur. In addition, future sponsors may be interested in additional data regarding demographic composition, as well as, audience satisfaction and customer trends of a global tennis event like the Shanghai Masters in

a developing country similar to China.

2. Theoretical Background

2.1. Service Quality

There is a general consensus that service quality is composed of a number of underlying dimensions (Murray & Howat, 2002). Parasuraman, Zeithaml, and Berry (1988) proposed five dimensions of service quality that included responsiveness, assurance, tangible, empathy, and reliability. Among them, the SERVQUAL scale developed by Parasuraman, et al. has been the most widely accepted and cited framework explaining service quality in various settings (Kim & Lough, 2007). Since its inaugural introduction to the literature, there has been some criticism to this measurement scale. Several scholars argued that the components of SERVQUAL are not applicable to all service industries and should be tailored to the context being examined (Cronin & Taylor, 1992; Finn & Lamb, 1991). To fill the gap in the literature, more pertinent models for measuring service quality have been constructed. For example, Howat, Murray, and Crilley (1999) introduced a three-factor model of service quality including personnel, core and peripheral service quality. In a slightly different way, McDougall and Levesque (2000) proposed that service quality is composed of two overarching dimensions: the core (what is delivered) and the relational (how it is delivered). Van Leeuwen, Quick, and Daniel (2002) defined the core product function of the game as core service quality and categorized game support programs as peripheral services. However, Murray and Howat argued it was also acceptable to measure relational service quality as a combination of attributes that reflect the personnel or peripheral factors. In the current study, we adopted core and peripheral services as two dimensions of service quality due to its more global approach (Murray & Howat, 2002) and the feasibility of distinguishing the core and peripheral dimensions of service quality.

2.2. Customer Satisfaction

Customer satisfaction is one of the key variables explaining behavioural intentions in marketing. Oliver (1997) defined customer satisfaction as a judgment that a product or service feature, or product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfilment. As this definition implies, the perception of satisfaction is a subjective evaluation by consumers. The literature generally suggests that service quality positively affects the customer satisfaction.

Murray and Howat' (2002) investigation supported this relationship between service quality and satisfaction for customers at Australian public sports and leisure centres. They stated that the core and relational service quality significantly influenced customer satisfaction, while relational service quality explained slightly more of the variance than core service quality in the overall customer

satisfaction. Koo et al. (2009) adopted a three-factor model of functional, technical, and environmental attributes, as the dimensions of service quality, to examine the causal effects between dimensions of service quality and spectator satisfaction in minor league baseball. Functional, technical and environmental attributes were reported as significant determinants of perceived service quality which, in turn, has salient effect on spectator satisfaction. In this way, previous studies had repeatedly confirmed the impact of service quality and satisfaction. There is no doubt that managers are to continuously seek and adopt procedures to understand, evaluate, and improve on the quality of services provided to their customers (Tsuji, Bennett, & Zhang, 2007).

2.3. Future Behavioural Intentions

Ajzen (1991) suggested that even though future intentions do not always lead to an actual behaviour, they do imply a high likelihood of future behaviours. This means that measuring future intentions of audiences is very important for the continued success of an event (Kim & Lough, 2007; Shonk & Chelladurai, 2008; Tsuji, Bennett, & Zhang, 2007). Behavioural intentions are usually described as repeat purchase or repurchase intentions (Cronin et al., 2000; McDougall & Levesque, 2000; Murray & Howat, 2002) because it demonstrates willingness (enthusiasm) to repurchase a product or service (Mitall, Rose & Baldasare, 1998). Intentions to attend future sporting events were the most widely-examined dependent variable in sport marketing literature (Shonk & Chelladurai, 2008; Tsuji, Bennett, & Zhang, 2007). For a service organization, attaining and maintaining a high level of customer repurchase (or repeat game attendance) intention is needed to be an ongoing process (Bhote, 1996). Typically, future attendance intentions were assessed by asking participants about the likelihood they would attend the event next year (Murray & Howat, 2002; Kim, et al., 2006; Kim & Lough, 2007; Shonk & Chelladurai, 2008; Tsuji, Bennett, & Zhang, 2007).

