



Service quality and complaint management influence fan satisfaction and team identification

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We explored the influence of facility quality, performance quality, interaction quality, and complaint management on fan satisfaction and team identification. Participants were 283 fans of a Class A minor league baseball team, who completed an online survey on the team's official social media website. We tested the efficacy of the proposed model using the structural equation modeling bootstrap procedure with maximum likelihood estimation. The results confirmed that complaint management positively influenced interaction quality, and that facility quality, performance quality, and interaction quality positively affected fan satisfaction and team identification. Our findings highlight the importance of complaint management, indicating that organizations need a good complaints management system and employees who are well trained in handling these complaints.

Keywords

service quality; complaint management; fan satisfaction; sports fans; team identification; minor league baseball

Customer retention is important for organizations as it provides a stable customer profile, which results in economic gain. It is well known that it is more expensive to acquire new customers than to retain current customers (Saleh, 2015). Customer satisfaction directly relates to customer retention and many scholars (e.g., Anderson & Sullivan, 1993; Cronin, Brady, & Hult, 2000; Rust & Zahorik, 1993) have argued that customer satisfaction is an immediate antecedent of customer loyalty. This means that satisfied customers continue their patronage, further strengthening their relationship with the company and its products and services.

Service quality is defined as “the consumer’s judgment about an entity’s overall excellence or superiority” (Parasuraman, Zeithaml, & Berry, 1988, p. 15). Service quality theory is based on product quality and customer satisfaction (Brady & Cronin, 2001), with higher service quality being critical to customer satisfaction (Liu, Guo, & Lee, 2011). The management and maintenance of long-term relationships through customer satisfaction results in economic and competitive gain for the company (Yang & Peterson, 2004).

Several sport marketing researchers (Cronin et al., 2000; Kwon, Trail, & Anderson, 2005) have acknowledged that, in the context of professional sport, customer satisfaction is a prerequisite for customer retention, and is a significant predictor of intention to attend future games. Whereas earlier researchers separately examined two types of customer satisfaction—game satisfaction (Kwon et al., 2005; Trail, Anderson, & Fink, 2005) and service satisfaction (Wakefield & Blodgett, 1996)—recent scholars have assessed them together. For example, Yoshida and James (2010) applied Rust and Oliver’s (1994) service quality framework to the context of sport, finding that game atmosphere, employee contacts, and facility access were important antecedents of fan satisfaction. Further, Theodorakis, Alexandris, Tsigilis, and

Karvounis (2013) used Grönroos' (1984) theoretical framework to conceptualize service quality as the combination of technical (i.e., game quality and team performance) and functional (i.e., tangibility, reliability, responsiveness, assurance, and empathy) qualities.

Following Brady and Cronin's (2001) theoretical model, we postulated that three dimensions of service quality influence satisfaction: *interaction quality*, indicating the nature of contact between customers and employees; *facility quality*, reflecting the caliber of the setting in which the service experience occurs; and *outcome quality*, in the form of team performance on the field. We conceptualized interaction and facility qualities as functional qualities, and performance represented an outcome quality. Although researchers have shown that *complaint management*, which refers to how organizations deal with customers' service problems (Álvarez, Casielles, & Martin, 2010), influences customer–organization interaction, few have examined the role of complaint management in the context of sport. In the sports industry, effective complaint management systems can provide a better consumption experience. It is important that this is an area that managers can control, because the service itself is not controllable. Therefore, effective management of complaints would improve customers' overall satisfaction with the industry, in which service is vital.

In addition, team identification is important in sport consumer behavior, for example, in regard to the impact of team identification on psychological well-being (Wann, 2006), and the relationship between perceived team performance and purchase intention (Ngan, Prendergast, & Tsang, 2011). Therefore, in the context of *minor league baseball* (MiLB), we investigated the effects of complaint management on interaction quality, and of service quality (facility quality, performance quality, and interaction quality) on fan satisfaction, which further influences team identification.

