

Journal of Issues in **Intercollegiate Athletics**

Examining the Effects of Relationship Quality and Calculative Commitment on Sport Consumer Behaviors for Intercollegiate Athletics

Ryan T. Wang
University of Florida

Cony M. Ho
University of Florida

James J. Zhang
University of Georgia

The purpose of this study was to examine the effects of relationship quality and calculative commitment on sport consumers' game attendance, donation intentions, and customer referral in the context of intercollegiate athletics. Relationship quality was operationalized as a higher-order construct containing trust, satisfaction, and affective commitment (De Wulf, Odekerken-Schröder, & Iacobucci, 2001). Calculative commitment, on the other hand, was conceptualized as a cost-induced commitment between relationship partners (Geyskens, Steenkamp, Scheer, & Kumar, 1996). Based on previous studies, a 29-item instrument was developed, and modifications were made to adapt it to intercollegiate athletics. Research participants (N = 350) were consumers of a Division I intercollegiate athletic program located in the southeast region of the United States. The result of a confirmatory factor analysis suggested that the measurement model fit the data well. In addition, the result of a structural equation modeling indicated that both relationship quality and calculative commitment are predictive of sport consumer behaviors at the intercollegiate level. Finally, the theoretical and managerial implications of this study's findings are discussed.

Introduction

Intercollegiate athletic programs such as football and basketball can generate a high level of income comparable to that of many professional sports. For instance, the media revenue of the National Collegiate Athletic Association (NCAA) men's basketball tournament was higher than that of the Major League Baseball (Kahn, 2007). Despite the fact that intercollegiate sports exhibit a seemingly promising future in terms of the financial viability of a few programs (e.g., men's basketball championship), myriad challenges, such as the economic downturn since 2001, still remain widespread (Gladden, Mahony, & Apostolopoulou, 2005). Intercollegiate athletic programs have been suffering from four major financial challenges: (1) the budget cuts by higher

education institutes; (2) the profit deficits of football programs; (3) the restrictions of university scholarships; and (4) the expenses of facilities and salaries. Consequently, the majority of intercollegiate athletic programs are struggling to maintain their financial viability. In fact, in the Football Bowl Subdivision (FBS), only 14 programs successfully sustained profits in 2009, and only 22 in 2010 (Fulks, 2010; 2011). Thus, it is important to help intercollegiate athletic programs develop strategies capable of driving positive sport consumer behavior. More precisely a review of the existing literature demonstrated that three sport consumer behaviors – game attendance, customer referral, and donation intentions – should be included as essential indicators of an athletic program's financial performance.

The combined revenue created by gate receipts and donations accounted for more than 50% of the total revenue in the FBS in 2010 (Fulks, 2011). In addition, customer referral was found to play a positive role in consumers' decision-making process because personal communications among customers were deemed as more trustworthy than firm-initiated communications (Hennig-Thurau, Gwinner, & Gremler, 2002; Reynolds & Beatty, 1999; Swanson, Gwinner, Larson, & Janda, 2003). In order to help intercollegiate athletic programs generate an increasing amount of game attendance, a stronger donation intention, and heightened intention to engage in customer referral, two concepts – namely, relationship quality and calculative commitment – were identified as key drivers for sport consumer behaviors based on extant literature (e.g., Judson, Aurand, & Karlovsky, 2007; Kim, Trail, Woo, & Zhang, 2011).

Relationship marketing has become a mainstream business strategy; accordingly, the focus of marketing campaigns has moved from creating new customers to retaining existing ones (Kim & Trail, 2011). The key to implementing successful relationship marketing strategies lies in nurturing relationships of a high quality; a quality relationship composed of trust, affective commitment, and satisfaction between service providers and customers has been suggested as the crucial determinant in converting relationship marketing efforts into desirable business outcomes (Palmatier, Dant, Grewal, & Evans, 2006). As a result, relationship quality was incorporated in the present study due to its capability to generate many desirable business outputs (e.g., game attendance, media consumption, and sales of team-licensed merchandise) in the context of sports (Kim, Trail, & Ko, 2011).

In addition to relationship quality, calculative commitment was also identified due to its relevance to many intercollegiate sport organizations in the United States. 'Calculative commitment' was defined as a cold and logical commitment to exchange relationships due to the cost incurred by terminating existing relationships without being affectively committed (Geyskens et al., 1996). The geographic locations of many U.S. intercollegiate sport organizations enable them to become the single service providers in local areas and subsequently to create a high calculative commitment among local customers. Calculative commitment has been suggested to have mixed effects on several aspects of business performance, such as increasing sales volume but reducing customer referrals (Verhoef, Franses, & Hoekstra, 2002). In light of its relevance to many intercollegiate athletic programs, calculative commitment was incorporated into the current study to help intercollegiate sports identify the potential positive as well as negative impacts on sport consumer behaviors and decision process in the context of intercollegiate sports.

The inclusion of relationship quality and calculative commitment in sport consumer research could provide valuable theoretical and managerial implications. A desirable relationship quality between athletic programs and their consumers could nurture consumer supports (e.g., Kim & Trail, 2011; Kim, Trail, & Ko, 2011). Accordingly, relationship quality was expected to

create a higher level of game attendance, future donation intention, and customer referral. Another potential contribution pertains to the inclusion of calculative commitment. To the best of our knowledge, calculative commitment has not been employed to study sport consumer behaviors at any level of sport. Based on the existing literature (e.g., Verhoef et al., 2002), calculative commitment was expected to increase game attendance but decrease customer referral due to the lack of alternative sport options and the subsequent high switching cost caused by attending other distant sporting events. The current study seeks to help intercollegiate athletic programs develop a more effective operational strategy by nurturing relationship quality and by avoiding over-reliance upon calculative commitment.

In summary, this study aims to examine the effects of relationship quality and calculative commitment on three sport consumer behaviors. The remainder of the article is organized as follows. The first section provides a brief overview of the current condition of intercollegiate sports. Next, a thorough review of the literature on relationship quality and calculative commitment is provided. Six hypotheses are then proposed to examine potential effects of relationship quality and calculative commitment on game attendance, donation intention, and customer referral. In the next section, the study offers empirical evidence supporting the six research hypotheses and discusses potential practical and theoretical implications of the findings. Finally, this study concludes by describing its limitations and exploring directions for future research.

Literature Review

Future Challenges for Intercollegiate Athletics

In the United States, the number of sport fans is expected to exceed 200 million. Among these 200 million fans, approximately 90% regularly follow sports-related news on a day-to-day basis (King, 2005). Attending sports events has gradually transformed into a popular recreational and leisure activity worldwide (Funk, Filo, Beaton, & Pritchard, 2009). At the collegiate level, the NCAA is predicted to generate \$777 million of revenue in the 2011-12 fiscal years, and the total asset of NCAA in 2010 is approximately \$570 million (National Collegiate Athletic Association, 2012; OneSource, 2012). The appearance of the Bowl Championship Series (BCS) has gradually transformed intercollegiate football into a multi-billion dollar business (Caro & Benton, 2012).

Nevertheless, several factors could still obstruct the future prosperity of spectator sports. These factors include competition from other forms of entertainment and consumers' decreasing discretionary income (Funk et al., 2009). In fact, regarding professional and semiprofessional sports during the 2008-09 fiscal years, the annual revenue indicated a slight 3% drop caused by the global economic recession and a resultant decrease in consumers' per capita disposable income. Additionally, alternative entertainment products, such as concerts and arts, and the evolution of modern technologies, including online video streaming and Internet broadcasting, were also expected to slow down or even stunt the growth of spectator sports (Nanfelt, 2012; Ripley, 2011).

The obstacles to maintaining financial success are even more apparent at the collegiate level. Ample evidence has indicated the existence of significant financial deficits faced by the majority of athletic programs. According to Fulks (2010; 2011), the net loss of the NCAA rose from \$8,089,000 in 2008 to \$10,164,000 in 2009. In fact, only 14 programs in the FBS reported

having generated a revenue surplus in the 2009 fiscal year, and only 22 in 2010. The condition was even worse in the Football Championship Subdivision (FCS). According to Fulks (2011), none of the FCS programs reported having generated revenue in 2009 or in 2010. This unsatisfactory financial performance at the collegiate level could be attributed to several causes. For example, U.S. higher-education budgets have continuously decreased over the course of this decade (Ehrenberg, 2006). This financial blight directly struck many athletic departments due to athletic programs' heavy reliance on their universities and educational institutions for financial support (Palmero, Li, Lawrence, & Conley, 2011). For instance, with the exception of programs in the FBS of the NCAA, other programs in Division I or the FCS received more than 70% of revenue from their lineal schools' financial support (Fulks, 2011). In fact, the budgets of athletic departments could sometimes be easily cut by their schools because intercollegiate athletics and varsities often were not deemed as core functions of higher education (Palmero et al., 2011).

When it comes to sport program revenue, football is the most important (Baird, 2004); football has the highest expenditures and generates the most revenue. In fact, other intercollegiate sport programs are often supported by the "surplus" revenue brought in by football programs. Thus, many intercollegiate athletic programs make significant investments in football programs and wait to harvest these football-related investments; however, existing data indicates that the increase in football-generated revenue cannot meet the expected goals to support other intercollegiate sports by earning surplus (Orleans, 2010).