Oliver (1997) pointed out that 'satisfaction itself is a desirable end state of consumption or patronization; it is reinforcing, pleasurable experience' (p.10). Consumers are loyal to the service providers who satisfy them (Kennett, Sneath, & Henson, 2001). That is, if a customer is satisfied with the consumption experience, it is highly predicted that he/she would like to repurchase this product or service in the future; if not, the chance of the customer to seek an alternative is greatly increased. There is convincing evidence suggesting that customer satisfaction has significant effects on profit via its influence on customer retention (Anderson, Fornell & Lehman, 1994; Cronin, Brady, & Hult, 2000).

Sports organizations are encouraged to continuously meet or exceed audiences' expectations and perceptions regarding service experiences if they are to maintain and grow the number of audiences and future attendance (Kennett et al., 2001). A satisfactory experience resulting from attending sporting events would appear to be an important predictor of a fan's likelihood of attending future events (Madrigal, R.,

1995). Other researchers (Murray & Howat, 2002; Kim, et al., 2006; Kim & Lough, 2007; Tsuji, Bennett, & Zhang, 2007; Yoshida & James, 2010) have also found satisfaction is a key determinant of attending the sporting event or recommending it to others in the future.

The relationship between service quality and future intentions has also gained much attention. Tsuji, et al. (2007) indicated that only peripheral service quality is influential when expressing future attendance intentions; however, both core and peripheral service qualities, have indirect effects on future intentions via satisfaction. In the research of Kim et al. (2006), factors including empathy, assurance, responsiveness, and tangibles were identified as most critical in overall repurchase intention. This may suggest that the service quality may have a direct effect on intention to return, but an indirect effect through satisfaction with the service (Shonk & Chelladurai, 2008). Unlike the findings of Shonk and Chelladurai, some researchers supported the theory of the service quality-satisfaction-behavioural intentions chain, while neglecting consideration of a direct impact of service quality on future intentions (Murray & Howat, 2002; Yoshida & James, 2010). Existence of some contrary findings suggests further research on the relationships among service quality, satisfaction, and behavioural intention in the context of sports.

Based on the aforementioned literature, two hypotheses were tested in the current study. Cross-cultural differences were examined by testing these two hypotheses in the Chinese and foreign groups respectively:

H1: Service quality is significantly related to audience satisfaction;

H2: Service quality and audience satisfaction are significantly related to future intention.

3. Methods

3.1. Participants and Data Collection

Using the stratified random sampling technique, data collection was conducted throughout the nine event days at the 2013 Shanghai Masters in China. Four graduate students were recruited to collect data using a guideline to broaden diverse population (Cronin, Brady, & Hult, 2000). English speaking data collectors were recruited and utilized in order to collect data from international visitors (those visiting from outside of the country of China). Collectors situated themselves at the rest areas between the playing courts and approached the audiences who were taking a break during or after a match to request their participation in the survey. The respondents were informed of the purpose of the study, the time the questionnaire would take, and were assured their information would be completely confidential and used for research only.

A total of 749 questionnaires were initially collected. Due to incompleteness, 56 were excluded from data analysis. The final sample consisted of 533 Chinese (77%) and 160 foreign visitors (23%). Approximately 52% of

Chinese visitors were males, 48% were females while 68.1% of foreign visitors were males and 31.9% were females. The ages of respondents ranged from 19 to 78 years old with 68.8% of Chinese sample and 39.4% of foreign sample being equal to or under 30 years old. Additionally, 66% of Chinese respondents and 64.4% of foreign respondents presently live in Shanghai, and the majority of them (59.5% of Chinese respondents and 51.9% of foreign respondents) have watched Shanghai Masters or Shanghai Masters cup at least once in the past. Detailed descriptive information of the socio-demographic audience characteristics are presented in Table 1.

3.2. Instrumentation

A pencil and paper questionnaire was used to measure the perceptions of service quality, audience satisfaction, and future attendance intention among the audiences of Shanghai ATP Masters 1000 in 2013. Service quality was measured in two aspects: core service quality and peripheral service quality. Core service quality was operationalized as the core product offerings of the game; while peripheral service

quality was defined as non-game related services (Van Leeuwen et al., 2002). This study measured the content of the game (i.e. the performance and competitiveness of the game) to assess the core service quality. The dimensions of peripheral service quality were determined based on the services provided for the audiences of the event. Ten items were included to measure peripheral service quality, including the following; onsite entertainment (concerts and music), transportation, parking service, grandstand environment (security, seat cleaning, order etc.), on-site information service (information publishing, consultation service etc.), onsite signage (ease of entrance), souvenir selling, concessions, ticket service, and official website. All items were anchored on a 5-point Likert-type scale, ranging from 1(very low) to 5 (very high). Audiences' overall satisfaction was rated on a question using a 5-point Likert-type scale ranging from 1(very dissatisfied) to 5 (very satisfied). Lastly, future attendance intention was measured on a three-point scale including will not come, may come, and surely will come. Demographic information was also collected as illustrated in Table 1.