Literature Review and Hypothesis Development

Minor League Baseball

There has been consistent growth in MiLB in the US in both attendance and number of teams, beginning in 2004 and continuing even during the economic downturn in the mid-2010s (Minor League Baseball, 2016). A major reason for MiLB's growth is that it provides affordable family entertainment. In 2013 the average cost for a family of four to attend a game at a minor league ballpark was \$62.52, which includes two adult tickets, two child tickets, two sodas, two beers, a program or scorecard, and parking (Minor League Baseball, 2013), whereas the average Fan Cost Index for attendance at major league baseball (MLB) games was \$208.45 in 2013 (The Business of Sports, 2017). Although souvenirs (i.e., two adult-size caps) were included in the MLB total, there is a sizeable cost difference between attendance at MLB and MiLB games.

Service Quality

Although service quality is critical to ensure customer satisfaction (Liu et al., 2011; Theodorakis et al., 2013; Theodorakis, Howat, Ko, & Avourdiadou, 2014), the measurement of service quality is complicated, owing to its intangible, heterogeneous, and undifferentiated nature (Parasuraman et al., 1988). For example, in the sport context, the quality and overall experience of the game are difficult to define and measure. A game is influenced by numerous factors (e.g., parking convenience, pleasant manner of ushers) that can affect the spectators' whole experience. As the sports industry is service oriented, managers should monitor controllable factors to enhance spectators' experience. Yoshida and James (2010) examined the behavioral intention of spectators and divided the antecedents of satisfaction into service quality (stadium employees and service environment) and core product quality (team characteristics and player performance) components, which influence service satisfaction and game satisfaction, respectively. Similarly, Milne and McDonald (1999) argued that it is critical for sport marketers to focus on the core product and ancillary services.

Prior researchers have developed psychometric measures according to service quality conceptualizations. For example, Parasuraman, Zeithaml, and Berry (1985) viewed service quality as the difference between customers' expectations and their perceptions of service quality on the basis of five constructs: reliability, responsiveness, assurance, empathy, and tangibility. Grönroos (1984) divided service quality into two dimensions: technical quality (i.e., evaluation of core service) and functional quality (i.e., evaluation of service delivery). Rust and Oliver (1994) argued that overall perceived service quality comprises three dimensions: customer–employee interaction, service environment, and outcome. Later, Brady and Cronin (2001) developed Rust and Oliver's conceptualization into a multilevel model, wherein interaction quality involves attitude, expertise, and behavior; physical environment quality involves ambient conditions, design, and social factors; and outcome quality involves valence, waiting time, and tangibles. Brady and Cronin argued that customers perceive service quality based on performance evaluation at multiple levels, which they combine to form an overall service quality perception. In this study we used only the highest level of the three dimensions in Brady and Cronin's framework to measure service quality, to reduce the length of our survey. The four assessed dimensions were facility quality, performance quality, interaction quality, and complaint management.

Facility quality. Physical/service environment quality reflects the caliber of the setting in which the service occurs. "Because services are intangible and often require the customer to be present during the process, the surrounding environment can have a significant influence on perceptions of the service encounter" (Parasuraman et al., 1988, p. 38). Similarly, Babin, Darden, and Griffin (1994) argued that, in the case of hedonic services, the outcome of a service experience is evaluated not only in terms of utility but also from an experiential perspective. Many sport scholars (e.g., Greenwell, Fink, & Pastore, 2002; J. J. Zhang et al., 1997) have acknowledged the influence of ancillary factors, such as facility layout, accessibility, and seating comfort, on customer satisfaction.

Environment quality, as represented by facility quality, is relevant to spectators' consumption experience, as spectator sport can be regarded as a hedonic service (Hightower, Brady, & Baker, 2002). In a study of the role physical environment played in hedonic service consumption of MiLB, Hightower et al. (2002) confirmed that fans' perception of service quality has a direct positive or negative impact on their overall perception of service quality. Therefore, we proposed the following hypothesis:

Hypothesis 1: Perceived facility quality will positively influence sport fan satisfaction.