In addition, in order to maintain a balanced competition among its member institutions, the NCAA currently imposes many restrictions regarding scholarship allocations; however, these restrictions have also had several negative financial impacts on intercollegiate athletic programs. Recruiting high school talent is an essential step for athletic programs to generate more financial benefits, such as media contracts and ticket sales (Kahn, 2007); however, the NCAA limits the number of scholarships that can be awarded to student-athletes within individual institutions. After 1994, FBS schools could offer no more than 85 scholarships to each football team annually – 10 fewer than in 1991. Among these 85 scholarships, 25 are designated to first-year student-athletes (Sutter & Winkler, 2003). The NCAA's restrictions on scholarships limit intercollegiate athletic programs' ability to recruit high school talent and associated star powers that have been found to be positively related to customers' event and merchandise consumption (Braunstein & Zhang, 2005). Therefore, the competition, or so-called "arms race", that has resulted from the recruitment of high school talent not only creates predicaments for on-field performance but also off-field performance, such as ticket sales and media rights.

The last financial challenge relates to expenditures on facilities and human resources. Facilities are often perceived as a "home" by sport fans, and modern infrastructures can be leveraged to recruit high school talent as well as attract sponsorship investments and alumni donations (Palmero et al., 2011). The associated construction and maintenance fees, however, also impose significant burdens on intercollegiate athletic departments. On the other hand, the "arms race" of intercollegiate athletics often involves coaches as well. The rising salaries of coaches present a hefty challenge to athletic programs' financial viability. In the six conferences with automatic BCS bids, the average salary in 2011 increased by 52% since 2006. There were 42 coaches in the FBS subdivision who earned more than \$1 million in 2006, as compared with only 5 such coaches in 1999 (Tsitsos & Nixon, 2012). Generally speaking, when athletic programs strive to become more competitive by hiring famous winning coaches, they also inevitably exacerbate their financial burdens. Due to the reasons mentioned above, most intercollegiate athletics are currently confronting the challenge of avoiding financial deficits.

A great amount of research has been devoted to overcoming various operational challenges and facilitating sports business success. Several approaches, such as consumer-based fan motivation and service-based market demands, have been developed to gain insight into fans and spectators (e.g., Funk, Ridinger & Moorman, 2003; Zhang, Lam, & Connaughton, 2003); however, today's market environment is no longer the traditional market place where a transaction or exchange is the sole function between services/goods and money. The highly competitive commercial area has prompted the use of the relationship paradigm of marketing not only in the general service area (Srinivasan & Moorman, 2005) but also in the context of sports (Gladden & Sutton, 2009; Kim & Trail, 2011).

Relationship Marketing

'Relationship marketing' is defined as "attracting, maintaining and – in multi-service organizations – enhancing customer relationships" (Berry, 2002, p. 61). It incorporates any activities aiming to create and maintain an exchange relationship (Morgan & Hunt, 1994). The execution of relationship marketing in modern business operations has been deemed as orthodoxy by academics as well as practitioners (Harris & Ogbonna, 2008). The use of relationship marketing is expected to solve major issues in the recent business world pertaining to customer churn and retention (Berry, 1995; Gruen, Summers, & Acito, 2000).

Customer churn occurs when one customer terminates his/her current relationship with the service provider and moves to another, and it could consequently lead to decreased customer lifetime value (Glady, Baesens, & Croux, 2009; Neslin, Gupta, Kamakura, Lu & Mason, 2006). Customer churn could be especially harmful to spectator sports because a declining attendance rate could lead to the loss of many revenue streams, such as naming rights and sponsorship deals, media contracts, licensing agreements, and team merchandise sales (Kim & Trail, 2011). Another reason prompting the use of relationship marketing relates to the relatively high cost of attracting new customers as opposed to retaining existing ones (Fornell & Wernerfelt, 1987). Desirable outcomes of relationship marketing include relationship continuity (Crosby, Evans, & Cowles, 1990) and consumer referral (Reynolds & Beatty, 1999); however, regardless of its wide application, research examining the role of relationship marketing in sport consumer behavior still remains scarce (Kim, Trail, & Ko, 2011).

Relationship Quality

One of the crucial strategies for implementing effective relationship marketing is to nurture a high-quality business-customer relationship. 'Relationship quality' refers to the overall strength of the relationship between service providers and consumers. As suggested by existing literature, to transform investments and efforts devoted to relationship marketing into favorable outcomes, corporations should foster a high-quality relationship with their customers (Palmatier et al., 2006). Relationship quality generally consists of multiple distinct components, such as trust, satisfaction and commitment (Dorsch, Swanson, & Kelley, 1998; Dwyer, Schurr, & Oh 1987; Fournier, 1998). The following sections review the three components of relationship quality.

Trust. The first main constituent of relationship quality is trust, which represents one's beliefs in another party to fulfill his/her needs (Anderson & Weitz, 1989). Trust only exists "when one party has confidence in an exchange partner's reliability and integrity" (Morgan &

Hunt, 1994, p. 23). Partners in a trustworthy relationship behave according to each other's best interests (Zabkar & Brencic, 2004). Establishing a high level of trust can bring about many favorable outcomes, such as buyers' intent to purchase in the future (Doney & Cannon, 1997). In addition, companies can conserve their budgets for negotiation with consumers because trust can directly mitigate customers' fear of sellers' opportunistic behaviors (Bendapudi & Berry, 1997).

Affective commitment. The second key element of relationship quality is affective commitment, which is defined as "an enduring desire to maintain a valued relationship" (Moorman, Zaltman, & Desphande, 1992, p. 316). 'Affective commitment' mainly refers to the affective component of attitudinal customer loyalty within relationship marketing research (Pura, 2005). Affective commitment appears when both partners (e.g., service providers and buyers) realize the importance of a relationship and subsequently exert a maximum effort to ensure indefinite relationships (Morgan & Hunt, 1994). It serves as a crucial element to distinguish a relational partnership from a functional partnership (Levy & Weitz, 2004). According to Morgan and Hunt (1994), buyers who possessed relationship commitment exhibit a lesser tendency to terminate their existing relationship and a higher degree of acquiescence to special policies requested by channel suppliers.

Satisfaction. 'Satisfaction' is defined as the emotional state caused by a consumer's cumulative appraisal of the seller-buyer relationship. Satisfaction, the third crucial dimension of relationship quality (De Wulf et al., 2001), is similar to the noneconomic satisfaction that exists between relationship partners as characterized by Geyskens, Steenkamp, and Kumar (1999). More precisely, the concept of satisfaction represents a consumer's satisfaction specifically with seller-buyer relationships rather than with discrete purchase transactions or overall satisfaction with products/services (De Wulf et al., 2001; Palmatier et al., 2006). In other words, 'satisfaction' refers to the emotional states that emerge in consumers after repetitive interaction with the service providers over time (Verhoef, 2003). Similar to the effects of trust and commitment, relationship satisfaction essentially plays an important role in a seller's objective performance regarding sales effectiveness and profit (Palmatier et al., 2006).

Overall relationship quality. What makes a relationship high-quality? Better relationship quality is characterized as being high in trust, satisfaction, and affective commitment (De Wulf et al., 2001). Although individual components of relationship quality have been suggested to create several desirable business outcomes – such as consumers' lower tendency to terminate their existing relationship, customer referral or word of mouth, and cooperation between relationship partners – relationship quality as a whole offers the largest explanatory power (Kim, Trail, & Ko, 2011; Morgan & Hunt, 1994; Palmatier et al., 2006). Furthermore, consumers are often incapable of differentiating between these highly correlated components. As a result, relationship quality is commonly conceptualized as a higher-order construct encompassing all three first-order components (Crosby et al., 1990; De Wulf et al., 2001).

Relationship quality in sports. Due to the lack of studies using relationship marketing to study sport consumer behavior and to ultimately increase consumer spending, Kim and Trail (2011) developed a relationship quality framework and identified five distinct components (trust, commitment, intimacy, self-connection, and reciprocity) of a quality business-customer relationship. This conceptual framework was empirically tested. More specifically, Kim, Trail, and Ko (2011) employed the general-specific model to directly examine the effects of not only overall relationship quality but also the five constituent parts on spectators' media consumption, consumption of licensed merchandise, and intention to attend future sport events. Consistent with previous findings, relationship quality as a whole was found to serve as the strongest predictor of

sport consumer behaviors; that is, relationship quality significantly explained 38% of variance in respondents' intentions to attend future sport events, 41% of variance in media consumption, and 35% of variance in spectators' intentions to purchase team-licensed merchandise. The relationship quality paradigm in sport consumer behavior provided by Kim and Trail (2011) and Kim, Trail, and Ko (2011) gave sport organizations the confidence to utilize relationship quality to improve many business-related performances, such as ticket and merchandise sales. Nevertheless, potential determinants of business performance related to relationship research and/or sport products were not accounted for. After considering the uniqueness of intercollegiate athletic programs, a new construct – calculative commitment – was identified to improve the current understanding of consumer behaviors in the context of intercollegiate sports.

Calculative Commitment

'Calculative commitment' is defined as "the extent to which exchange partners perceive the need to maintain a relationship given the anticipated termination or switching costs associated with leaving" (Verhoef et al., 2002, p. 204). Calculative commitment is deemed as a stand-alone construct that is independent of affective commitment; in other words, a relationship containing affective commitment can neither mitigate nor aggravate calculative commitment (Geyskens et al., 1996; McGee & Ford, 1987). In contrast to the positive nature of affective commitment, calculative commitment can be viewed as a cost-induced commitment; that is, calculative commitment carries a negative connotation implying that the commitment to exchange relationships is the result of a cold and logical assessment of the sunk costs previously invested as well as the remaining benefits of existing relationships (Geyskens et al., 1996).