Table 1. Descriptive Statistics of the Sample (N=693)

Category		Chinese group		Foreign group	
		n	%	n	%
Gender	Male	277	52.0	109	68.1
	Female	256	48.0	51	31.9
Age	19-23	198	37.1	10	6.3
	24-30	169	31.7	53	33.1
	31-40	101	18.9	39	24.4
	41-50	47	8.8	38	23.8
	51-60	13	2.4	14	8.8
	Above 60	5	.9	6	3.8
Present residence	Shanghai	352	66.0	103	64.4
	In China but out of Shanghai	178	33.4	19	11.9
	Out of China	3	.6	38	23.8
Employment status	Student	192	36.0	23	14.4
	Housewife	10	1.9	22	13.8
	Staff	214	40.2	48	30.0
	Senior manager	53	9.9	49	30.6
	Other	64	12.0	18	11.3
Education background	Middle school or less	2	.4	3	1.9
	High school /Vocational school/Secondary school	30	5.6	20	12.5
	College/University	412	77.3	63	39.4
	Graduate or more	89	16.7	74	46.3
Frequency of playing tennis	Every two days	63	11.8	23	14.4
	Once a week	111	20.8	30	18.8
	Every two weeks	43	8.1	9	5.6
	Once a month	39	7.3	24	15.0
	From time to time	190	35.6	46	28.8
	Never	87	16.3	28	17.5
Past experience	First time	216	40.5	77	48.1
	1-2 times before	244	45.7	63	39.4
	3-4 times before	41	7.7	12	7.5
	More than 4 times before	32	6	8	5

3.3. Validity

The questionnaire was presented to a panel of five experts to ensure the construct validity. Two of the experts were managers from the Shanghai Tennis Masters organization committee, who had substantial practical experience of sporting events and were well informed about the service being provided at the event. The other three were faculty in the field of sport management in a Mid-eastern university in Shanghai. The panel of experts was asked to review the questionnaire in terms of representativeness and relevance of the items. An item related to official website service was added based on the experts' feedback, due to the official website being the first place the event committee released the latest updates and news reports about the games, such as the game schedule of the next day.

3.4. Pilot test of Questionnaire

A pilot test was conducted with 20 local students majoring in sports marketing and 5 international graduate students attending the university (two Americans and three Australians). Based on their feedback, the questionnaire was slightly revised and then reliability was measured. Cronbach's alphas for service quality were 0.90 and 0.76 in the Chinese and foreign groups, respectively. IRB approval was obtained before the survey was distributed at the event.

3.5. Data Analysis

Using SPSS 21.0, descriptive statistics were calculated to examine the audiences' overall rate of perceived service quality, satisfaction, and future attendance. Using correlations, discriminant validity was examined. Additionally, a multivariate analysis of variance (MANOVA) was conducted to assess the group difference in the overall factors within the Chinese and foreign groups. In addition, regression analyses were adopted to examine the extent to which service quality had significant impact on future attendance intention with the moderating effect of audience satisfaction across the Chinese and foreign groups.

4. Results

4.1. Descriptive Statistics

In the Chinese group, Content of the Game (M=4.47) produced the highest mean, while Concessions produced the lowest mean (M=3.84). In the foreign group, Content of Game (M=4.42) also had the highest mean, while Transportation had the lowest mean (M=3.39; Table 2).

Multivariate normality distribution of the motives was examined. In the Chinese group, skewness and kurtosis values ranged from |0.088| to |1.174| and |0.001| to |2.983|, respectively, indicating normal data distribution. Similar results were found in the foreign group, in that the skewness and kurtosis values ranged from |0.059| to |1.149| and |0.13| to |1.536|, respectively (Table 2).