Performance quality. Brady and Cronin (2001) conceptualized the variable of outcome quality, which is what the customer is left with after service delivery, with three subdimensions. Of these, valence captures the attributes that control whether customers regard the service outcome as good or bad, regardless of any other experienced aspects, for example, "We lost the game" and "The movie was amazing" (Brady & Cronin, 2001). In the context of sport, outcome quality directly relates to quality of performance on the field. Team performance is especially crucial for fan satisfaction in professional sport. Although teams cannot guarantee a quality game (Yoshida, Heere, & Gordon, 2015), the game itself, as a result of team performance, is the core of the spectator experience. Therefore, we chose outcome quality as performance quality.

Varying terms are used to illustrate the role of a sports team's on-field performance in fan satisfaction. For example, C. Lee and Won (2012) found that the quality of the game is an important factor for spectator attendance at MiLB games, whereas Yoshida and James (2010) found that core product quality influences game satisfaction. Therefore, we proposed the following hypothesis:

Hypothesis 2: Perceived performance quality will positively influence sport fan satisfaction.

Interaction quality. Interaction quality denotes the positive or negative outcome of employee–customer encounters during service delivery. Brady and Cronin (2001) showed that interaction quality is influenced by employee attitude, behavior, and expertise. Further, Chen, Chen, and Lee (2013) found in their examination of the relationships between service quality, customer satisfaction, and loyalty in the bed and

breakfast market that interaction quality influenced customer satisfaction. Thus, organizational training is important to equip employees with the necessary expertise and practical knowledge.

The importance of employee–customer interaction tends to be greater for service consumption than for product consumption (Razmdoost & Mills, 2016). In addition, the company–customer relationship depends on many factors, such as complaint management, shared objectives, and communication (Brashear, Boles, Bellenger, & Brooks, 2003). Whereas pleasant interaction with ticket clerks or ushers can positively influence interaction quality, unpleasant encounters with service employees can negatively influence the overall consumption experience. Therefore, we proposed the following hypothesis:

Hypothesis 3: Perceived interaction quality will positively influence sport fan satisfaction.

Complaint management. Customers who experience service problems may respond differently, such as exiting a store, remaining loyal to the company, or voicing complaints (Tax, Brown, & Chandrashekar, 1998). A complaint is thus a customer-initiated expression of dissatisfaction (Landon, 1980). Complaints can serve as an important source of information for companies to improve their products and services (C.-H. Lee, Wang, & Trappey, 2015). Whether complaints are properly handled can influence customers' perceived quality of service.

There is a close relationship between complaint management and service quality. In a study conducted across four industry sectors, Ang and Buttle (2012) found that the complaint handling process affected policy and marketing-related benefits, including customer satisfaction. Similarly, Conlon and Murray (1996) and Singh, Jain, and Choraria (2016) found that when an organization effectively manages complaints, customers are likely to stay with the company. In contrast, an unresolved unfavorable service encounter is a major reason for customers switching service providers (Conlon & Murray, 1996), emphasizing the importance of effective complaint management. When customers experience unsatisfactory employee feedback and performance, this indicates that the organization is not committed to customer service (Bell & Luddington, 2006). Thus, we proposed the following hypothesis:

Hypothesis 4: Well-managed complaints will positively influence sport fans' perceived interaction quality.

Customer Satisfaction

Fornell (1992) defined customer satisfaction as an overall attitude based on customers' experience after purchasing products or using services. Oliver (1997) described it as a "judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment" (p. 13). Satisfaction can be affected by an array of factors, such as service quality, product quality, price, and contextual and personal factors (Zeithaml & Bitner, 2000). Customer satisfaction is associated with numerous business benefits, such as customer retention and positive word-of-mouth (Anderson, Fornell, & Lehmann, 1994; Palmatier, Dant, Grewal, & Evans, 2006), and is also regarded as an antecedent of loyalty (Deng, Lu, Wei, & Zhang, 2010; de Ruyter & Wetzels, 2000). Similarly, Trail et al. (2005) argued that satisfaction is a key antecedent of behavioral intention to return or to repeat consumption.

