

Sportscape Factors Influencing Spectator Attendance and Satisfaction at a Professional Golf Association Tournament

Keith W. Lambrecht, Frederick Kaefer,
and Samuel D. Ramenofsky

Abstract

Sportscape refers to service extensions and the physical surroundings of a sports event. This is a case study that focuses on sportscape factors and how they influence the overall satisfaction of spectators attending a PGA TOUR event. Golf is different from other sports in that it has a flexible venue and is experienced differently by spectators and, therefore, careful analysis must be given to sportscape factors. A survey was developed and implemented at a PGA TOUR event to identify the influence of eight specific sportscape factors on the level of satisfaction of spectators. Based on preliminary descriptive analysis, the spectators appeared to be satisfied with all eight sportscape factors. By using cluster analysis, two distinct homogeneous groups of specta-

Keith W. Lambrecht, PhD, is an associate professor and director of sport management programs in the School of Business Administration at Loyola University Chicago. His research interests are in the areas of management and marketing for the sport industry.

Frederick Kaefer, PhD, is an associate professor of information systems and operations management in the School of Business Administration at Loyola University Chicago. His research interests include modeling of consumer choice and information technology.

Samuel D. Ramenofsky, PhD, is an associate professor of Information Systems and Operations Management in the School of Business Administration at Loyola University Chicago. His research interests include model building and statistical analysis.

tors were identified: a smaller group that was more satisfied with the sportscape factors and a larger group that was less satisfied. Multiple regression was then used to identify the sportscape factors that impacted overall satisfaction by cluster. Recommendations and suggestions for future research are made based on our findings to PGA directors to enhance spectator satisfaction and increase attendance.

Introduction

Sport is a major component of the American culture and a growing sector of the entertainment industry and the global economy, thus competing for the discretionary income of consumers world-wide. While business and industry have long been concerned with customer satisfaction (Anderson, Fornell, & Lehmann, 1994; Anderson & Mittal, 2000; Bearden & Teel, 1983; Churchill & Surprenant, 1982; Day & Bodur, 1978; Spreng, Harrell, & Mackoy, 1995), limited research has been conducted on customer satisfaction in the sport industry, also known as fan or spectator satisfaction (Greenwell, 2007; Madrigal, 1995; Van Leeuwen, Quick, & Daniel, 2002). Notably, these studies have focused on professional sports such as baseball, basketball, football, hockey, and soccer, not professional golf. In business terminology, customer satisfaction measures how products and services offered by a company meet or exceed customer expectations. Customer satisfaction is crucial in the sport industry, where sport organizations focus on understanding the needs and wants of customers while working to achieve organizational goals. Mullin, Hardy, and Sutton (2000) emphasized that sport organizations need to focus on product extensions since sport marketers have little or no control over their core product or the game. Product extensions include the physical environment surrounding the core product that are identified in business and industry as "servicescape" (Bitner, 1992) and have been referred to as "sportscape" in the sport industry (Wakefield & Sloan, 1995).

Purpose

This case study was designed to assess the overall level of satisfaction of spectators attending a professional golf tournament. Specifically, the objective was to identify sportscape factors that influence the overall level of satisfaction of golf spectators who attended a PGA TOUR event.

Background

There is heightened competition for the consumer in the sport industry due to the growth of the four traditional major professional sports leagues of baseball, basketball, football, and hockey; and individual sports

such as golf, NASCAR, and tennis. In addition, college sports are currently surging in popularity. The international passion for sports such as boxing, cycling, golf, soccer, tennis, and track and field are indicative of the globalization of sport and the sport industry. Furthermore, there is more media attention given to sports programming today than ever before, with free broadcasts, cable television, the Internet, and various radio networks individualized to specific sports. Due to the heightened competition for the consumer in the sport industry, sport executives must be concerned with the satisfaction of spectators and factors that influence spectators to attend and return to a sporting event.

A prime example of the heightened competition for consumers in the sport industry can be found in professional golf. Major golf tournaments generated approximately \$954 million in revenue in 2005 (SRI International, 2008). Based on numbers reported in sports publications and conversations with professional golf tournament directors, the level of golf spectator attendance has become a concern. Therefore, the question becomes: What can be done to increase spectator satisfaction and counter attendance trends at PGA events?