Table 2. Means, Standard Deviations, Skewness, and Kurtosis for the Service Quality

Group	Service Quality Items	M	SD	Skewness	Kurtosis
	1. Content of game	4.47	.627	-.810	-.104
	2. Transportation	4.06	.987	-.892	.236
	3. Parking	4.00	1.024	-.815	-.001
	4. Onsite entertainment	4.22	.774	-.537	-.741
	5. Grandstand environment	4.35	.715	-.957	1.137
	6. Information service	4.30	.750	-1.174	2.212
Chinese Group	7. Onsite signage	4.35	.739	-1.025	1.126
	8. Souvenir selling	4.11	.847	-.711	.266
	9. Concessions	3.84	.985	-.592	-.135
	10. Ticket service	4.39	.721	-1.155	1.621
	11. Official website	4.26	.834	-1.073	.953
	12. Audience satisfaction	4.44	.624	-1.134	2.983
	13. Future intention	2.41	.527	-.088	-1.096
	1. Content of game	4.42	.649	-.835	.338
	2. Transportation	3.43	1.073	-.374	-.074
	3. Parking	3.75	1.076	-.841	.385
	4. Onsite entertainment	4.13	.751	-.863	1.536
	5. Grandstand environment	4.35	.672	-.814	.644
	6. Information service	3.96	.933	-.931	.820
Foreign Group	7. Onsite signage	4.10	.883	-.981	1.023
	8. Souvenir selling	3.81	.928	-.262	-.599
	9. Concessions	3.68	1.093	-.720	-.013
	10. Ticket service	4.03	.993	-1.149	1.190
	11. Official website	4.04	.946	-.871	.367
	12. Audience satisfaction	4.42	.598	-.484	-.642
	13. Future intention	2.42	.520	.059	-1.382

Table 3.   Correlations among Service Quality Items, Audience Satisfaction and Future Attendance Intention

Correlation Matrix													
Chinese Group	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Content of game	1												
2. Transportation	0.41*	1.00											
3. Parking	0.32*	0.50*	1.00										
4. Onsite entertainment	0.38*	0.46*	0.48*	1.00									
5. Grandstand environment	0.37*	0.53*	0.41*	0.52*	1.00								
6. Information service	0.42*	0.47*	0.42*	0.50*	0.51*	1.00							
7. Onsite signage	0.45*	0.33*	0.40*	0.43*	0.45*	0.66*	1.00						
8. Souvenir selling	0.31*	0.39*	0.37*	0.48*	0.51*	0.47*	0.50*	1.00					
9. Concessions	0.35*	0.45*	0.38*	0.46*	0.42*	0.45*	0.40*	0.64*	1.00				
10. Ticket service	0.41*	0.48*	0.45*	0.43*	0.51*	0.52*	0.50*	0.47*	0.45*	1.00			
11. Official website	0.42*	0.40*	0.34*	0.38*	0.37*	0.54*	0.50*	0.43*	0.50*	0.47*	1.00		
12. Audience satisfaction	0.57*	0.44*	0.37*	0.35*	0.43*	0.49*	0.51*	0.37*	0.36*	0.46*	0.44*	1.00	
13. Future attendance	0.14*	0.08	-.01	0.07	0.01	0.07	0.04	0.04	0.00	0.04	-.01	0.13*	1.00
Foreign Group	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Content of game	1.00												
2. Transportation	0.42*	1.00											
3. Parking	0.09	0.66*	1.00										
4. On site entertainment	0.20**	0.06	0.34*	1.00									
5. Grandstand environment	0.26*	0.20	0.35*	0.38*	1.00								
6. Information service	0.19**	0.07	0.44*	0.40*	0.34*	1.00							
7. On site signage	0.23*	-.02	0.16	0.34*	0.43*	0.69*	1.00						
8. Souvenir selling	0.30*	0.29**	0.29**	0.36*	0.33*	0.37*	0.48*	1.00					
9. Concessions	0.31*	-.02	0.05	0.28*	0.20**	0.22*	0.26*	0.50*	1.00				
10. Ticket service	0.17**	0.18	0.20	0.30*	0.39*	0.49*	0.44*	0.45*	0.33*	1.00			
11. Official website	0.12	0.10	0.20	0.32*	0.38*	0.42*	0.43*	0.47*	0.33*	0.37*	1.00		
12. Audience satisfaction	0.61*	0.24	0.25	0.25*	0.35*	0.34*	0.32*	0.39*	0.34*	0.25*	0.27*	1.00	
13. Future attendance	0.19**	0.21	0.19	0.12	0.09	0.09	0.07	0.10	0.10	-0.07	0.06	0.12	1.00

Note. * indicates statistically significant at the .01 level (p<.01, two-tailed); ** indicates statistically significant at 0.5 level