According to Gong et al. (2015) satisfaction in sport can be divided into the elements of service (e.g., Wakefield & Blodgett, 1996) and game (e.g., Kwon et al., 2005). Satisfied *sports fans* are likely to continue consumption by attending games and purchasing merchandise, whereas unsatisfied fans are likely to discontinue consumption. Therefore, the overall experience of consuming sports products affects fans' overall satisfaction level (Oliver, 1997).

Team Identification

According to social identity theory (Tajfel, 1981), social identity is a portion of an individual's self-concept

derived from perceived membership in a social group. Individuals generally try to associate with people or organizations who display features they aspire to have (Tajfel & Turner, 1985). Stokburger-Sauer, Ratneshwar, and Sen (2012) described the role of identification in consumer behavior as “What we buy, own, and consume defines us to others as well as to ourselves” (p. 406). Similarly, researchers have shown that team identification explains sports fan behavior (e.g., Capella, 2002; Wann & Branscombe, 1993; Wann, Tucker & Schrader, 1996). Trail, Anderson, and Fink (2000) defined identification as “an orientation of the self in regard to other objects, including a person or group, that results in feelings or sentiments of close attachment” (pp. 165–166).

Sport consumer behavior scholars have shown that team identification influences fans’ cognitive, affective, and behavioral reactions (Capella, 2002; Wann & Branscombe, 1993). Cognitively, highly identified fans may perceive their team’s performance more favorably (Dietz-Uhler & Murrell, 1999). Affectively, highly identified fans are more likely to experience high levels of anxiety and emotion when their team plays (Wann, Schrader, & Adamson, 1998). Behaviorally, Stryker and Serpe (1994) found that identity salience is a factor that explains time individuals spend engaging in various behaviors. In the sport context, individuals with high identification may attend more games and spend more money to follow the team with whom they identify (Wann, 2006; Z. Zhang, Won, & Pastore, 2005). Further, researchers have found that levels of identification influence media and merchandise consumption (Greenwell et al., 2002; Gwinner & Swanson, 2003). Subjects of attachment in sport can include players, coaches, universities, level of sport, or the sport itself (Kwon et al., 2005; Robinson & Trail, 2005). Following Woo, Trail, Kwon, & Anderson (2009), we examined *team identification*, which is defined as the level of attachment to, or concern about, a particular sports team (Branscombe & Wann, 1991).

Underwood, Bond, and Baer (2001) argued that, compared with other service providers, sports teams can generate exceptionally high levels of customer identification. Highly identified fans are likely to have a strongly favorable attachment to the sports team with whom they identify. Therefore, they tend to watch more games in person or through media, pay more for tickets, spend more on team merchandise, and stay loyal to the team even when it is struggling (Fisher & Wakefield, 1998; Laverie & Arnett, 2000).

Satisfaction and team identification. Although researchers have examined the effect of team identification on various affective, cognitive, and behavioral reactions (Capella, 2002; Wann & Branscombe, 1993), little is known about the antecedents of sports fans’ team identification (J. S. Lee & Kang, 2015). Bodet and Bernache-Assollant (2011) found in their investigation of consumer loyalty in relation to sport spectatorship that consumer satisfaction positively influenced team identification, which mediated the relationship between consumer satisfaction and intention to attend the next game. Similarly, J. S. Lee and Kang (2015) found that performance-related satisfaction had a positive impact on team identification and revisit intent, probably because the longevity of satisfied customers fortifies their identification. Thus, we proposed the following hypothesis:

Hypothesis 5: The level of sport fan satisfaction will positively influence sports team identification.