The formation of calculative commitment could be attributed to the interdependence between exchange partners in an ongoing relationship; that is, when the extent to which one party (e.g., the sellers) provides valuable resources to another party (e.g., the buyers) with very limited alternative resources available (Hibbard, Kumar, & Stern, 2001), the highly dependent party would be reluctant to discontinue the existing relationships due to the cost of termination and/or switching. The positive effect of dependence on relationship commitment has been supported by previous findings. For example, Andaleeb (1996) and Hibbard et al. (2001) found that, in a channel market, buyers'/dealers' dependence on suppliers/sellers could lead to a higher level of channel commitment; however, although calculative commitment could prompt exchange partners to continue their existing relationship, this relationship could essentially be a pseudo-relationship characterized by its lack of affective commitment and relationship quality. In other words, rather than voluntarily continuing their relationships in an enjoyable manner, relationship partners could be negatively motivated to maintain their relationship as a result of interdependence. Nevertheless, a dearth of research has empirically investigated the impact of calculative commitment on relationship continuity and the necessity of differentiating calculative commitment from affective commitment (Geyskens et al., 1996).

The concept of calculative commitment could be particularly relevant to intercollegiate athletics. Unlike general consumer products, intercollegiate sports often serve as single service providers for local sport consumers wanting to attend live sport events. For example the University of Florida (UF) offers local Gainesville residents the only opportunity to attend NCAA Division I athletic events. Other available major intercollegiate sport events (e.g., Florida State University, University of South Florida, and University of Central Florida) are all located in surrounding cities that are more than 100 miles from Gainesville. Consequently, sport

consumers' perceived choice constraints could potentially help the Florida Gators foster strong local fan support, such as game attendance; however, calculative commitment has been largely overlooked by existing scholarly work on relationship marketing in sport consumer behavior. The Florida Gators is not a unique example in the United States. Many schools located in collegiate towns (e.g., Mississippi State University, University of Arizona, and Oklahoma State University) may also be prone to eliciting a strong perception of calculative commitment among their customers. Considering the fact that many intercollegiate athletic organizations could induce a high level of dependence and subsequent calculative commitment, calculative commitment was identified as a potential determinant of sport consumer behaviors.

Hypotheses- Effects of Relationship Quality and Calculative Commitment

Recently, many sport organizations have shifted their marketing strategies to the relationship marketing paradigm due to their financial losses from customer attrition and the rising costs of attracting new consumers (Kim & Trail, 2011). This shift has also spurred some academic research interest in the context of sports (e.g., Bee & Kahle, 2006; Stavros, Pope, Winzar, 2008; Tower, Jago, & Deery, 2006). In a similar vein, the present study examines the effects of two constructs – relationship quality and calculative commitment – on three sport consumer behaviors, including future donation intentions, game attendance, and customer referral. The following sections lay out the rationale behind the decision to incorporate these three dependent variables.

Game Attendance. Revenue generated from gate receipts comprises a significant portion of the financial sources for sports organizations, particularly at the intercollegiate level (Fulks, 2010; Zhang, Smith, Pease, & Mahar, 1996). For example, in 2010, gate receipts made up 29% and 16% of revenue of FBS and FCS programs, respectively (Fulks, 2011). However, besides a handful of sport organizations, plenty of sport organizations are currently struggling to fill up empty stadium seats. As a result, increasing game attendance remains as a main task of many sport marketers and professionals (Swanson et al., 2003). Similar endeavors were also made by academics to identify key determinants of heightened game attendance (e.g., Neale & Funk, 2006; Wang, Zhang, & Tsuji, 2011). Relationship quality as a whole has been suggested to improve consumers' behavioral loyalty in terms of frequency and expenditure of repeated purchasing (De Wulf et al., 2001; Palmatier et al., 2006). The positive effect of relationship quality on behavioral loyalty has also been documented in the context of sports (Kim, Trail, & Ko, 2011). Therefore, the current study proposed the following:

Hypothesis 1: Relationship quality has a positive effect on game attendance.

Calculative commitment, on the other hand, has also been shown to increase product consumption in general business (e.g., Verhoef et al., 2002). Although the role of calculative commitment has not been tested in the context of sport, based on existing findings in other fields, the current study expects calculative commitment to increase game attendance due to the associated high cost of switching and the lack of alternative sporting events. In other words, individuals who perceive a high level of calculative commitment would be more likely to continuously attend the limited sporting events because such events are the only available ones in the local area. Thus, the following hypothesis arises:

Hypothesis 2: Calculative commitment has a positive effect on game attendance.

Donation intentions. ‘Donation’ is defined as “gift of money, goods, or other property (e.g., land, a painting, a bodily organ) from an individual or a group to a nonprofit group without expectation of direct, immediate economic benefit” (Smith, Stebbins, & Dover, 2006, p. 71). Alumni donations, it has been suggested, are one of the most essential revenue sources of intercollegiate athletics (Winfrey & McCluskey, 2008). For instance, contributions and donations in 2010 comprised 23% and 28% of revenue in FBS and FCS, respectively (Fulks, 2011). The importance of donations has prompted sport management scholars to identify the antecedents driving donation behavior in the context of intercollegiate sports (e.g., Mahony, Gladden, & Funk, 2003; Verner, Hecht, & Fansler, 1998). Relationship quality has been found to increase various sellers’ performance in terms of sales volumes, market shares, and consumers’ willingness to maintain their existing relationships (Reynolds & Beatty, 1999; Siguaw, Simpson, & Baker, 1998).

In college settings, a positive long-term relationship could encourage students to make donations after graduating; that is, students who had been more satisfied with their relationship to their school during their academic career also indicated a higher likelihood to become donors as alumni (Pearson, 1999). Although there is a paucity of direct evidence showing a positive relationship between relationship quality and intention to donate to intercollegiate athletics, it is proposed that relationship quality has a positive effect on donation intention, based on existing findings on other types of donation (e.g., Pearson, 1999). Thus, it is expected that sport consumers who perceive a desirable relationship quality with their affiliated intercollegiate sport teams will exhibit higher intention to make donations in the future. Accordingly, the third hypothesis emerges as follows:

Hypothesis 3: Relationship quality has a positive effect on donation intentions.

In terms of the relationship between calculative commitment and donation intentions, though, O’Neil and Schenke (2007) used the theory of social exchange to predict the donation behavior of athlete-alumni. According to social exchange theory, individuals tend to maximize benefits and minimize cost. Thus, people would likely consider whether to maintain their current relationships with existing partners by comparing the cost-benefit ratio between existing alternative partners (Thibaut & Kelley, 1959). In a similar vein, calculative commitment implies that individuals would maintain their existing relationships with their current exchange partners as a result of a cold assessment of the termination costs. This rational analysis of costs and benefits contradicts the altruistic view of donation behaviors (Smith et al., 2007). Accordingly, it was not expected that sport consumers would voluntarily donate to their affiliated intercollegiate sport teams simply due to the lack of alternative options. Therefore, the present study predicted that individuals perceiving a high level of calculative commitment would not exhibit higher donation intentions. Thus, the fourth corresponding hypothesis arises as follows:

Hypothesis 4: Calculative commitment has no effect on donation intentions.

Customer referral. Customer referral, or word-of-mouth, has become an effective approach to disseminating product information. ‘Customer referral’ is defined as “the extent to which customers advise other customers (e.g., friends, family, colleagues) to do business with

the focal supplier” (Verhoef et al., 2002, p. 203). Compared with business-initiated communication, customer referral is usually perceived as more trustworthy and, in turn, more influential on buyers’ decision making through informal and inter-personal communications, (Hennig-Thurau et al., 2002; Reynolds & Beatty, 1999). Empirical evidence also suggests that customer referral is one of the most significant outcomes of better relationship quality according to a recent meta-analysis between 1987 and 2004 (Palmatier et al., 2006). Given the literature above, it is expected that consumers who perceive a desirable relationship quality with their current sports organizations would exhibit a higher intention to engage in customer referral. As a result, the current study hypothesized the following:

Hypothesis 5: Relationship quality has a positive effect on customer referral.

Calculative commitment, in contrast, was expected to influence consumers’ intention to engage in word-of-mouth communications in a negative way. As mentioned earlier, consumers who perceived a high level of calculative commitment could be forced to maintain their relationships with their service providers (Geyskens et al., 1996). Although this forced relationship could increase actual consumption, based on previous findings, calculative commitment was expected to reduce customer referral and even cause consumers to disseminate negative referrals (Kumar, Hibbard, & Stern, 1994; Verhoef et al., 2002). With regard to sports, consumers might continue to attend sporting events due to the lack of alternatives and the high level of calculative commitment; however, these consumers might feel reluctant to recommend the same sport products to others because these sports products could also create a high level of calculative commitment among new customers. This led to the last hypothesis.

Hypothesis 6: Calculative commitment has a negative effect on customer referral.

In conclusion, the purpose of this study was to examine the effects of relationship quality and calculative commitment on sport consumer behaviors at the intercollegiate level. After thoroughly reviewing the literature related to relationship marketing, six research hypotheses were developed and tested to understand how relationship quality and calculative commitment could influence intercollegiate sport consumers’ game attendance, customer referral, and intentions to donate.

Method

Participants

Data were collected in two modes. A face-to-face survey was distributed to spectators of Division I FBS intercollegiate football events. Target participants were individuals affiliated with a southeastern university at the NCAA Division I level. Potential participants were encountered and informed of the purpose of the study in classrooms and other on-campus locations (e.g., hallways and student recreation centers). In the in-class occasions, participants were rewarded extra course points. During the face-to-face period, a total of 202 responses were collected. A second online survey was posted on an online survey service provider. The emails of potential participants were acquired from multiple instructors of many undergraduate courses offered at the university where the data were collected. Survey links were emailed to 452 individuals. A

total of 172 participants responded to the online survey, which equals a response rate of 38%. Upon completion, the 172 participants were rewarded extra course credits for their participation. Of the 172 returned surveys, 24 were incomplete and discarded accordingly. Combining the two data collection steps resulted in a total of 350 usable surveys. Among them, 55.1% were male ($n = 193$) and 44.9% female ($n = 157$). The majority of participants were between 18 and 24 years old (80.0%), single (89.4%), and Caucasian (74.0%). Nearly 90% of participants originated from the state in which the data were collected. Table 1 summarizes the demographic information of research participants.