Table 4.   Group Differences between the Chinese and Foreign Groups

Variables	Chinese		Foreigners		F	Sig.	η_p^2
	M	SD	M	SD			
1. Content of game	4.47	.627	4.42	.649	1.08	.302	.013
2. Transportation	4.06	.987	3.43	1.073	13.08	.001*	.138
3. Parking	4.00	1.024	3.75	1.076	8.01	.006*	.089
4. On site entertainment	4.22	.774	4.13	.751	0.29	.594	.003
5. Grandstand environment	4.35	.715	4.35	.672	0.09	.763	.001
6. Information service	4.30	.750	3.96	.933	7.73	.007*	.086
7. Onsite signage	4.35	.739	4.10	.883	7.34	.008*	.082
8. Souvenir selling	4.11	.847	3.81	.928	10.07	.002*	.109
9. Concessions	3.84	.985	3.68	1.093	3.59	.062	.042
10. Ticket service	4.39	.721	4.03	.993	4.64	.034*	.054
11. Official website	4.26	.834	4.04	.946	4.51	.037*	.052
12. Overall satisfaction	4.44	.624	4.42	.598	0.19	.664	.002
13. Future attendance	2.41	.527	2.42	.520	2.13	.148	.025

Note. η_p^2. Partial eta-squared

To detect potential issues associated with multicollinearity, correlations among all variables were examined (Table 3). Discriminant validity of the items was evident in that no correlations were higher than .85 (Kline, 2010), indicating mutual independence among service quality items in both groups.

To assess the group differences between the Chinese and foreign groups, a multivariate analysis of variance (MANOVA) was conducted towards the proposed 13 constructs using nationality as a criterion variable. The result indicated the MANOVA null hypothesis of equality of the mean scores for the 13 constructs between two groups was rejected at the .001 significant level (Wilk's Lambda=.675, F=2.59, P<0.01; Table 4). The computed F

values for Content of Game, Onsite Entertainment, Information Service, Onsite Signage, Souvenir Selling, Ticket Service, and Official Website were statistically significant (Table 4).

Partial eta-squared (ηp^2) was also computed as an index of effect size (Cohen, 1973). Partial eta-squared is similar to R^2 in a regression analysis and can be deemed as the amount of variance in a dependent variable that is explained by a categorical independent variable (Yoshida & James, 2010). The partial eta-squared values for the 13 constructs ranged from 0.001 to 0.138, indicating that the contributions of the two groups to the dependent variables were small.

4.2. Impact of Service Quality on Audience Satisfaction

In order to examine the impact of service quality on audience satisfaction, a multiple regression considering all 11 service quality factors as independent variables and audience satisfaction as the dependent variable was conducted. It was indicated that the effects of the 11 service s quality factors on the audience satisfaction was statistically significant [F $(11, 42) = 3.221$, p<0.01] in the Chinese group, explaining about 31.6% of the variance in the audience satisfaction. Similarly, a statistical significance was found between service quality and audience satisfaction in the foreign group [F $(11, 18) = 2.638$, p<0.01], explaining about 38.3% of the variance in the audience satisfaction.

To further determine the service quality factors which significantly impact audience satisfaction, a stepwise regression analysis was conducted. It is suggested that model 2 of these two groups produced the highest R^2 of 0.383 and 0.386, respectively. According to the coefficients result in Table 5, Grandstand Environment (β=.387, p=.002) and Official Website (β=.385, p=.002) were found to be significant predictors of audience satisfaction in the Chinese group. In the foreign group, Content of Game (β=.489, p=.002) and Parking (β=.385, p=.014) were the factors which showed a statistically significant impact on the audience satisfaction.

Table 5. The Influence of Service Quality and Audience Satisfaction

Group	Model	Variables	Beta	*t*	*Sig.*
Chinese group	1	Grandstand environment*	.527	4.467	.000
	2	Grandstand environment*	.387	3.344	.002
		Official website*	.385	3.325	.002
Foreign group	1	Content of game*	.531	3.318	.003
	2	Content of game*	.489	3.342	.002
		Parking*	.385	2.630	.014

Note. * Significant at the .05 level.

4.3. Impact of Service Quality and Audience Satisfaction on Future Intention

To predict the influence of service quality and audience satisfaction on future attendance, multiple stepwise regressions were applied. The results of regression analysis, using alpha=0.05 for variable entry and alpha=0.1 for

variable removal suggested that model 1 [F $(1, 52) =7.312$, p<0.01] of the Chinese group and model 2 [F $(2, 27) =7.249$, p<0.01] of the foreign group have the highest R squared values.