Method

Participants and Procedure

After we had obtained an Institutional Review Board approval, we collected data from fans of a Class A Minor League Baseball team in the southern United States. Class A is a full-season, 140-plus game league and is considered the first step to professional baseball from the Class A Short League or the Rookie League (Moore, 2013). We contacted the team personnel and explained the purpose of the study. After they had reviewed the survey we made minor modifications. A team staff member then posted the survey link with a soliciting message on the team’s official website and Facebook page. Interested fans were asked to click on the link and complete the survey. The message and link were reposted twice more during the following 2 weeks.

During this period, of 326 respondents who clicked on the link, 43 did not finish the survey. After we had deleted incomplete responses, there were 283 usable surveys. Most of the 283 participants were men ($n = 180$, 63.6%), Caucasian ($n = 269$, 95.1%), and married ($n = 196$, 69.3%), and their ages ranged from 21 to 81 years, with a mean age of 44.98 years ($SD = 13.59$).

Scale Development

We developed a survey to examine how the four dimensions of service influence spectator satisfaction, which, in turn, influences team identification. Our initial development of the instrument was based on the literature review, after which we sent the survey to a panel of experts for feedback (Litwin, 1995). Some wording was then changed before the survey was sent for a final review to the team general manager, who requested that one performance quality item (“XXX team demonstrates a high level of play”) be deleted.

The instrument consisted of two sections. The first section comprised three items modified from Koo et al. (2009) to measure facility quality, two items modified from Koo et al. to assess performance quality, and three items modified from Koo et al. to assess interaction quality; three items modified from Álvarez et al. (2010) to measure complaint management; three items modified from Álvarez et al. to measure satisfaction; and three items modified from Trail and James (2001) to assess team identification. We used the second section to collect demographic information, namely, gender, age, race, and income level.

Data Analysis

We employed structural equation modeling (SEM) using AMOS 21 to test the efficacy of the proposed model. Prior to conducting a confirmatory factor analysis, we checked for multivariate normality using Mardia’s (1970) coefficient of multivariate kurtosis. The result of 155.69 indicated significant nonnormality. Therefore, as recommended by Byrne (2001), we used the SEM bootstrap procedure with 500 resamples, and maximum likelihood estimation to minimize the violation of normality. Then, we examined the full measurement model, which revealed the factor loadings of the measures on the constructs, as well as error variances and factor covariances. We conducted a structural model analysis to test the hypotheses, and used the PROCESS macro for SPSS (Hayes, 2013) to examine the mediating role of satisfaction in the relationship between the service quality factors and team identification.

Results

Measurement Assessment

The measurement model demonstrated a good overall fit to the data: chi-square/degrees of freedom ratio (χ^2/df) = 357.58/104 = 3.44, root mean square error of approximation (RMSEA) = .093, comparative fit index (CFI) = .94, Tucker–Lewis index (TLI) = .92, standardized root mean square residual (SRMR) = .055. The RMSEA value was relatively high but showed a mediocre fit (Byrne, 2001; MacCallum, Browne, & Sugawara, 1996). All the measured variables had significant factor loadings on their latent factors, ranging from .77 to .93 (see Table 1). Reliability coefficients (Cronbach’s α) ranged from .83 (facility quality) to .92 (interaction quality and team identification), and each average variance extracted (AVE) value was greater than the accepted level of .50 (Bagozzi & Yi, 1988; Hair, Black, Babin, & Anderson, 2009). Thus, reliability and convergent validity were good.

Table 1. *Factor Loadings, Means, Standard Deviations, Reliability, and Average Variance Extracted Among Study Variables*