The marketing of sport has unique characteristics and marketing the PGA has additional considerations. In general, the core sport product may be inconsistent and/or unpredictable, thus most sport marketers have little or no control of their core sport product (the game or event), making the job of the sport marketer more complex (Mullin, Hardy, & Sutton, 2000). In golf, there are many additional factors that are not under the control of the PGA tournament directors. Non-controllable factors include the weather, the quality of golfers in the field of tournament players, prominent golfers who miss the cut to play on the weekend, and player injuries. On the other hand, golf directors can control sportscape factors in their flexible venues. For example, how crowds are controlled as spectators view and interact with the professional golfers.

Ticket sales and attendance of spectators are important revenue generators in conducting a successful PGA tournament, as is the ability to convert an occasional ticket holder into a repeat consumer. To increase customer attendance, it is important to understand and improve customer satisfaction. Therefore, PGA tournament executives need to focus on sportscape factors to maintain and attract spectators to their events. We demonstrate the importance of carefully identifying controllable sportscape factors to enhance the overall level of satisfaction of spectators and thus increase spectator attendance. The sportscape or physical environment factors that are controllable at a golf tournament include concessions, course accessibility,

crowd control, merchandise, parking, personnel (staff or volunteers), restrooms, and seating.

Relevant Literature

Research on how physical surroundings affect behavior has been a part of psychology literature since the 1960s. Research in the field of environmental psychology has addressed the relationships between people and their physical surroundings (Darley & Gilbert 1985; Holahan, 1986; Stokols & Altman, 1987). In addition, studies in business and industry have identified the aspects of the physical environment most important in influencing behavior and creating an image in hotels, restaurants, and banks (Baker, Berry, & Parasuraman, 1988; Booms & Bitner, 1982). Similarly, studies in organizational behavior have suggested that physical surroundings impact employee satisfaction and productivity (Davis, 1984). However, until the early 1990s little research was conducted that addressed the impact of physical surroundings on customers in the sport industry.

Bitner (1992) coined the term "servicescape" to describe the physical surroundings of a service encounter. Bitner defined servicescape as the "built environment" of man-made or physical surroundings as opposed to the natural or social environment. This seminal research determined that servicescape factors play an important role in the level of satisfaction with the service setting and that the satisfaction with the setting can impact the decision of consumers to stay and/or return to the setting in the future. Bitner's work established the framework for understanding the role of the servicescape in service consumer settings.

Spectator Behavior

Studies relevant to sport spectator behavior can best be categorized into two groups: psychological and sociological; and the economics of sport. Kahle, Kambara, & Rose (1996) relied on a psychological theory called Kelman's Functional Theory of Attitudinal Influence in constructing a model to measure motivations for college football attendance. They noted that spectators are influenced to attend sporting events because of appreciation of the game, quality of the players, benefits for group seating, and parking. Melnick (1993) illustrated that other spectators may seek social interaction and entertainment factors when attending sporting events such as stadium design, food service quality, and player/fan interactions. Wakefield (1995) found that the interactive effects of team identification, social influences, and perceived ticket value impact spectator's intentions to attend future games. Furthermore, Pease & Zhang (2001) developed The Spectator Motivation Scale (SMS), which found that fan identification, team

image, salubrious attraction, and entertainment value were predictive to attendance frequency. Similarly, Zhang et al. (2001) concluded that salubrious effects, achievement seeking, and stress and entertainment were also predictive of spectator attendance.

Economic studies of sport have been conducted in a variety of sport settings, including professional sport in general (Hansen & Gauthier, 1989; Noll, 1974), Major League Baseball (Baade & Tiehen, 1990; Domazlicky & Kerr, 1990; McDonald & Rascher, 2000), professional basketball (Mawson & Coan, 1994; Zhang et al., 1995), minor league baseball (Branvold, Pan, & Gabert, 1997), minor league hockey (Zhang et al., 1996; Zhang et al., 1997), college football (DeShriver, 1999; Kahle, Kambara, & Rose, 1996) and women's basketball (Kerstetter & Kovich, 1997). While these economic studies deal with fielding a quality team, team standings, winning percentages, number of spectators attending the sporting event, or the revenues generated, they are not focused on how sportscape factors influence spectator satisfaction.