The coefficient result of stepwise regression analysis was presented in Table 6. It was indicated that Content of Game (β=.351 p=.009) was the only salient predictor of future intention in the Chinese group, while both Content of Game (β=.459 p=.007) and Grandstand Environment (β=.335 p=.041) had statistically significant influence on future attendance in the foreign group.

Table 6. The Influence of Service Quality and Audience Satisfaction on Future Attendance

Group	Model	Variables	Beta	*t*	*Sig.*
Chinese group	1	Content of game*	.351	2.704	.009
Foreign group	1	Content of game*	.488	2.958	.006
	2	Content of game*	.459	2.944	.007
		Grandstand environment*	.335	2.149	.041

Note. * Significant at the .05 level.

5. Discussion and Conclusions

This study aimed to gain a better understanding in the differences of perceptions between local and foreign audiences that attend a mega sporting event. Some interesting findings were revealed through the evaluation of the proposed hypotheses in this study. The findings from the first regression model considered eleven service quality factors as independent variables, and audience satisfaction as the dependent variable, indicated statistically significant results, leading to the confirmation of the hypothesis that service quality is significantly related to audience satisfaction. This is consistent with the dominant position in the previous studies, that service quality is a major predictor of customer satisfaction (Cronin et al., 2000; Kim et al., 2006; Koo et al., 2009; Murray & Howat, 2002; Tsuji et al., 2007; Yoshida & James, 2010). Consequently, this position appears to have broad-based empirical support in the context of the sports service industry. The stepwise regression indicated that Grandstand Environment and Official Website services were the most influential factors of satisfaction perceived by Chinese audiences; while, Content of Game and Parking services were significantly related to the satisfaction perceived by foreign audiences. Clearly, the audiences in these two groups assessed their overall satisfaction differently. Chinese audiences emphasize the importance of providing a clean and comfortable grandstand environment, as well as timely and easy website service. Foreign audiences highly evaluate the importance of an attractive game and a convenient parking service. This finding shows that the service being provided, beyond the playing courts (such as official website service, parking service), is critical to improve the service quality, and in turn audience satisfaction.

The findings from the stepwise regression analysis

indicated that Content of Game in the Chinese group and that Grandstand Environment in the foreign group were significantly associated with future attendance, leading to the partial confirmation of the hypothesis that service quality and audience satisfaction are significantly related to future intention. This finding is consistent with the previous studies (DeSchriver & Jensen, 2002; Li & Hou, 2012; Welki & Zlatoper, 1994; Madrigal, 1995) that suggested the quality of the game strongly influences audiences' decision to attend a sporting event, which may explain why the audience showed high level of future attendance intention if they were attracted by the high quality of the game. This finding is different with the study of Tsuji, et al. (2006) who indicated that the core service quality (that is, the game itself or the team's performance) was not influential in explaining future intention. Similarly, Mahony, Madrigal, and Howard (2000) suggested that sport managers may wish to sell the game as one aspect of a whole 'sport service experience' rather than focusing on core product. The varying research results may be due to the fact that the study was conducted under different service contexts. Still, it calls for a need for investigations that will obtain a more generalizable result.

The difference between the Chinese and foreign audiences, pertaining to the evaluation of service quality, audience satisfaction, and future intention, was found using the MANOVA and ANOVA results. The difference between these two groups was statistically significant; the Chinese audience evaluated the eleven service quality factors and overall satisfaction higher than the foreign audience. Further, Content of Game, Onsite Entertainment, Information Service, Onsite Signage, Souvenir Selling, Ticket Service, and Official Website services were evaluated differently across these two groups.

The findings of this study contribute to the knowledge of customer behaviors regarding sporting events in a cross-cultural perspective and lead to recommendations for sports marketers. First, sports marketers need to understand that sporting events offer many different experiences for local and foreign audiences, from parking and concessions, to the event itself. Content of the Game is the most important factor which will affect the audiences' perceptions of satisfaction and future intention. Thus, providing an attractive and entertaining game is to be the core of sporting events at any time. However, the performance of a game may generally be beyond the control of the sport manager (Kelley & Turley, 2001). Nonetheless, there are some activities in which the sports managers could do to support the game and strengthen the attractiveness of the game. For example, game atmosphere could be a part of the game experience for the audience. Yoshida and James (2010) suggested the combination of game atmosphere and the unique characteristics of the core product (i.e. player performance) help sport marketers satisfy the audiences. In addition, entertainment activities at the game break may also improve the audience's experience with the game.