Factors and items	β	SE	M (SD)	α	AVE
Facility quality					
The appearance of XXX Park is pleasant.	.80	–	6.48 (0.81)		
XXX Park provides a comfortable environment for fans.	.80	0.09	6.21 (0.98)	.83	.61
Overall, XXX Park is convenient to use.	.76	0.09	6.18 (0.98)		
Performance quality					
Overall, XXX is a competitive team.	.90	–	4.82 (1.52)	.89	
The performance of XXX team is acceptable to me.	.90	0.07	4.95 (1.57)		
Interaction quality					
Overall, I'd say the quality of my interactions with XXX's employees is excellent.	.93	0.05	6.01 (1.22)		
XXX's employees are friendly.	.92	0.05	6.01 (1.22)	.92	.81
XXX's employees do whatever it takes to satisfy my needs.	.84	–	5.60 (1.44)		
Complaint management					
When I inform XXX's employees about service problems, they try to address the issue.	.85	0.05	5.42 (1.46)		
I think XXX has a good system for listening to fans.	.86	0.05	5.25 (1.44)	.90	.76
Once I inform XXX about an aspect of the service I am unhappy with, they are very flexible in dealing with the problem.	.91	–	4.98 (1.50)		
Satisfaction					
I am satisfied with XXX team.	.90	–	5.81 (1.20)		
Overall, I am satisfied with all aspects of XXX team.	.92	0.05	5.64 (1.26)	.89	.74
I truly enjoy being a fan of XXX team.	.77	0.05	6.19 (1.08)		
Team identification					
I would experience loss if I had to stop being a fan of XXX team.	.85	–	5.47 (1.63)		
I consider myself to be a "real" fan of XXX team.	.89	0.05	5.47 (1.52)	.92	.79
Being a fan of XXX team is very important to me.	.93	0.05	5.14 (1.58)		

Note. β = standardized factor loading, SE = standard error, AVE = average variance extracted.

The measurement model's factor correlations ranged from .32 to .77 (see Table 2), indicating no excessively high correlation (i.e., > .85; Kline, 2015). In addition, the squared correlations between one construct and any others were lower than the AVE for each construct (Fornell & Larcker, 1981). Therefore, discriminant validity was established.

Table 2. *Factor Correlation Results*

	FQ	PQ	IQ	CM	SA	TI
Facility quality (FQ)	–					
Performance quality (PQ)	.38**	–				
Interaction quality (IQ)	.56*	.34*	–			
Complaint management (CM)	.43*	.32*	.77*	–		
Satisfaction (SA)	.65*	.69*	.60*	.60*	–	
Team identification (TI)	.38*	.40*	.32*	.32*	.54*	–

Note. * $p < .05$, ** $p < .01$.

Structural Model and Hypothesis Tests

The results of the SEM bootstrap procedure with maximum likelihood estimation revealed a good overall fit of the data to the proposed model, $\chi^2/df = 389.73/111 = 3.51$, RMSEA = .09 (.08–.11), CFI = .93, TLI = .91, SRMR = .07. As MacCallum et al. (1996) used .01, .05, and .08 to indicate excellent, good, and mediocre fit, respectively, the RMSEA of .09 in this study indicates marginal acceptability.

Satisfaction was significantly influenced by facility quality ($\beta = .29, t = 5.14, p = .014$), performance quality ($\beta = .47, t = 9.41, p = .005$), and interaction quality ($\beta = .39, t = 7.57, p = .001$). Thus, Hypotheses 1, 2, and 3 were supported. Further, complaint management positively influenced satisfaction ($\beta = .29, t = 5.14, p = .014$), and satisfaction had a positive impact on team identification ($\beta = .29, t = 5.14, p = .014$). Thus, Hypotheses 4 and 5 were supported (see Table 3 and Figure 1).

Table 3. Hypothesis Testing Results

Hypothesis	β (SE)	95% CI	CR	p	Result
H1: FQ \rightarrow SA	.29 (0.09)	[0.08, 0.45]	5.14	.014	Supported
H2: PQ \rightarrow SA	.47 (0.04)	[0.35, 0.57]	9.41	.005	Supported
H3: IQ \rightarrow SA	.39 (0.04)	[0.25, 0.53]	7.57	.001	Supported
H4: CM \rightarrow IQ	.78 (0.05)	[0.70, 0.85]	13.03	.005	Supported
H5: SA \rightarrow TI	.53 (0.08)	[0.38, 0.63]	8.72	.007	Supported

Note. FQ = facility quality, PQ = performance quality, IQ = interaction quality, CM = complaint management, SA = satisfaction, TI = team identification, SE = standard error, CI = confidence interval, CR = critical ratio.