Sportscape

Wakefield and Sloan (1995) coined the term "sportscape" and suggested that empirical studies in sport attendance had failed to address practical aspects of the sports encounter that would be of interest to sport administrators wishing to increase or maximize spectator satisfaction and attendance. Their results supported the premise that although team loyalty strongly affects attendance, stadium design and stadium services (sportscape) also directly influence spectators' desire to stay and attend games at a stadium. Wakefield and Blodgett (1994, 1996) applied servicescape factors to sporting and leisure venues and found that perceptions of quality increased spectators' level of satisfaction with all settings, which in turn led to their desire to stay longer and return in the future. Wakefield, Blodgett, and Sloan (1996) created a survey instrument (composed of stadium constructs to determine how sports spectators perceive a facility) to be employed in further research studies and by sport practitioners. A major finding was that overcrowding and/or cramped conditions were the most significant factor in determining customers' satisfaction within sportscape.

Recent studies have been completed on sport consumer satisfaction (Caro & Garcia, 2007; Greenwell, Lee, & Naeger, 2007; McDonald & Stavros, 2007; Ross, 2007; Tsuji, Bennett, & Zhang, 2007); however, the spectators examined in these studies have been in action sports, intercollegiate athletics, and professional team sport organizations and not professional golf. Professional golf tournaments have flexible venues and unique ways in which spectators experience them.

Unlike other sports, in golf spectators are able to move about the course and have close interaction with the professional athletes.

In summary, the above sportscape studies demonstrate that within a fixed venue, sportscape factors have a direct impact on the level of satisfaction on spectators and their desire to return to the venue. It is within the context of these sportscape studies that this case study was founded in adapting sportscape factors from fixed venues to flexible or configurable non-stadia sites. This study is the first to analyze how sportscape impacts spectator satisfaction in a non-stadia venue at a professional golf tournament, where sport directors have the flexibility to adapt the venue and the capability to improve sportscape factors.

Method

Sample

Data used for this case study was obtained at a PGA TOUR event by request of the tournament director to better understand the impact of sportscape factors on spectator satisfaction. A systematic random sample was taken of spectators entering the event, Thursday through Sunday. Every 25th spectator entering the tournament gate was asked to participate in the study by completing a self-administered questionnaire at one of four designated locations prior to departing the event venue. Subjects were assured confidentiality. The 521 subjects who participated in the study were given a tournament logo golf ball and were entered into a drawing to win a trip for two to a Golf Digest Instructional School. All subject entries were 18 years of age or older. Of the 521 surveys collected, 127 surveys were not fully completed in the sportscape area, thus 394 surveys were deemed usable.

To determine if the sample was representative, the survey included questions pertaining to gender, age group, number of years attending the tournament, ticket acquisition, and type of ticket. Table 1 reports the descriptive statistics, as a percent, of the demographic and attendance information for the 394 respondents.

The statistical findings of the spectator demographics and attendance were similar to men's golf fan demographics and attendance at all professional golf events ("Scarborough research," 2007), demonstrating that the sample taken was representative of spectators attending professional golf events. Specifically, approximately 80% of attendees were male, 36 years of age or older, and held grounds tickets.

Instrument

The survey instrument used for this case study was constructed to solicit information in three areas about

Table 1.
Descriptive Statistics of Demographic and Attendance
Information of Spectators at a PGA TOUR Event
(N=394)*

Variable	%
Gender**	
Male	79.9
Female	20.1
Age**	
18-25	8.6
26-35	11.4
36-45	15.5
46-55	25.9
56-65	24.4
66 and over	14.2
Number Years Attended**	
1-3	52.2
4-6	20.3
7-9	10.7
10 or more	16.8
Ticket Acquisition**	
Advance mail	4.1
Advance phone	4.1
Advance online	5.8
Purchased on-site	19.8
Gift	56.9
Other	9.4
Type of Ticket***	
Daily Grounds	74.4
Weekly Grounds	7.6
Hospitality	17.5

*Of the 394 responses, 2 spectators omitted answering the type of ticket question.