Second, local and foreign audiences showed differences when they evaluated the services being provided. Data also suggests a difference between the two groups regarding the relationships between service quality, audience satisfaction, and future intention. Market segmentation is a very important step in marketing and in the sports field. Sport managers should consider establishing and implementing different strategies for the local and foreign audiences. For example, certain services may need to be provided differently, such as the access service (e.g. transportation and parking), because the needs for the services vary among the differing audiences.

6. Limitations and Suggestions for Future Study

The current study includes limitations that need to be taken into consideration when interpreting results. The first limitation may include the omission of service quality variables. For example, this study did not include personnel appearance in the service quality dimensions, because this study was largely based on the specific services in which the sport managers provided for the audiences. Additionally, customer-frontline employee interaction is very important and can impact the effect of the service delivery.

Second, the current study did not examine the moderating roles of audience characteristics (i.e. gender, age, occupation, education, and past experience) on the perceptions of service quality, satisfaction, future attendance, and the relationships among these three constructs. A more detailed understanding of what moderators significantly affects the audiences' evaluations of the game will be beneficial for sport marketer's strategies.

Third, even though future attendance intention is a widely-used outcome, multiple-items measurement may best describe the future intentions of consumers. Multiple-items measurement can fully evaluate the impact of the game on audience's behaviour (e.g. repurchase intentions, positive word-of-mouth, or customer loyalty; Cronin et al., 2000).

In summary, the local and foreign respondents surveyed in this study reported satisfaction with the game and expressed their intention to attend the game next year. The findings of this study offered both theoretical and practical contributions to the existing literature about the relationships of service quality, satisfaction, and future behavioural intention, and also provided several recommendations to sports managers. Still, further research pertaining to those complex relationships needs to be developed in additional contexts.

REFERENCES

[1] E. W. Anderson, C. Fornell, and D. R. Lehmann, 1994, Customer satisfaction, market share, and profitability: Findings from Sweden, Journal of Marketing, 58(3), 53-66.

[2] I. Ajzen, 1991, The theory of planned behavior, Organizational Behavior and Human Decision Processes, 50, 179-211.

[3] K. R. Bhote, Beyond customer satisfaction to customer loyalty - The key to greater profitability, New York: American Management Association, 1996.

[4] P. Cao, and J. Zhang, 2011, Influencing factors of sports events audiences' satisfaction degree, Journal of Shenyang Sport University, 30(5), 41-44.

[5] S. Chun, J. W. Gentry, and L. P. McGinnis, 2004, Cultural differences in fan ritualization: A cross-cultural perspective of the ritualization of American and Japanese baseball fans, Advances in Consumer Research, 31, 503-508.

[6] J. Cohen, 1973, Eta-squared and partial eta-squared in fixed factor ANOVA designs, Educational and Psychological Measurement, 33, 107-112.

[7] J. J. Cronin, M. K. Brady, and G. T. Hult, 2000, Assessing the effects of quality, value and customer satisfaction on consumer behavioral intentions in service environments, Journal of Retailing, 76, 193-218.

[8] J. J. Cronin, and S. A. Taylor, 1992, Measuring service quality: A re-examination and extension, Journal of Marketing, 56(3), 56-68.

[9] T. D. DeSchriver, and P. E. Jensen, 2002, Determinants of spectator attendance at NCAA Division II soccer contests, Journal of Sport Management, 16, 311-330.

[10] D. W. Finn, and C. R. Lamb, 1991, An evaluation of the SERVQUAL scales in a retail setting, Advances in Consumer Research, 18, 483-490.

[11] J. Huang, B. Zhang, and L. Zhao, 2010, Quality characteristics and quality control of the games in professional sports tournaments, Journal of Physical Education, 17(8), 33-36

[12] G. Howat, D. Murray, and G. Crilley, 1999, The relationships between service problems and perceptions of service quality, satisfaction and behavioural intentions of Australian public sports and leisure centre customers, Journal of Park and Recreation Administration, 17(2), 42-64.

[13] S. W. Kelley, and L. W. Turley, 2001, Consumer perceptions of service quality attributes at sporting events, Journal of Business Research, 54, 161-166.

[14] P. A. Kennett, J. Z. Sneath, and S. Henson, 2001, Fan satisfaction and segmentation: A case study of minor league hockey spectators, Journal of Targeting, Measurement and Analysis for Marketing, 10(2), 132-142.