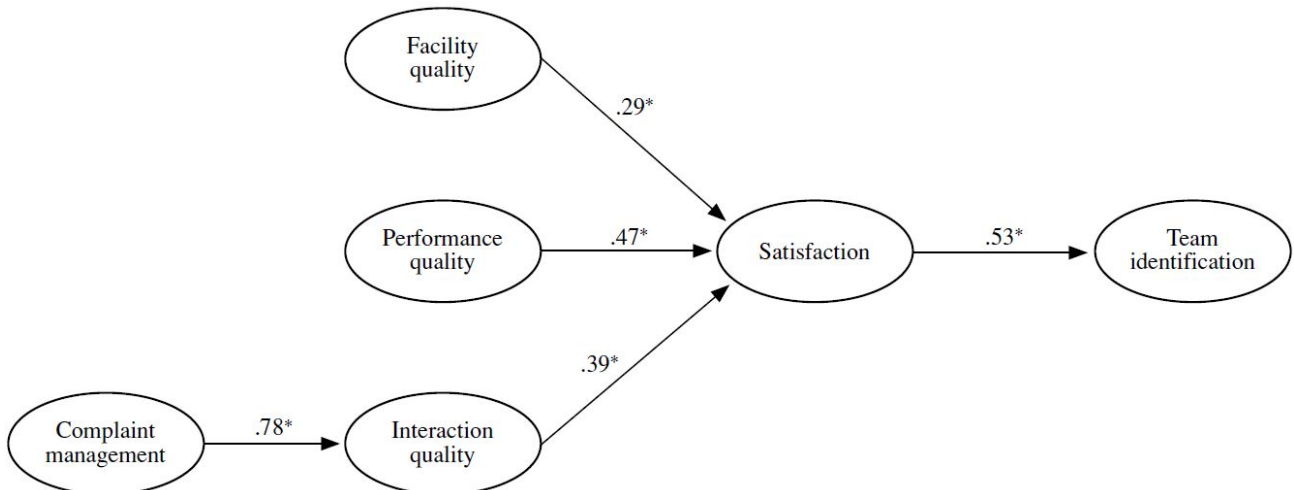


Figure 1. Proposed model.

* $p < .001$.

Mediation Analysis

The results of our examination of the direct and indirect effects of the independent variables on team identification via satisfaction showed that the direct effects of the four independent variables on team identification were not significant and all indirect effects via satisfaction were significant. Thus, satisfaction fully mediated the relationships between the service quality factors and team identification (see Table 4).

Table 4. *Mediation Analysis Results*

Mediation path	Direct effects		Indirect effects	
	Effect (SE)	95% CI	Effect (SE)	95% CI
FQ → SA → TI	.06 (0.11), $p = .57$	[-0.16, 0.29]	.55*** (0.12)	[0.36, 0.86]
PQ → SA → TI	.07 (0.10), $p = .48$	[-0.12, 0.26]	.48*** (0.08)	[0.34, 0.64]
IQ → SA → TI	-.03 (0.08), $p = .74$	[-0.17, 0.13]	.42*** (0.07)	[0.29, 0.58]
CM → SA → TI	-.02 (0.07), $p = .82$	[-0.14, 0.11]	.33*** (0.05)	[0.23, 0.44]

Note. FQ = facility quality, PQ = performance quality, IQ = interaction quality, CM = complaint management, SA = satisfaction, TI = team identification, SE = standard error, CI = confidence interval.

*** $p < .001$.

Discussion

We examined how the factors of facility quality, performance quality, interaction quality, and complaint management influence fan satisfaction and affect team identification in the context of MiLB. The results showed that performance quality was the strongest predictor of fan satisfaction, followed by interaction quality and then facility quality. Further, complaint management had a significant impact on interaction quality.

Theoretical Implications

Facility, performance, and interaction quality explained 73% of the variance in fan satisfaction, which further influenced team identification, explaining about 28% of fans' identification with the team.