**Statistically independent of cluster membership based on Pearson Chi-square test at the .05 level of significance

*** Statistically dependent of cluster membership based on Pearson Chi-square test at the .05 level of significance

the spectators attending the PGA TOUR event: the spectator's demographics and attendance information, perception of sportscape factors, and overall satisfaction. The survey questions concerning sportscape factors were based on research summarized previously (Wakefield & Blodgett, 1994, 1996; Wakefield & Sloan, 1995), and the specific requests of the tournament

director. Spectators were asked to rate the following eight sportscape factors: parking (*ease of entering parking and proximity to entrance gates*), course accessibility (*ease of entering the course and ability to move about the course*), concessions (*prices, quality, and variety*), seating (*availability and viewing sightlines of golfers*), merchandise (*prices, quality, and selection*), crowd control (*ability to move freely around the course, crowdedness, and security*), restrooms (*cleanliness, convenient locations, and sufficient numbers*), and employee/volunteer helpfulness (*concessions, marshals, merchandise, and security*). Ratings were conducted according to a 5-point Likert scale, with "1" indicating "poor" to "5" indicating "excellent." The survey instrument also asked spectators to rate their overall level of satisfaction with this PGA TOUR event according to the same 5-point Likert scale. Two independent experts in survey design were asked to examine the instrument for content validity. They concurred that the instrument would be an appropriate and effective tool for data collection.

Analysis

To carefully examine the influence of sportscape on overall level of satisfaction, cluster analysis was employed to investigate if there were homogeneous groups of spectators based on the eight sportscape factors. Cluster analysis is extremely useful in a number of contexts and in particular has been used to segment sport spectators (Ross, 2007). The two-step clustering approach in SPSS 15.0 with the Schwarz Bayesian Criteria (BIC) and the log-likelihood measure of distance was used for our analysis. Regression analysis was then used to reveal the impact of sportscape factors on overall satisfaction.

Results and Analysis

The average ratings on the sportscape factors for the 394 respondents who fully completed the survey's sportscape questions ranged from 3.43 for merchandise up to 4.31 for employee/volunteer helpfulness (see Table 2, column 2). Based on these results, spectators appeared to be satisfied with all eight of the sportscape factors with an average sportscape rating of 3.90.

However, all spectators were not equally satisfied. Cluster analysis and follow-up discriminant analysis revealed two distinct homogeneous groups of spectators (Table 2, columns 3 and 4). One group (*Cluster 2*, n=155) was clearly more satisfied with the sportscape with an average sportscape rating of 4.52 and no average sportscape factor ratings less than 4.00. The second group (*Cluster 1*, n=239) was less satisfied with the sportscape with an average sportscape rating of 3.50 and average factor ratings all approximately one point

Table 2.**Mean Sportscape Factor Ratings Based on 1(Poor) to 5(Excellent) Likert Scale**

Sportscape Factor	All Spectators (N=394)	Members of Cluster 1 (N=239)	Members of Cluster 2 (N=155)
Parking	4.05	3.69	4.61
Course Accessibility	4.15	3.79	4.71
Concessions	3.61	3.18	4.28
Seating	3.62	3.16	4.32
Merchandise	3.43	3.05	4.01
Crowd Control	4.19	3.78	4.83
Restrooms	3.85	3.40	4.53
Helpfulness of Employees/Volunteers	4.31	3.96	4.85
Average Sportscape Rating*	3.90	3.50	4.52

* Takes into account every response across all 8 sportscape factors.

less than the spectators who were more satisfied. Each of the eight sportscape factors contributed to the formation of the two clusters at the .05 level of significance. Notably, over 60% of the spectators were less satisfied with the sportscape (i.e., were in cluster 1), demonstrating the importance of improving sportscape for the majority of spectators.

The Pearson Chi-square test for statistical independence was applied to see if cluster membership was dependent on any of the demographic or attendance variables identified in Table 1. The results showed that cluster membership was only dependent on the type of ticket held (hospitality or grounds) at the .05 level of significance. As one might expect, spectators with hospitality tickets (*complimentary refreshments, easier/closer parking, private seating, and use of private restrooms*) were more satisfied with the sportscape. However, of those that held hospitality tickets, approximately 40% were less than fully satisfied (i.e., were in cluster 1).

It is evident from our study that sportscape factors have a direct impact on spectator's level of satisfaction. Therefore, golf event organizers need to carefully examine sportscape factors to improve spectators' perceptions and, thus, increase their level of satisfaction. To better understand how individual sportscape factors affect overall level of satisfaction, we conducted multiple regression analysis for all spectators and for each cluster of spectators. In addition to the eight sportscape factors, type of ticket held (grounds or hospitality) was included in the models as a control variable, as it was the only demographic or attendance

variable found to have dependency with cluster membership. See Table 3 for detailed results.

