# Social Media and Sports Marketing: Examining the Motivations and Constraints of Twitter Users

## Chad Witkemper, Choong Hoon Lim, and Adia Waldburger

Chad Witkemper is an assistant professor in the Department of Kinesiology, Recreation, and Sport at Indiana State University. His research interests include organizational behavior, consumer behavior, and social media use.

Choong Hoon Lim is an assistant professor of sport marketing and management in the School of Public Health, at Indiana University. His research interests include sport marketing, sport media, sport management, media violence, gambling, and online sport.

Adia Waldburger is a doctoral student in sport management in the School of Public Health at Indiana University. Her research interests include sport communication and online media with a focus on Olympic and Paralympic sport.

## **Abstract**

This study examined what motives and constraints influence Sport Twitter Consumption (STC) in regard to following athletes. Furthermore, the study attempted to cultivate a reliable and valid model through which researchers and practitioners can measure Twitter consumption-related motivations and constraints. The proposed combined model consisted of 12 items with four measures of motivation (i.e., information, entertainment, pass time, and fanship) and 12 items with four measures of constraints (i.e., accessibility, economic, skills, social). Structural Equation Modeling (SEM) method with a convenience sample of 1,124 respondents was employed to analyze the conceptual framework and elements of the scale. Motivations for STC among the respondents were positively and significantly related, whereas constraints were negatively and significantly related to their Twitter consumption in regard to following athletes. Results and future implications for practical and theoretical sport marketing research are also discussed.

#### Introduction

In an article by Nielsen Online (McGiboney, 2009), reports show Twitter grew exponentially from February 2008 through February 2009, increasing its users from 475,000 to over seven million. In terms of percentages, this was almost 1,400% growth. By 2010, Twitter users increased by 100 million according to Sysomos, a social media monitoring company (Van Grove, 2010). More recently, reports indicate Twitter has grown to 200 million users (Shiels, 2011).

Twitter is a service in which users can interact with one another through the use of 140 characters. It shares features with communication mediums people already use, but in a simple and quick way. It has elements much like those of email, instant messaging, RSS, texting, blogging, social networks, and so forth (O'Reilly & Milstein, 2009). Twitter is a free social networking and micro-blogging service that enables its users to send and receive "tweets" from other users. These messages can be delivered to user "followers" automatically (Williams, 2009).

This information leads to the primary purpose of this research, which is to ascertain the reasoning behind why individuals adopt Twitter as a medium to follow their favorite athletes, and propose a model to aid in the understanding of this consumer behavior. More specifically, this study investigates the motivation and constraint factors which influence Sport Twitter Consumption. This study is unique because it examines both motivations and constraints simultaneously.

Hur, Ko, and Valacich (2007) began looking at both fan motivations and constraints to consume online media. However, their model was not able to significantly predict constraints. Further research into consumer behavior and fantasy sports was successful in merging motivations and constraints into a single model (Suh, Lim, Kwak, & Pedersen, 2010). Seo and Green (2008) developed a reliable instrument with which they were able to gauge consumer motivations for online consumption; however, constraints were not addressed.

Social media is being used more frequently by sports organizations and athletes as a tool to communicate

with fans (Pedersen, Parks, Quarterman, & Thibault, 2010). There are several forms of social media currently being utilized by sport organizations to market their team. Facebook is used to provide information, post pictures and videos, and promote upcoming events. YouTube has been used to share videos with fans about the team or organization. Each of these options may require more time and effort than a fan has to offer, whereas Twitter is a quick source of information that does not require much effort from an individual. While other forms of social media are offered, these three are the most common types of social media found on official team websites. However, the growth of Twitter has been noticed in the sport industry, as it is becoming commonplace to hear about athletes who "tweet" or to read an article where the story broke from someone's Twitter account. For example, Cliff Lee's (Major League Baseball) negotiations and whether or not Brett Favre (National Football League) would start during the Vikings-Giants game broke through Twitter (Bennett, 2010).

There are only a handful of studies on social media in general which focus on the sport industry (Ballouli & Hutchinson, 2010; Drury, 2008; Pegoraro, 2010; Sheffer & Schultz, 2010a, 2010b; Williams & Chinn, 2010). However, of these studies, none have empirically examined individuals who choose to use social media as a medium for sport simultaneously with those who do not. Therefore, little is known about sport Twitter users' motivations and constraints. By identifying which specific constraints limit participation in following athlete Twitter accounts, sport governing bodies, leagues, and individual team front offices may better decide how to change their social media marketing strategies. For example, in the wake of the 2010 FIFA World Cup, Sony launched a new marketing campaign through Twitter, the Sony Ericsson Twitter Cup (Sony News, 2011). Using Twitter as a marketing strategy is a relatively new tactic, so information is needed on how to best utilize it.