These results confirm that even at the MiLB level, performance quality (as the core service) is very important in fans' overall experience and satisfaction. Although the strength of the effect of performance quality may vary among fan segments, such as hard-core and fair-weather fans (C. Lee & Won, 2012), or level of sport (e.g., minor league vs. major league), professional sports teams cannot ignore performance quality if they want to attract and retain fans. However, performance quality may be less or not at all important in contexts such as club or youth sport.

Facility quality also had a significant impact on fan satisfaction in this study, a result in line with Hightower et al.'s (2002) view that spectator sport is a hedonic service. This means that the stadium as an environmental factor contributes to fans' overall experience. Many MiLB teams are playing in new or renovated stadiums because of Major League Rule Attachment 58 in 1990, which specifies minimum facility standards for minor league stadiums for MiLB teams to maintain their affiliation with MLB teams (Howard & Crompton, 2014). This requirement is based on an understanding of the importance of facility quality in fans' experience at ballparks. The MiLB team we examined plays at a 4,500-seat capacity ballpark built in 2005 at a construction cost of \$25 million (Merzbach, 2005), which seems to have been well received by fans.

We found that interaction quality was an important antecedent of fan satisfaction with a MiLB game,

supporting Chen et al.'s (2013) finding that personal interaction quality directly and indirectly influenced satisfaction with a hotel business. In addition, complaint management had a significant influence on fan satisfaction, a finding that supports those of Álvarez et al. (2010) and Varela-Neira, Vázquez-Casielles, and Iglesias (2010), the latter of whom argued that customers' emotional experiences regarding how banks handle complaints is critical to customer satisfaction.

Finally, as shown in Figure 1, fan satisfaction fully mediated the relationships between the service quality factors, complaint management, and team identification. Thus, fans' team identification is strengthened by their level of satisfaction, which is mainly influenced by the degree to which the team provides a pleasant service environment, the level of team performance, and how well the team staff deals with complaints.

Practical Implications

In this study, we have shed light on the importance of complaint management and the mediating role of satisfaction in the relationship between service quality and team identification. Complaint management positively influenced interaction quality, which, in turn, affected fan satisfaction with the overall game experience. Complaint management can be relatively easily addressed as it is within managers' control, in contrast to performance quality. Customers do not necessarily express their dissatisfaction in the form of a complaint; therefore, our model cannot be used to determine if a customer has a complaint. However, it does illustrate the influence of complaint management on interaction quality, which further influences satisfaction and team identification if customers do complain.

Thus, organizations need a good complaints management system to channel complaints to the right personnel/department, and to forward them to a higher authority when the issue cannot be resolved by the first responders. Further, as employees need to be well trained in handling complaints, a training program should be provided to educate them on how to properly deal with unsatisfied customers. Although this requires resources, such as financial investment, the complaint-handling process is critical. In the sport context, fans have a sense of ownership of their identified teams; thus, the opportunity for fans to be heard is important. It should also be emphasized that as it is the employees who are in direct contact with customers, the motivation, education, and training of employees are critical for an organization to deliver a pleasant and satisfying experience for fans (Álvarez et al., 2010).

Finally, our results showed that fan satisfaction mediates the relationship between service quality and team identification. Fans who are highly satisfied with the facility, the game itself, and employee interaction are likely to experience greater team identification, which is a critical factor in strengthening fan loyalty and revisit intention. Thus, sport managers should aim to provide an enjoyable and satisfying customer experience.

Limitations and Directions for Future Research

The three quality dimensions that we examined (i.e., facility, performance, and interaction) were adopted from Brady and Cronin's (2001) framework, which includes multilevel subdimensions. As we used only the highest level of dimensions, the inclusion of multilevel subdimensions in future studies would aid understanding of these factors' influence on fan satisfaction. In addition, future researchers could apply this framework to other baseball contexts, such as intercollegiate athletics and major league teams, to further clarify the importance of each dimension, which, as it may vary in different levels and contexts, would improve the generalizability of our findings.

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