Table 1 - Demographic Background of Participants (N = 350)

Variable	Categories	N	Percentage (%)
Gender	Male	193	55.1
	Female	157	44.9
Marital status	Single	313	89.4
	Married	35	10.0
	Divorced	2	0.6
Education level	In high school now	2	0.6
	High school graduate	13	3.7
	In college now	236	67.4
	College graduate	56	16.0
	In graduate school now	40	11.4
	Others	3	0.9
Age	Under 18	4	1.1
	18-24	280	80.0
	25-34	30	8.6
	35-44	5	1.4
	45-60	21	6.0
	Over 60	10	2.9
Ethnicity	Caucasian	259	74.0
	Hispanic	36	10.3
	Black	30	8.6
	Asian	20	5.7
	Others	5	1.4
Hometown*	Florida	311	88.9
	States in the U.S.	25	7.1
	Other countries outside the U.S.	14	4.0

Note. *Individual states were not listed because they did not account for more than 1% of total participants.

Instrument

A two-part questionnaire was designed and distributed to research participants. The first part of the questionnaire contained materials measuring the seven research constructs. Items regarding calculative commitment (four items), trust (four items), satisfaction (six items), affective commitment (four items), and customer referral (five items) were adapted from a previous study (Verhoef et al., 2002). Furthermore, to measure sport consumers' future donation

intentions, three items were generated and reviewed by a panel of experts. These items were phrased into a 5-point Likert typed scale (1 = strongly disagree to 5 = strongly agree). Participants were asked to indicate the number of games attended previously and the expected number of games that they will attend in a 3-year span on a 5-point scale (1 = less than 1 game, 2 = 2 to 5 games, 3 = 6 to 10 games, 4 = 11 to 20 games, and 5 = more than 20 games). The second half of the questionnaire collected information regarding participants' socio-demographic background. The time required to complete the questionnaire was approximately 10 minutes.

Data Analysis

Data analysis was conducted by Analysis of Moment Structure (Amos) 8.0 and the Statistical Package for Social Science (SPSS) 17.0 for Windows. Item reliability was first examined based on the Cronbach's alpha. After internal consistency was ensured, a confirmatory factor analysis (CFA) was conducted to examine the model fit of the proposed measurement model. A structural equation modeling (SEM) with Amos 8.0 was subsequently conducted to test the proposed structural model as well as the six research hypotheses. Multiple criteria, including the construct reliability (CR) with a cutoff value of .7, average variance extracted (AVE) with a cutoff value of .5, absolute fit indices (chi-square, root mean square error of approximation, and standardized root mean residual), and incremental fit index (CFI), were used to examine the psychometric properties of the scale (Bagozzi & Yi, 1988; Fornell & Larcker, 1981; Hair, Black, Babin, & Anderson, 2010).

Results

The internal consistency of survey items measuring the seven constructs was first investigated according to the .7 cut-off value of Cronbach's alpha (Fornell & Larcker, 1981; Nunnally & Bernstein, 1994). The results found support for internal consistency. More specifically, trust ($\alpha = .75$), satisfaction ($\alpha = .88$), affective commitment ($\alpha = .87$), calculative commitment ($\alpha = .74$), customer referral ($\alpha = .84$), future donation intention ($\alpha = .77$), and game attendance ($\alpha = .88$) all exceeded the .7 threshold. Descriptive statistics for the research constructs are presented in Table 2.

Table 2 - *Descriptive Statistics (Mean and Standard Deviation)*

Factor	<i>M</i>	<i>SD</i>
Trust	3.82	.67
Satisfaction	3.76	.67
Affective Commitment	3.99	.83
Calculative Commitment	2.37	.82
Customer Referral	4.00	.76
Donation Intentions	3.38	.93
Game Attendance	2.70	.96

Confirmatory Factor Analysis

Prior to assessing the model fit and dimensionality of the measurement model, skewness and kurtosis of the items were examined. No items indicated extreme values exceeding the 3.0 suggested threshold value (Chou & Bentler, 1995). CFA was then performed to examine the psychometric properties of the measurement model. According to the conventional view (e.g., Crosby et al., 1990; De Wulf et al., 2001), relationship quality was treated as a second-order latent variable reflected by three first-order latent constructs – trust, satisfaction, and affective commitment. All other constructs were treated as first-order latent constructs.

Based on the maximum likelihood estimation, the results of CFA indicated that the measurement model fit the data well ($\chi^2 = 813.01$, $df = 364$, $p < .001$, $\chi^2/df = 2.23$). The value of root mean square error of approximation and standardized root mean residual (RMSEA = .06, 90% CI = .054 – .065, SRMR = .055) indicated acceptable fit (Hu & Bentler, 1999). In addition, CFI (= .92) met the suggested .90 benchmark (Bentler, 1990); however, several items did not load well on their corresponding constructs. After a closer examination of the meanings of low-loading items, four items were found to be inconsistent with their corresponding constructs and were subsequently dropped from the CFA model. These four items were: (a) XYZ Athletics puts its fans and customers first (trust 1, $\lambda = .68$); (b) I remain a customer of XYZ Athletics because my peers may not accept me otherwise (calculative commitment 1, $\lambda = .53$); (c) I encourage friends and relatives to wear XYZ Athletics' apparel (customer referral 5, $\lambda = .62$); and (d) I intend to be a season ticket holder in the future (donation intention 2, $\lambda = .61$). After the deletions, the result of CFA suggested that the measurement model fit the data well ($\chi^2 = 624.67$, $df = 262$, $p < .001$, $\chi^2/df = 2.39$; CFI = .93, RMSEA = .063, 90% CI = .057 – .070, SRMR = .062). Although three items still contained factor loadings lower than the suggested .707 cut-off (Hair et al., 2010), they were retained because the accuracy of the survey would not be influenced by a small number of slightly low factor loadings once the total sample size reached 300 (Guadagnoli & Velicer, 1988). This resulted in a 25-item hierarchical measurement model. In addition, the three first-order components (trust, satisfaction, and affective commitment) all loaded on the second-order relationship quality well (see Figure 1).

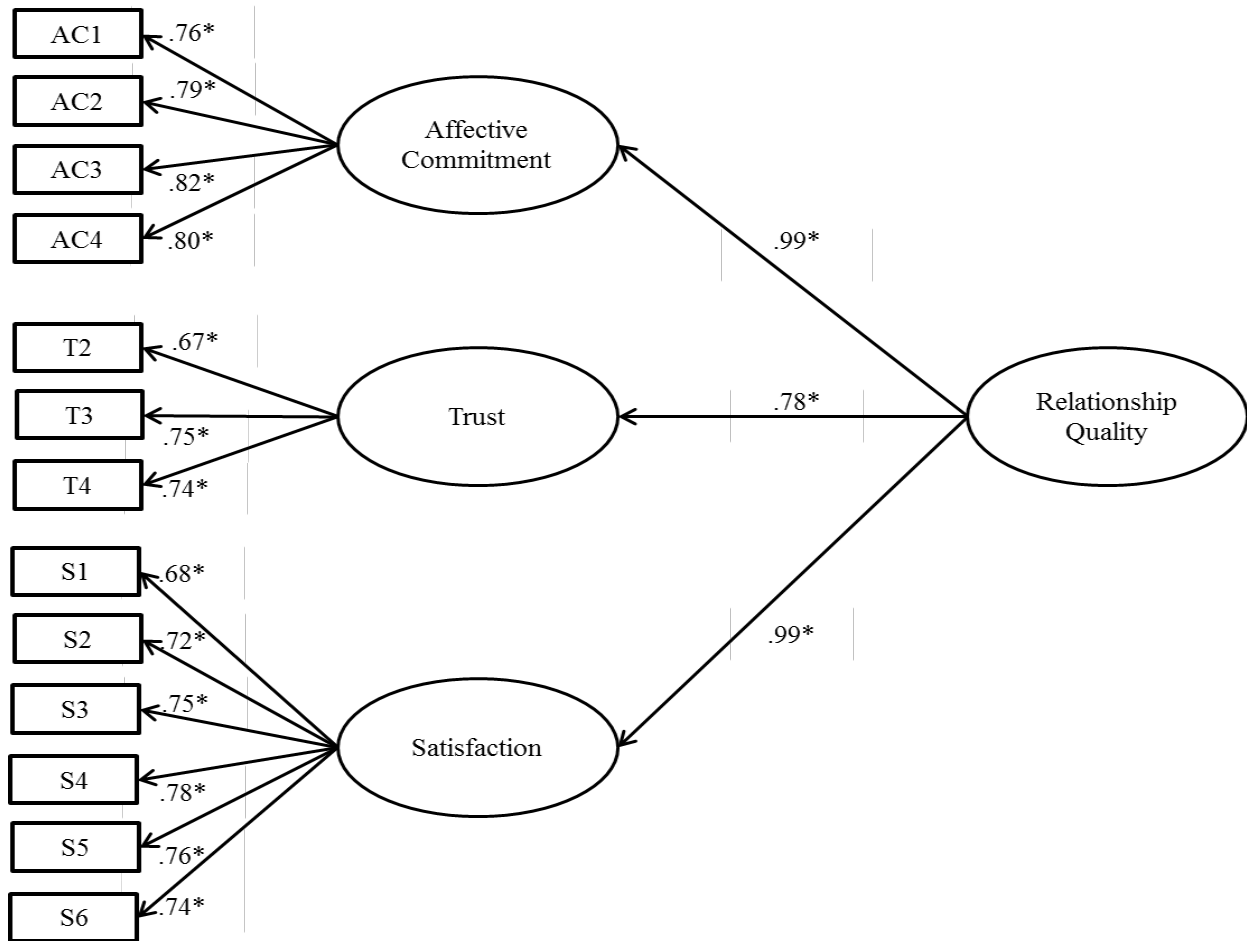


Figure 1. *Second-order model of relationship quality.* * $p < .001$.