All three regression models were valid (see F statistic, Table 3). In the model for all spectators, only two sportscape factors were not significant on the overall level of satisfaction: parking and merchandise (see Table 3, column 2). However, when we analyze spectators by cluster, we see a more informative picture of the influence of sportscape factors on the overall level of satisfaction. In order to improve the level of satisfaction, the PGA director should focus on the cluster of spectators that is less than fully satisfied (cluster 1) because there is greater opportunity to increase these spectators' level of satisfaction. Unlike investigating all spectators, the results for cluster 1 show that there are only three sportscape factors that affect the level of satisfaction: course accessibility, restrooms, and helpfulness of employees/volunteers. These results show that by improving any or all of these three sportscape factors, the level of satisfaction for those that are less satisfied will increase. Since resources are limited, the benefit of using cluster analysis here is that tournament directors can identify the sportscape factors that make the greatest impact.

Examining the cluster of spectators that are more satisfied (cluster 2), we see there are four sportscape factors that impact spectator satisfaction. These factors are: seating, merchandise, crowd control, and helpfulness of employees/volunteers. Since helpfulness of employees/volunteers is the only factor affecting both clusters of spectators, PGA directors should definitely

Table 3.
Standardized coefficients in Multiple Regression models

Independent Variables	All Spectators (N=392)	Members of Cluster 1 (N=239)	Members of Cluster 2 (N=153)
Sportscape Factors			
Parking	0.064	0.079	0.042
Course Accessibility	0.176*	0.231*	0.052
Concessions	0.088*	0.088	0.071
Seating	0.125*	0.089	0.215*
Merchandise	0.043	-0.003	0.163*
Crowd Control	0.129*	0.098	0.154*
Restrooms	0.139*	0.142*	0.130
Helpfulness of Employees/Volunteers	0.270*	0.253*	0.305*
Control Variables			
Ticket Held	0.093*	0.134*	0.084
F Statistic	64.8*	15.1*	8.5*
* Statistically significant at the 0.05 level			

pay attention to this factor. Prior to the tournament, the tournament director was concerned with merchandising and concessions and believed that they would be issues affecting spectators' satisfaction. By careful analysis, we note that the concern for concessions was misdirected and merchandising only has an impact on cluster 2, and therefore will only have a marginal impact on the level of satisfaction of spectators. It is through this more careful examination (by cluster) that PGA TOUR directors can identify which sportscape factors have the greatest impact on attendees' level of satisfaction.

Another finding of this case study is that sportscape satisfaction (i.e., spectator's cluster membership) is independent of age, gender, number of years attended, and ticket acquisition method. This finding is different than previous research on sportscape for events held at a stadium (Wakefield & Blodgett, 1994). One possible explanation for this finding is that golf tournaments are conducted at many different and unique venues where the sportscape is spread out over many acres and can be more easily changed or adjusted for each tournament or tournament site.

Conclusions and Recommendations

This case study analyzed the influence of sportscape factors on spectator satisfaction at a professional golf

tournament. This study shows that spectators attending a PGA TOUR event appeared to be satisfied with all sportscape factors considered. However, when utilizing cluster analysis, two distinct homogeneous groups of spectators based on sportscape factors were identified. One group was more satisfied with the sportscape, while the second group was less satisfied. We demonstrate, by careful analysis, that tournament directors can identify which sportscape factors impact golf spectator's level of satisfaction. This finding is critical since sportscape factors are event operational items that impact spectators' level of satisfaction and that sport organizers and golf tournament directors can control. In the PGA tournament examined here, the level of satisfaction of both cluster groups can be impacted with the helpfulness of tournament employees or volunteer workers. While many tournament directors typically hold training sessions for volunteers, they are usually brief in nature and do not required volunteer attendance. To ensure helpfulness of volunteers, training sessions should focus on spectator satisfaction with detailed information on how their specific duties and responsibilities help to improve spectator satisfaction.