[15] H-D. Kim, D. LaVetter, and J-H. Lee, 2006, The influence of service quality factors on customer satisfaction and repurchase intention in the Korean professional basketball

league, International Journal of Applied Sports Sciences, 18(1), 39-58.

[16] H-D. Kim, and N. L. Lough, 2007, An investigation into relationships among constructs of service quality, customer satisfaction, and repurchase intention in Korean private golf course, The ICHPER SD Journal of Research, 2(1), 14-22.

[17] G. Koo, R. Hardin, S. McClung, T. Jung, J. J. Cronin, C. Vorhees, and B. Bourdeau, 2009, Examination of the causal effects between dimensions of service quality and spectator satisfaction in Minor League Baseball, International Journal of Sports Marketing and Sponsorship, 11(1), 46-59.

[18] X. Li, and H. Hou, 2012, Analysis on the main influential factors of fans watching of the Chinese Professional football league, Journal of Beijing Sport University, 35(10), 140-144.

[19] R. Madrigal, 1995, Cognitive and affective determinants of fan satisfaction with sporting event attendance, Journal of Leisure Research, 27(3), 205-227.

[20] D. F. Mahony, R. Madrigal, and D. Howard, 2000, Using the psychological commitment to team (PCT) scale to segment sport consumers based on loyalty, Sport Marketing Quarterly, 5(3), 1-8.

[21] G. H. McDougall, and T. Levesque, 2000, Customer satisfaction with service: Putting perceived value into the equation, Journal of Services Marketing, 14(5), 392-410.

[22] V. Mitall, W. T. Rose, and P. M. Baldasare, 1998, The Asymmetric impact of negative and positive attribute-level performance on overall satisfaction and repurchase intentions, Journal of Marketing, 62, 33-47.

[23] D. Murray, and G. Howat, 2002, The relationships among service quality, value, satisfaction, and future intentions of customers at an Australian sports and leisure centre, Sport Management Review, 5, 25-43.

[24] R. L. Oliver, Satisfaction: A behavioural perspective on the consumer. New York: McGraw-Hill, 1997.

[25] A. Parasuraman, V. A. Zeithaml, and L. L. Berry, 1988, SERVQUAL: A multiple-item scale for measuring customer perceptions of service quality, Journal of Retailing, 64(1), 12-40.

[26] D. J. Shonk, and P. Chelladurai, 2008, Service quality, satisfaction and intent to return in event sport tourism, Journal of Sport Management, 22(5), 587-602.

[27] Y. Tsuji, G. Bennett, and J. Zhang, 2007, Consumer satisfaction with an action sports event, Sport Marketing Quarterly, 16(4), 199-208.

[28] L. Van Leeuwen, S. Quick, and K. Daniel, 2002, The sport spectator satisfaction model: A conceptual framework for understanding the satisfaction of spectators, Sport Management Review, 5, 99-128.

[29] B. Wang, 2013, Empirical study on Chinese urban citizens' wishes of watching the games of CBA League, Sport Science Research, 34(4), 66-71.

[30] X. Wang, 2012, Study on influence factors about Nanjing sport spectator watching games, Journal of Nanjing Institute of Physical Education, 26(2), 60-66.

[31] A. M. Welki, and T. J. Zlatoper, 1994, The industry of sports

US professional soccer: The demand for game-day attendance in 1991, Managerial and Decision Economics, 15(5), 487-495.

[32] Y. Yi, and S. La, 2004, What influences the relationship between customer satisfaction and repurchase intention? Investigating the effects of adjusted expectations and customer loyalty, Psychology and Marketing, 21(5), 351-373.

[33] M. Yoshida, and J. James, 2010, Customer satisfaction with game and service experiences: Antecedents and consequences, Journal of Sport Marketing Management, 24, 338-361.

[34] X. Zhang, Y. Zeng, W. Xu, and Y. Zhao, 2011, Research of the service quality model of the Chinese professional sports competition, Journal of Beijing Sport University, 34(11), 40-43.

[35] H. Zhu, 2011, An empirical study on the service quality of CBA league match, China Sport Science, 31(10), 11-20.

[36] Y. Zhu, (2012, October 15). Shanghai Tennis population increased 380 thousands in the past 6 years and the tennis consumption of last year added up to 150 million Chinese yuan. Oriental Morning Post, A28.