Model reliability was examined based on construct reliability (CR) and Cronbach's alpha. The values of Cronbach's alpha ranged from .72 to .88. With regard to CR, all constructs passed the suggested .7 threshold (Fornell & Larcker, 1981; Nunnally & Bernstein, 1994). Discriminant validity was ensured because all of the inter-factor correlations (see Table 3) were found to fall below the .85 threshold suggested by Kline (2005). In addition, convergent validity was ensured by examining the average variance explained (AVE) of individual constructs. The AVE values of all constructs except calculative commitment (AVE = .47) reached the suggested .50 threshold (Bagozzi & Yi, 1988). Nevertheless, because calculative commitment met all other criteria, it was retained regardless of the slightly lower AVE. Table 4 illustrates the Cronbach's alpha, CR, AVE, and factor loadings of scale items.

Table 3 - *Inter-Factor Correlations of Relationship Quality, Calculative Commitment, and Three Sport Consumer Behaviors*

	RQ	CC	CR	DI	GA
Relationship Quality (RQ)	-				
Calculative Commitment (CC)	.03	-			
Customer Referral (CR)	.82*	-.12	-		
Donation Intentions (DI)	.68*	.10	.59*	-	
Game Attendance (GA)	.45*	-.25*	.48*	.49*	-

Note. * $p < .001$

Table 4 - *Measurement Properties of Research Constructs*

Items	Factor loading	C.R.	AVE	α
Affective Commitment		.87	.63	.87
I am a loyal customer of XYZ Athletics	.76			
Because I feel a strong attachment to XYZ Athletics, I remain a loyal customer	.79			
Because I feel a strong sense of belonging with the XYZ, I want to remain a loyal customer of XYZ Athletics	.82			
Because supporting XYZ Athletics makes me happy, I remain a loyal customer	.80			
Trust		.76	.52	.76
I can rely on XYZ Athletics to provide a good service	.67			
I can rely on XYZ Athletics to keep its promises	.75			
I trust what XYZ Athletics tells me	.74			
Satisfaction		.88	.55	.88

I am satisfied with my relationship with XYZ Athletics	.68		
I am satisfied with XYZ Athletics' response to my questions and concerns	.72		
I am satisfied with XYZ Athletics' willingness to explain procedures	.75		
I am satisfied with the service quality of XYZ Athletics	.78		
I am satisfied with the expertise/helpfulness of XYZ Athletics staff members	.76		
I am satisfied with the personal attention of XYZ Athletics	.74		
Calculative Commitment		.73	.47 .72
I remain a customer of XYZ Athletics because it is too difficult and requires too much time to attend sporting events of other organizations	.63		
I remain a customer of XYZ Athletics because they are the only sporting events in the local city	.70		
Because it is difficult to cancel tickets, I remain a customer of XYZ Athletics	.73		
Customer Referral		.84	.57 .84
I encourage friends and relatives to attend XYZ Athletics events	.75		
If somebody is interested in sports, I recommend they follow XYZ Athletics	.77		
I encourage friends and relatives to watch XYZ Athletics events on television	.75		
I say positive things about XYZ Athletics to persons in my environment	.74		
Donation Intentions		.78	.63 .78
I intend to donate to the XYZ Alumni Association	.76		
I intend to donate to XYZ Athletics Boosters	.83		

Game Attendance	.88	.72	.88
How many XYZ Athletics events did you attend last year?	.86		
How many XYZ Athletics events have you attended this year?	.88		
How many XYZ Athletics events do you plan to attend next year?	.80		

Note. XYZ refers to respondents' affiliated intercollegiate athletic programs.

Structural Equation Modeling

A SEM with maximum likelihood estimation was further conducted to simultaneously test the six research hypotheses. The result of SEM exhibited acceptable model fit ($\chi^2 = 716.89$, $df = 266$, $p < .001$, $\chi^2/df = 2.70$; CFI = .91, RMSEA = .070, 90% CI = .064 – .076, SRMR = .06). Examination of the path coefficients indicated that relationship quality had a significant and positive effect on donation intentions ($\beta = .75$, $p < .001$), game attendance ($\beta = .55$, $p < .001$), and customer referral ($\beta = .93$, $p < .001$). As a result, hypotheses 1, 3, and 5 were supported. Furthermore, contrary to hypothesis 2, calculative commitment was found to have a negative effect on game attendance ($\beta = -.26$, $p < .001$). Consequently, there was no evidence supporting hypothesis 2. Consistent with hypothesis 4, calculative commitment was found to have no effect on donation intention ($\beta = .10$, $p = .09$). Lastly, hypothesis 6 was supported by a significant and negative path from calculative commitment to customer referral ($\beta = -.19$, $p < .001$). The proposed structural model explained 89%, 56%, and 37% of variance in customer referral, donation intention, and game attendance, respectively. For an illustration of the proposed structural model, please see Figure 2.

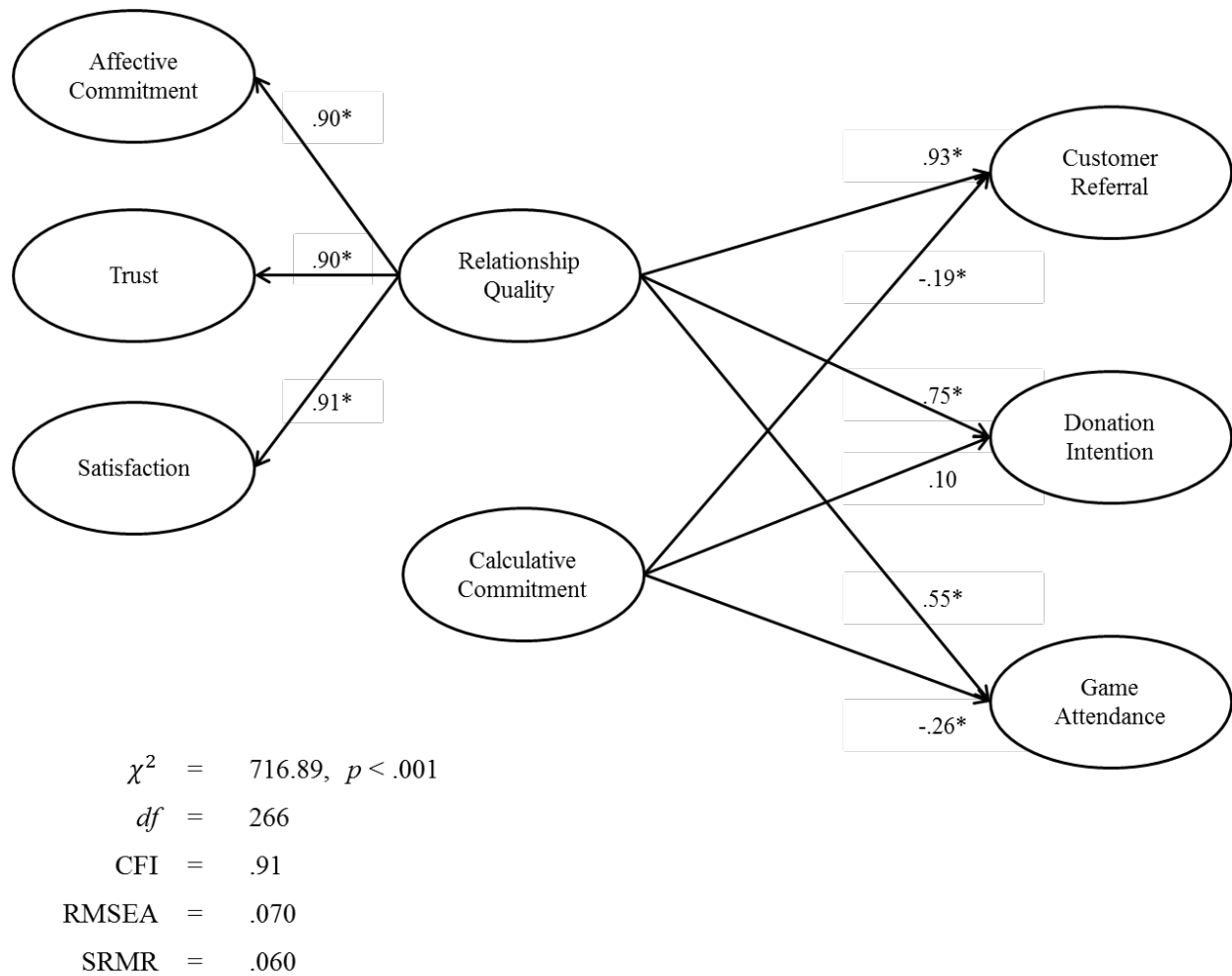


Figure 2. *Proposed structural model.* * $p < .001$.