Previous studies have shown the positive influence of sportscape factors on the overall level of spectator satisfaction and attendance in fixed venues. Thus, professional golf executives and tournament directors need

to become more aware and knowledgeable of sportscape factors and how they influence spectator satisfaction in their flexible venues. These include traditional sportscape factors and innovative sportscape factors as well. The spectator experience at a golf tournament is unique, with spectators walking the course or sitting at one hole and watching players come through the course with scores on only a few leader boards throughout the course. Therefore, golf executives and directors should consider employing currently available technology to enhance the spectator experience when attending a golf tournament. Using wireless hand-held communication devices on the course during the tournament (to provide player updates or live action picture feeds of other holes on the golf course) should enhance the level of satisfaction and will be appealing to younger spectators. These technological innovations are an exciting area for future research in professional golf as well as at other sporting events that should enhance spectator satisfaction.

This case study focuses on a particular professional golf tournament. It would be useful to do a follow-up study to verify the effectiveness of enhanced training. Additional studies are needed of other professional golf tournaments and other professional sports to better understand sportscape factors and their effects on spectator satisfaction. In addition, new technologies should be studied to identify their impact on spectator's satisfaction.

References

- Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *Journal of Marketing*, 58(3), 53-66.
- Anderson, E. W., & Mittal, V. (2000). Strengthening the satisfaction-profit chain. *Journal of Service Research*, 3(2), 107-120.
- Baade, R. A., & Tiehen, L. J. (1990). An analysis of major league baseball attendance, 1969-1987. *Journal of Sport and Social Issues*, 14(1), 14-32.
- Baker, J., Berry, L. L., & Parasuraman, A. (1988). The marketing impact of branch facility design. *Journal of Retail Banking*, 10(2), 33-42.
- Bearden, W. O., & Teel, J. E. (1983). Selected determinants of consumer satisfaction and complaint reports. *Journal of Marketing Research*, 20(1), 21-28.
- Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of Marketing*, 56(2), 57-71.
- Booms, B. H., & Bitner, M. J. (1982). Marketing services by managing the environment. *Cornell Hotel and Restaurant Administration Quarterly*, 23(1), 35-39.
- Branvold, S. E., Pan, D. W., & Gabert, T. E. (1997). Effects of winning percentage and market size on attendance in minor league baseball. *Sport Marketing Quarterly*, 6(4), 35-42.
- Caro, L. M., & Garcia, J. A. M. (2007). Consumer satisfaction with a periodic reoccurring sport event and the moderating effect of motivations. *Sport Marketing Quarterly*, 16(2), 70-81.
- Churchill, G. A., Jr., & Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of Marketing Research*, 19(4), 491-504.
- Darley, J. M., & Gilbert D. T. (1985). Social psychological aspects of environmental psychology. In G. Lindzey & E. Aronson (Eds.) *Handbook of Social Psychology* (3rd ed., pp. 949-991). New York: Random House.
- Davis, T. R. V. (1984). The influence of the physical environment in offices. *The Academy of Management Review*, 9(2), 271-283.
- Day, R. L., & Bodur, M. (1978). Consumer response to dissatisfaction with services and intangibles. *Advances in Consumer Research*, 5(1), 263-272.
- DeSchrive, T. D. (1999). Factors affecting spectator attendance at NCAA Division II football contests. *International Sports Journal*, 3(2), 55-65.
- Domazlicky, B. R., & Kerr, P. M. (1990). Baseball attendance and the designated hitter. *American Economist*, 34(1), 62-68.
- Greenwell, T. C. (2007). Expectations, industry standards, and customer satisfaction in the student ticketing process. *Sport Marketing Quarterly*, 16(1), 7-14.
- Greenwell, T. C., Lee, J., & Naeger, D. (2007). Using the critical incident technique to understand critical aspects of the minor league spectator's experience. *Sport Marketing Quarterly*, 16(4), 190-198.
- Hansen, H., & Gauthier, R. (1989). Factors affecting attendance at professional sport events. *Journal of Sport Management*, 3(1), 15-32.
- Holahan, C. J. (1986). Environmental psychology. *Annual Review of Psychology*, 37, 381-407.
- Kahle, L. R., Kambara, K. M., & Rose, G. M. (1996). A functional model of fan attendance motivations for college football. *Sport Marketing Quarterly*, 5(4), 51-60.
- Kerstetter, D. L., & Kovich, G. M. (1997). An involvement profile of Division I women's basketball spectators. *Journal of Sport Management*, 11(3), 234-249.
- Madrigal, R. (1995). Cognitive and affective determinants of fan satisfaction with sporting event attendance. *Journal of Leisure Research*, 27(3), 205-227.
- Mawson, L. M., & Coan, E. E. (1994). Marketing techniques used by NBA franchises to promote home game attendance. *Sport Marketing Quarterly*, 3(1), 37-45.
- McDonald, H., & Stavros, C. (2007). A defection analysis of lapsed season ticket holders: A consumer and organizational study. *Sport Marketing Quarterly*, 16(4), 218-229.
- McDonald, M., & Rascher, D. (2000). Does bat day make cents? The effect of promotions on the demand for major league baseball. *Journal of Sport Management*, 14(1), 8-27.
- Melnick, M. J. (1993). Searching for sociability in the stands: A theory of sports spectating. *Journal of Sport Management*, 7(1), 44-60.
- Mullin, B. J., Hardy, S., & Sutton, W. A. (2000). *Sport marketing* (2nd ed.). Champaign, IL: Human Kinetics
- Noll, R. G. (1974). Attendance and price setting. In Roger Noll (Ed.), *Government and the sports business* (pp. 115-157). Washington, DC: Brookings Institute.
- Pease, D. G., & Zhang, J. J. (2001). Socio-motivational factors affecting spectator attendance at professional basketball games. *International Journal of Sport Management*, 2(1), 31-59.
- Ross, S. D. (2007). Segmenting sport fans using brand associations: A cluster analysis. *Sport Marketing Quarterly*, 16(1), 15-24.
- Scarborough research: Men's golf demographics. (2007, January 4), *Street and Smith's SportsBusiness Daily*, Retrieved April 14, 2008, from <http://www.sportsbusinessdaily.com/article/108393>
- Spreng, R. A., Harrell, G. D., & Mackoy, R. D. (1995). Service recovery: Impact on satisfaction and intentions. *Journal of Services Marketing*, 9(1), 15-23.
- SRI, International (2008). The 2005 golf economy report: Executive summary. Arlington, VA: SRI International.
- Stokols, D., & Altman, I. (1987). *Handbook of environmental psychology*. New York: John Wiley & Sons, Inc.
- Tsuji, Y., Bennett, G., & Zhang, J. (2007). Consumer satisfaction with an action sports event. *Sport Marketing Quarterly*, 16(4), 199-208.
- Van Leeuwen, L., Quick, S., & Daniel, K. (2002). The sport spectator satisfaction model: A conceptual framework for understanding the satisfaction of spectators. *Sport Management Review*, 5(2), 99-128.