Discussion

The purpose of this study was to examine the effects of relationship quality and calculative commitment on three sport consumer behaviors. The difficulty in maintaining the profitability of intercollegiate athletic programs is evident. At the collegiate level, only 14 members of the FBS division reported profits in 2009; an amount that increased only slightly to 22 in 2010. Furthermore, the median revenue generated in the FCS Division showed a 3.1% decrease from 2008 to 2009 (Fulks, 2010). Clearly, it is imperative for athletic directors to develop efficient marketing strategies; improving relationship quality and maintaining a preferable long-term relationship with consumers are the keys to business success (Kim & Trail, 2011). The findings of the present study were expected to assist sports organizations in making better use of relationship marketing. Two important variables – relationship quality and calculative commitment – were identified and empirically tested to help intercollegiate athletic programs maintain financial viability by generating game attendance, donation intentions, and customer referrals.

Impacts on Sport Consumer Behaviors

Game attendance. The present study found that relationship quality and calculative commitment have strong effects on several sport consumer behaviors. Game attendance has been deemed one of the most important revenue sources for sport organizations (see, e.g., Zhang et al., 1996). Testing hypothesis 1 demonstrated that relationship quality could significantly increase the level of game attendance in a three year-span. This result was consistent with previous findings suggesting that relationship quality could serve as an important antecedent of consumers' actual consumption and future purchase intentions (e.g., De Wulf et al., 2001; Kim, Trail, & Ko, 2011; Palmatier et al., 2006).

Contrary to the prediction of hypothesis 2, calculative commitment was found to negatively influence game attendance. Calculative commitment has been viewed as a negative motivation discouraging consumers from discontinuing their relationships with their current service providers (Verhoef et al., 2002); that is, the associated termination and/or switching cost could prompt consumers to remain behaviorally loyal (Dick & Basu 1994; Klemperer 1995). Nevertheless, owing to the development of modern technology, the switching and termination costs could be relatively low; consumers who perceived a high level of calculative commitment could easily watch or follow other sport events through TV broadcasting or online video streaming. As a result, calculative commitment could actually be harmful to game attendance.

Donation intention. Furthermore, relationship quality was also found to have a positive relationship with donation intentions. A significant portion of intercollegiate athletic programs' revenue came from donations (Fulks, 2010; 2011). Consequently, donation behavior has received more scholarly attention due to its efficacy in generating revenue. Based on the current study's results, relationship quality was found to be a strong predictor of sport consumers' future intention to donate to their affiliated intercollegiate athletic programs. In addition, consistent with hypothesis 4, there was no evidence suggesting that calculative commitment could be leveraged to generate sport consumers' donation behavior.

Customer referral. Lastly, relationship quality was found to positively affect customer referrals. Customer referral has recently been viewed as a form of effective communication that can be used to disseminate product information. Unlike company-initiated communication, customer referral is done in a private and personal approach between individual consumers. As a result, product information is often believed to be more trustworthy when received through customer referrals (Hennig-Thurau et al., 2002; Reynolds & Beatty, 1999). The present study provided an initial empirical support for the positive effect of relationship quality on customer referral. More importantly, a negative relationship between calculative commitment and customer referral was also found. According to the result of hypothesis 6, as expected, calculative commitment significantly reduced sport consumers' tendency to engage in customer referrals. In other words, sport consumers would be reluctant to recommend their affiliated teams to others in order to avoid imposing the same level of calculative commitment on others.

In conclusion, relationship quality and calculative commitment together were found to explain large portions of the three sport consumer behaviors – game attendance, donation intentions, and customer referral. The remaining sections provide theoretical and managerial implications of the present study's findings.

Theoretical Implications

Three valuable theoretical implications emerged from the current study. The first theoretical contribution made pertains to the replication of the relationship paradigm in the context of sports by showing three positive effects of relationship quality on game attendance, donation intention, and customer referral. As suggested by Kim, Trail, and Ko (2011), it would be beneficial to study and understand sport consumer behaviors from the viewpoint of relationship quality. Nevertheless, there has been a shortage of empirical work directly examining the role of relationship quality in the context of sports. Aiming to improve upon the current understanding of relationship quality, this study provided additional empirical evidence to support the claim that relationship quality can have a positive effect on sport consumer behaviors in the context of intercollegiate athletics.

Second, the present study incorporated donation intentions as the focal-dependent variable. Donation has been suggested as being an important source of revenue for non-profit organizations and hybrid institutions such as universities (Brady, Nobel, Utter, & Smith, 2002); in fact, donation is one of the most essential revenue resources of intercollegiate athletic programs (Winfrey & McCluskey, 2008). By using donation intention as the focal-dependent variable, the present study successfully captured long-lasting sport consumer behavior. In other words, future research using the relationship quality paradigm to study sport consumer behaviors at the intercollegiate and/or other levels should employ dependent variables capable of reflecting the relational view of consumer behaviors.

Lastly and most importantly, the role of calculative commitment in relationship marketing of intercollegiate sports was clarified. To date, studies on sport consumer behaviors have only paid sparse attention to the role of calculative commitment. According to previous research, commitment is a multi-faceted construct (Allen & Meyer, 1990), and each dimension of commitment (e.g., affective commitment and calculative commitment) can be theoretically distinct from each other (Geyskens et al., 1996; McGee & Ford, 1987). Failure to consider the difference between affective commitment and calculative commitment can lead to the incorrect identification of a spuriously loyal customer who continues to remain a spectator without being emotionally committed as a truly loyal one (Backman & Crompton, 1991). In other words, scholars who study sport consumer behaviors need to distinguish cost-based loyalty that is due to calculative commitment from attitudinal loyalty that is characterized by affective commitment.

Managerial Implications

Several managerial implications were derived from the results of the present study. The three sport consumer behaviors tested in this current study – game attendance, donation intentions, and customer referral – are directly related to sports organizations' financial soundness. Therefore, sport managers should keep watch for potential antecedents that could be employed to help them generate positive sport consumer behaviors while preventing negative ones. First, based on the results of hypotheses 1, 3, and 5, relationship quality could affect all of the essential sport consumer behaviors in a positive way. Accordingly, more managerial attention should be paid to fostering high-quality relationships with intercollegiate sport consumers. It is warranted that intercollegiate athletics allocate resources and develop marketing strategies to target exclusively at long-term season-tickets holders in order to encourage existing customers to continue their relationship with their affiliated sport teams. For example, firms could also offer

more economic benefits or privileges that are only available to long-term customers (Vesel & Zabkar, 2010). Thus, intercollegiate athletics could offer benefit programs, such as priority parking, discounts on merchandise, and priority offers to buy additional or playoff tickets, all of which would be exclusive to customers who have a long-term relationship with their affiliated sport teams. Besides benefits purely related to products' economic values, according to Vesel and Zabkar (2010), firms could also directly target relationship development by offering other soft benefits, such as special invitations for and customized communications with long-term customers. In addition, organizations should emphasize the development of a desirable firm-customer interaction to foster a high-quality relationship between organizations and customers (Lin & Wu, 2011). Accordingly, athletic directors at the intercollegiate level could provide special events for existing customers, such as open practices, autograph sessions, and VIP receptions in players' locker room. Through these special events, customers can enjoy more face-to-face interactions with their favorite players and coaches and become long-term ticket holders by developing a more desirable relationship with their affiliate sport organizations and persona.

Calculative commitment is another important factor that should be noted by intercollegiate sport organizations. The effect of calculative commitment is actually harmful to two important sport consumer behaviors – customer referral and game attendance. Unfortunately, most intercollegiate athletic departments are unable to reduce the level of calculative commitment by simply relocating themselves; however, they still can mitigate the deleterious effects of calculative commitment in other ways. First of all, Venkata (2010) suggested that firms should focus on increasing customers' satisfaction by reducing customers' resentment. Sport organizations should pay more attention to effectively managing customers' complaints and subsequently developing a higher level of consumer satisfaction. Moreover, as suggested by Liu, Su, Li, & Liu (2010), in order to decrease the opportunistic behaviors resulting from customers' feeling of calculative commitment, firms should shift their focus from economic considerations toward consumers' emotional responses to the organizations when building customer relationships. Thus, rather than simply considering the organizations' revenue, sport teams should offset potential deleterious influences resulting from calculative commitment by, for example, reinforcing team traditions and offering community involvement activities. Finally, to decrease the negative impacts of calculative commitment, firms should clearly explain their current and future organizational objectives and ultimate goals, thereby enabling their customers to have the same targets moving forward (Bloemer, 2010). Thus, intercollegiate athletic programs could create a vision of "shared goals" with their customers and persuade them to keep pursuing these shared goals together.

Limitations

Although the measurement model indicated an acceptable model fit based on the result of the CFA, one limitation emerged from the low AVE value (.47) of calculative commitment. Items measuring calculative commitment were developed by Verhoef and colleagues (2002) in regard to an insurance product. In their study, these items exhibited acceptable validity and reliability after going through a series of exploratory factor analysis and CFA tests. In addition, due to the acceptable value of other fit-indices, the present study proceeded to test the structural model regardless of the low AVE value. Nevertheless, the validity of calculative commitment may be questionable. Secondly, the present study measured participants' intentions to donate to

the athletic programs and become season ticket holders. In consumer research, it is conventional to use behavioral intentions as the proxy of actual behaviors (Fishbein & Ajzen, 1975); however, behavioral intentions do not always translate into actual behaviors (Morwitz, Steckel, & Gupta, 2007). The third limitation related to the research sample. Based on the socio-demographic backgrounds of the respondents, the majority seemed to be undergraduate or graduate students. Students comprised a significant portion of the total consumers of intercollegiate athletic programs, but the generalizability of this present study could still be limited. Therefore, samples that are more representative of the customer population of collegiate sports could validate the focal findings and improve the generalizability.