- Wakefield, K. L. (1995). The pervasive effects of social influence on sporting event attendance. *Journal of Sport and Social Issues*, 19(4), 335-351.
- Wakefield, K. L., & Blodgett, J. G. (1994). The importance of servicescapes in leisure service settings. *Journal of Services Marketing*, 8(3), 66-76.
- Wakefield, K. L., & Blodgett, J. G. (1996). The effect of the servicescape on customers' behavioral intentions in leisure service settings. *Journal of Services Marketing*, 10(6), 45-61.
- Wakefield, K. L., Blodgett, J. G., & Sloan, H. J. (1996). Measurement and management of the sportscape. *Journal of Sport Management*, 10(1), 15-31.
- Wakefield, K. L., & Sloan, H. J. (1995). The effects of team loyalty and selected stadium factors on spectator attendance. *Journal of Sport Management*, 9(2), 153-172.
- Zhang, J. J., Pease, D. G., Hui, S. C., & Michaud, T. J. (1995). Variables affecting the spectator decision to attend NBA games. *Sport Marketing Quarterly*, 4(4), 29-39.
- Zhang, J. J., Pease, D. G., Lam, E. T., Bellerive, L. M., Pham, U. L., Williamson, D. P., Lee, J. T., & Wall, K. A. (2001). Sociomotivational factors affecting spectator attendance at minor league hockey games. *Sport Marketing Quarterly*, 10(1), 43-54.
- Zhang, J. J., Pease, D. G., Smith, D. W., Lee, J. T., Lam, E. T., & Jambor, E. A. (1997). Factors affecting the decision making of spectators to attend minor league hockey games. *International Sports Journal*, 1(1), 39-53.
- Zhang, J. J., Smith, D. W., Pease, D. G., & Mahar, M. T. (1996). Spectator knowledge of hockey as a significant predictor of game attendance. *Sport Marketing Quarterly*, 5(3), 41-48.

Copyright of *Sport Marketing Quarterly* is the property of Fitness Information Technology, Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.