Future Directions

A fruitful direction for future research could be to test the potential moderating effect of calculative commitment. According to Palmatier et al. (2006), the effect of relationship quality on business performance and consumer behaviors could be moderated by several market-related (B2B vs. B2C) or product-related (services vs. products) factors. Nevertheless, to the best of our knowledge, there has been no sport-related research examining whether calculative commitment could alter the positive impacts of relationship quality on sport consumer behaviors. A post-hoc multi-group analysis was conducted to provide preliminary evidence supporting this potential research direction. Participants were classified into three groups based on their scores on calculative commitment. A multi-group structural model allowing the three direct effects of relationship quality on customer referral, game attendance, and donation intention to freely vary was first fitted with the three groups. Then, a second multi-group structural model constraining the three effects to be equal across the three groups to examine the potential moderating role of calculative commitment was fitted. The chi-square difference test ($\Delta\chi^2 = 25.35$, $\Delta df = 6$, $p < .001$) was significant, suggesting that calculative commitment could potentially moderate the three effects of relationship quality on sport consumer behaviors. Based on the result of this post-hoc analysis, further examination on the moderating role of calculative commitment in relationship-related research is warranted.

Another potential direction for future research could pertain to the effects of relationship quality and calculative commitment on different types of donation behaviors. Although the current results supported the claim that relationship quality could increase individuals' future donation, donations made to the intercollegiate athletic programs could be motivated by factors other than pure altruism. For example, many commercial-related benefits, such as future ticket and parking availability, were identified as initial main drivers for athletic gifting at the intercollegiate level (Stinson & Howard, 2008; 2010b). On the other hand, the formation of calculative commitment through a cold assessment of the cost incurred by terminating the existing relationship is inconsistent with altruistic donations. Nevertheless, it is possible that calculative commitment could be utilized to lure different donor segments. For example, according to previous studies, repayers usually donate because they have received benefits during previous service encounters (Prince & File, 1994; Stinson & Howard, 2010a). Therefore, sport consumers who continue their existing relationship with their athletic programs as a result of high calculative commitment may potentially become repayers due to previously received services provided by their athletic programs. Accordingly, it is important for future research to take into consideration various different forms of donation behaviors.

Moreover, relationship quality focuses on customer retention and on relationship continuity. Research using the relationship paradigm should also shift its emphasis from one-shot measure toward the transformation of consumer behaviors over the long term. As a result, longitudinal studies could provide better insight into the effect of relationship quality on sport consumer behaviors. Lastly, relationship quality was treated as an independent variable in the present study; however, relationship quality has also been suggested to fully mediate the effects of relationship marketing efforts, such as a company's relationship investments and expertise, on business success. As a result, a marketing input → relationship quality → marketing output sequential model could be formulated to directly test the mediating role of relationship quality.

References

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, *63*, 1-18.
- Andaleeb, S. S. (1996). An experimental investigation of satisfaction and commitment in marketing channels: The role of trust and dependence. *Journal of Retailing*, *72*, 77-93.
- Anderson, E., & Weitz, B. (1989). Determinants of continuity in conventional industrial channel dyads. *Marketing Science*, *8*, 310-323.
- Backman, S. J., & Crompton, J. L. (1991). Using a loyalty matrix to differentiate between high, spurious, latent and low loyalty participants in two leisure services. *Journal of Park and Recreation Administration*, *9*, 1-17.
- Bagozzi, R. P., & Yi, Y. J. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, *16*, 74-94.
- Baird, K. (2004). Dominance in college football and the role of scholarship restrictions. *Journal of Sport Management*, *18*, 217-235.
- Bee, C. C., & Kahle, L. R. (2006). Relationship marketing in sports: A functional approach. *Sport Marketing Quarterly*, *15*, 102-110.
- Bendapudi, N., & Berry, L. L. (1997). Customer's motivations for maintaining relationships with service providers. *Journal of Retailing*, *73*, 15-37.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, *107*, 238-246.

- Berry, L. L. (2002). Relationship marketing of services – Perspectives from 1983 and 2000. *Journal of Relationship Marketing, 1*, 59-77.
- Berry, L. L. (1995). Relationship marketing of services – Growing interest, emerging perspectives. *Journal of the Academy of Marketing Science, 23*, 236-245.
- Bloemer, J. (2010). The psychological antecedents of employee referrals. *International Journal of Human Resource Management, 21*, 1769-1791.
- Brady, M. K., Noble, C. H., Utter, D. J., & Smith, G. E. (2002). How to give and receive: An exploratory study of charitable hybrids. *Psychology and Marketing, 19*, 919-944.
- Braunstein, J. R., & Zhang, J. J. (2005). Dimensions of athletic star power associated with Generation Y sports consumption. *International Journal of Sports Marketing and Sponsorship, 6*, 242-267.
- Caro, C. A., & Benton, C. F. (2012). The great divide: Examining football revenue among FBS schools. *International Journal of Sports Science and Coach, 7*, 345-369.
- Chou, C. P., & Bentler, P. M. (1995) *Estimates and tests in structural equation modeling*. Thousand Oaks, CA: Sage Publications.
- Crosby, L. A., Evans, K. R., & Cowles, D. (1990). Relationship quality in services selling: An interpersonal influence perspective. *Journal of Marketing, 54*, 68-81.
- De Wulf, K., Odekerken-Schröder, G., & Iacobucci, D. (2001). Investments in consumer relationships: A cross-country and cross-industry exploration. *Journal of Marketing, 65*, 33-50.
- Dick, A. S., & Basu, K. (1994). Customer Loyalty: Toward an integrated conceptual framework. *Journal of the Academy of Marketing Science, 22*, 99-113.
- Doney, P. M., & Cannon, J. P. (1997). An examination of the nature of trust in buyer-seller relationships. *Journal of Marketing, 61*, 35-51.
- Dorsch, M. J., Swanson, S. R., & Kelley, S. W. (1998). The role of relationship quality in the stratification of vendors as perceived by customers. *Journal of the Academy of Marketing Science, 26*, 128-142.
- Dwyer, F. R., Schurr, P. H., & Oh, S. (1987). Developing Buyer-Seller relationships. *Journal of Marketing, 51*, 11-27.
- Ehrenberg, R. G. (2006). The perfect storm and the privatization of public higher education. *Change: The Magazine of Higher Learning, 38*, 46-53.
- Fishbein, M., Ajzen. (1975) *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*, 39-50.
- Fornell, C., & Wernerfelt, B. (1987). Defensive marketing strategy by customer complaint management: A theoretical analysis. *Journal of Marketing Research, 24*, 337-346.
- Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research, 24*, 343-353.
- Fulks, D. (2010). *Revenues and expenses 2004-2009*. Retrieved from http://www.ncaapublications.com/DownloadPublication.aspx?download=REV_EXP_2010.pdf
- Fulks, D. (2011). *2004-2010 Revenues and expenses*. Retrieved from <http://www.ncaapublications.com/productdownloads/2010RevExp.pdf>

- Funk, D. C., Filo, K., Beaton, A. A., & Pritchard, M. (2009). Measuring the motives of sport events attendance: Bridging the academic-practitioner divide to understanding behavior. *Sport Marketing Quarterly*, *18*, 126-138.
- Funk, D. C., Ridinger, L. L., & Moorman, A. M. (2003). Understanding consumer support: Extending the sport interest inventory (SII) to examine individual differences among women's professional sport consumers. *Sport Management Review*, *6*, 1-31.
- Geyskens, I., Steenkamp, J. E. M., & Kumar, N. (1999). A meta-analysis of satisfaction in marketing channel relationships. *Journal of Marketing Research*, *36*, 223-238.
- Geyskens, I., Steenkamp, J. E. M., Scheer, L. K., & Kumar, N. (1996). The effects of trust and interdependence on relationship commitment: A trans-Atlantic study. *International Journal of Research in Marketing*, *13*, 303-317.
- Gladden, J.M., Mahony, D. F., & Apostolopoulou, A. (2005). Toward a better understanding of college athletic donors: What are the primary motives. *Sport Marketing Quarterly*, *14*, 18-30.
- Gladden, J.M., & Sutton, W.A. (2009). Marketing principles applied to sport management. In H.P. Masteralexis, C.A. Barr, & M.A. Hums (Eds.), *Principles and practices of sport management* (pp. 42-59). Sudbury, MA: Jones and Bartlett Publishers.
- Glady, N., Baesens, B., & Croux, C. (2009). Modeling churn using customer lifetime value. *European Journal of Operational Research*, *197*, 402-411.
- Gruen, T. W., Summers, J. O., & Acito, F. (2000). Relationship marketing activities, commitment, and membership behaviors in professional associations. *Journal of Marketing*, *64*, 34-49.
- Guadagnoli, E., & Veilcer, W. F. (1988). Relation to sample size to the stability of component patterns. *Psychological Bulletin*, *103*, 265-275.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective* (7th ed.). Upper Saddle River, NJ, Pearson Education.
- Harris, L. C., & Ogbonna, E. (2008). The dynamics underlying service firm-customer relationships. *Journal of service research*, *10*, 382-399.
- Hennig-Thurau, T., Gwinner, K. P., & Gremler, D. D. (2002). Understanding relationship marketing outcomes: A integration of relational benefits and relationship quality. *Journal of Service Research*, *4*, 230-247.
- Hibbard, J. D., Kumar, N., & Stern, L. W. (2001). Examining the impact of destructive acts in marketing channel relationships. *Journal of Marketing Research*, *38*, 45-61.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*, 1-55.
- Judson, K. M., Aurand, T. W., & Karlovsky, R. W. (2007). Applying relationship marketing principles in the university setting: An adaptation of the exchange relationship typology. *Marketing Management Journal*, *17*, 184-197.
- Kahn, L. M. (2007). Cartel behavior and Amateurism in college sports. *Journal of Economic Perspectives*, *21*, 209-226.
- Kim, Y. K., & Trail, G. (2011). A conceptual framework for understanding relationships between sport consumers and sport organizations: A relationship quality approach. *Journal of Sport Management*, *25*, 57-69.

- Kim, Y. K., Trail, G., & Ko, Y. J. (2011). How relationship influences sport consumption behavior? An empirical examination relationship quality framework. *Journal of Sport Management, 25*, 576-592.
- Kim, Y. K., Trail, G., Woo, B., & Zhang, J. (2011). Sports consumer-team relationship quality: development and psychometric evaluation of a scale. *International Journal of Sports Marketing and Sponsorship, 12*, 254-271.
- King, B. (2005). The 24/7 fan. *Street & Smith's SportsBusiness Journal, 7*, 23-33.
- Klemperer, P. (1995). Competition when consumers have switching costs: An overview with applications to industrial organizations, macroeconomics, and international trade. *Review of Economic Studies, 62*, 515-539.
- Kline, R. B. (2005). Principles and practice of structural Equation Modeling. New York: The Guilford Press.
- Kumar, N., Hibbard, J. D., & Stern, L. W. (1994). *The nature and consequences of marketing channel intermediary commitment* (Report No. 94-115). Cambridge: Marketing Science Institute
- Levy, M., & Weitz, B. A. (2004). *Retailing management*. Chicago: Richard D. Irwin.
- Liu, Y., Su, C., Li, Y., & Liu, T. (2010). Managing opportunism in a developing interfirm relationship : The interrelationship of calculative and loyalty commitment. *Industrial Marketing Management, 39*, 844-852.
- Lin, J. S. C., & Wu, C. Y. (2011). The role of expected future use in relationship-based service retention. *Managing Service Quality, 21*, 535-551.
- Mahony, D. F., Gladden, J. M., & Funk, D. C. (2003). Examining athletic donors at NCAA Division I institutions. *International Sports Journal, 7*, 9-27.
- McGee, G. W., & Ford, R. C. (1987). Two (or more?) dimensions of organizational commitment: Reexamination of the affective and continuance commitment scales. *Journal of Applied Psychology, 72*, 638-641.
- Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of marketing research: The dynamics of trust within and between organizations. *Journal of Marketing Research, 29*, 314-29.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing, 58*, 20-38
- Morwitz, V. G., Steckel, J. H., & Gupta, A. (2007). When do purchase intentions predict sales? *International Journal of Forecasting, 23*, 347-364.
- Nanfelt, M. (2012). *IBISWorld industry report 71121a sports franchises in the US*. Retrieved from: <http://clients.ibisworld.com.lp.hscl.ufl.edu/industryus/default.aspx?indid=1628>
- National Collegiate Athletic Association (2012). *NCAA revenue breakdown*. Retrieved from: <http://www.ncaa.org/wps/wcm/connect/public/ncaa/finances/revenue>
- Neale, L., & Funk, D. (2006). Investigating motivation, attitudinal loyalty and attendance behavior with fans of Australian football. *International Journal of Sport Marketing and Sponsorship, 7*, 307-319.
- Neslin, S. A., Gupta, S., Kamakura, W., Lu, J., & Mason, C. H. (2006). Defection detection: Measuring and understanding the predictive accuracy of customer churn models. *Journal of Marketing Research, 43*, 204-211.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory*. New York: McGraw-Hill.

- O'Neil, J., & Schenke, M. (2007). An examination of factors impacting athlete alumni donations to their alma mater: A case study of a U.S. university. *International Journal of Nonprofit and Voluntary Sector Marketing, 12*, 59-74.
- OneSource Company (2012). *OneSource company summary report National Collegiate Athletic Association*. Retrieved from: <http://businessbrowser.onesource.com.lp.hscl.ufl.edu/web/Reports/ReportMain.aspx?KeyID=L45238429&Process=CP&FtrID=UNIFIEDSUMMARY>
- Orleans, J. (2010). "Be careful what you wish for": A responses to professor Andrew Zimbalist's: "dollar dilemmas during the downturn: A financial crossroad for college sports.". *Journal of Intercollegiate Sport, 3*, 125-134.
- Palmatier, R. W., Dant, R. P., Grewal, D., & Evans, K. R. (2006). Factors influencing the effectiveness of relationship marketing: A meta-analysis. *Journal of Marketing, 70*, 136-153.
- Palmero, M., Li, M., Lawrence, H. & Conley, V. M. (2011). Who is in charge? An analysis of NCAA Division I arena management models. *Journal of Venue and Event Management, 3*, 17-32.
- Pearson, J. (1999). Comprehensive research on alumni relationships: Four years of market research at Stanford University. *New Direction for Institutional Research, 101*, 5-21.
- Prince, R. A., & File, K. M. (1994). *The seven faces of philanthropy: A new approach to cultivating major donors*. San Francisco: Jossey-Bass.
- Pura, M. (2005). Linking perceived value and loyalty in location-based mobile services. *Managing Service Quality, 15*, 509-538.
- Reynolds, K. E., & Beatty, S. E. (1999). Customer benefits and company consequences of customer-salesperson relationships in retailing. *Journal of Retailing, 75*, 11-32.
- Ripley, M. (2011). *IBISWorld industry report 71121a sports franchises in the US*. Retrieved from: <http://clients.ibisworld.com/industryus/default.aspx?indid=1628>
- Siguaw, J. A., Simpson, P. M., & Baker, T. (1998). Effects of supplier market orientation on distributor market orientation and the channel relationship: The distributor perspective. *Journal of Marketing, 62*, 99-111.
- Smith, D. H., Stebbins, R. A., & Dover, M. A. (2006). *A dictionary of nonprofit terms & concepts*. Bloomington, IN: Indiana University Press.
- Srinivasan, R., & Moorman, C. (2005). Strategic firm commitments and rewards for customer relationship management in online retailing. *Journal of Marketing, 69*, 193-200.
- Stavros, C., Pope, N. K. L., & Winzar, H. (2008). Relationship marketing in Australian professional sport: An extension of the Shani framework. *Sport Marketing Quarterly, 17*, 135-145.
- Stinson, J.L., & Howard, D.R. (2008). Winning does matter: Patterns in private giving to athletic and academic programs at NCAA I-AA and I-AAA Institutions. *Sport Management Review, 11*, 1-20.
- Stinson, J. L., & Howard, D. R. (2010a). Athletic giving and academic giving: Exploring the value of split donors. *Journal of Sport Management, 24*, 744-768.
- Stinson, J. L., & Howard, D. R. (2010b). Intercollegiate athletics as an institutional fundraising tool: An exploratory donor-based view. *Journal of Nonprofit and Public Sector Marketing, 22*, 312-335.
- Sutter, D., & Winkler, S. (2003). NCAA scholarship limits and competitive balance in college football. *Journal of Sport Economics, 4*, 3-18.

- Swanson, S. R., Gwinner, K., Larson, B. V., & Janda, S. (2003). Motivations of college student game attendance and word-of-mouth behavior: The impact of gender difference. *Sport Marketing Quarterly*, 12, 151-162.
- Thibaut J. W., & Kelley, H. H. (1959). *The social psychology of groups*. New York, NY: Wiley.
- Tower, J., Jago, L., & Deery, M. (2006). Relationship marketing and partnerships in not-for-profit sport in Australia. *Sport Marketing Quarterly*, 15, 167-180.
- Tsitsos, W., & Nixon, H. L., II. (2012). The star wars arm race in college athletics: Coaches' pay and athletic program status. *Journal of Sport and Social Issues*, 36, 68-88.
- Venkata, Y. (2010). An empirical analysis of the retention of dissatisfied business services customers using structural equation modeling. *Australasian Marketing Journal*, 18, 222-232.
- Verhoef, P. C. (2003). Understanding the effect of customer relationship management efforts on customer retention and customer share development. *Journal of Marketing*, 67, 30-45.
- Verhoef, P. C., Franses, P. H., & Hoekstra, J. C. (2002). The effect of relational constructs on customer referrals and number of services purchased from a multiservice provider: Does age of relationship matter?. *Journal of the Academy of Marketing Science*, 30, 202-216.
- Verner, M. E., Hecht, J. B., & Fansler, A. G. (1998). Validating an instrument to assess the motivation of athletics donors. *Journal of Sport Management*, 12, 123-137.
- Vesel, P., & Zabkar, V. (2010). Comprehension of relationship quality in the retail environment. *Managing Service Quality*, 20, 213-235.
- Wang, R. T., Zhang, J. J., & Tsuji, Y. (2011). Examining fan motives and loyalty for the Chinese Professional Baseball League of Taiwan. *Sport Management Review*, 14, 347-360.
- Winfrey, J., & McCluskey, J. J. (2008). Incentives for Post-Apprehension self-punishment: University self-sanctions for NCAA infractions. *International Journal of Sport Finance*, 3, 196-209.
- Zabkar, V., & Brencic, M. M. (2004). Values, trust, and commitment in business-to-business relationships: A comparison of two former Yugoslav markets. *International Marketing Review*, 21, 202-215.
- Zhang, J. J., Lam, E. T. C., & Connaughton, D. P. (2003). General marketing demand variables associated with professional sport consumption. *International Journal of Sports Marketing and Sponsorship*, 5, 33-55.
- Zhang, J. J., Smith, D. W., Pease, D. G., & Mahar, A. T. (1996). Spectator knowledge of hockey as a significant predictor of game attendance. *Sport Marketing Quarterly*, 5, 41-48.