As Twitter continues to evolve, many business organizations are adopting Twitter accounts within their marketing strategies to interact with their fans. Across the major professional leagues in the United States (NFL, NBA, WNBA, MLB, MLS, NHL, WPS), every team utilizes Twitter in some manner. The Carolina Panthers specifically have a section of their website titled "Fanzone," where one can find the link to follow the team on Twitter (Carolina Panthers, 2012). Major League Baseball teams utilize a section called "Connect with the (Team name)," where fans can choose to follow the team via Twitter. NASCAR also provides fans with the capability of following the

league through Twitter. Several drivers also employ Twitter to connect with their fans.

By utilizing Twitter, each league is attempting to take advantage of its capabilities by keeping consumers aware and connected to its brand. Branding effects in sport have been studied extensively (Bagozzi & Dholakia, 2006; Ballouli & Hutchinson, 2010; Cornwell & Maignan, 1998; Coyte, Ross, & Southall, 2011; Crowley, 1991; Gladden & Funk, 2004; Goss, 2009; Gwinner, 1997; Marshall & Cook, 1992; Meenaghan, 1991; Santomier, 2008; Xing & Chalip, 2006), and Twitter is another element which can aid in building stronger relationships between the organization and the fans to increase brand strength. The significance of this study lies in the ability to engage in relationship marketing with young adults through social media. According to demographic data obtained from Quantcast.com (2011), the majority of Twitter users in the United States range from 18-34 years old, thus an ideal age range to examine for this study. Additionally, this demographic group has been labeled as a very competitive market (Lopez, 2009). Further, additional studies have indicated individuals between the ages of 18 and 34 are highly sought after by sport marketers (Lim, Martin, & Kwak, 2010).

Relationship marketing theory has received attention in many areas of business, and has also addressed the sport industry as seen in the following studies. Sports organizations focus on long-term consumer retention and incorporate a variety of database-management techniques to maintain and enhance customer relationships (Bee & Kahle, 2006). Relationship marketing has been described as an ongoing cooperative behavior between the marketer and the consumer (Sheth & Parvatiyar, 2000). In practice, relationship marketing is characterized by the attraction, development, and retention of customers (Bee & Kahle, 2006). Bee and Kahle (2006) stress the importance of relationship marketing and its overall effectiveness. A careful examination of the motivations and constraints of Sport Twitter Consumption (STC) can improve the relationship system implemented by the organizations marketing efforts. For the purpose of this study STC is defined as the use of Twitter to connect with and follow a sport-related entity.

In order to properly begin the transition to relationship marketing, sport organizations must understand why individuals are choosing to consume Twitter and identify the constraints that keep them from using it. This research will address which motivational and constraint factors impact STC among college students, and provide practical implications for the significance of the findings.

## Literature Review

The literature to follow will show how Twitter can be applied to sport marketing. Additionally, the focus of this research is to identify the motivations and constraints of Twitter usage; therefore, this review will also examine the rich literature in these fields as they pertain to media consumption. A deeper understanding of social media is also presented.

#### Social Media

Social media in general can be confusing to a manager or researcher, especially as to what qualifies as social media. Furthermore, social media does differ from the seemingly similar Web 2.0 and User Generated Content (UGC) (Kaplan & Haenlin, 2010) and is often referred to as new media. However, Kaplan and Haenlin (2010) explain that the era of social media actually began in the 1950s and that high-speed Internet access aided in the creation of social networking sites such as MySpace (2003), Facebook (2004), and Twitter (2006). These sites helped coin the term "social media" and contributed to the prominence it has today. Based on this line of research, it should be noted that social media should not be classified as new media but as an independent phenomenon to be examined.

Current social media literature has disproportionately addressed impression management, and security (Barnes, 2006; Boyd & Ellison, 2007; Jagatic, Johnson, Jakobsson, & Menczer, 2007; Stutzman, 2006) without emphasis on sport. Williams and Chinn (2010) linked social media to sport marketing, in particular making the connection between social media and relationship marketing. Additional research has linked social media to communications, particularly sport journalism (Sheffer & Schultz, 2010a, 2010b), and a case study has been done on athletes who use social media (Pegoraro, 2010). Further research has linked social media to branding (Ballouli & Hutchinson, 2010).

#### Relationship Marketing

Relationship marketing spans many different business industries and was described as a paradigm shift in the mid-1990s (Grönroos, 2004). This approach to marketing was first introduced in the service marketing field (Berry, 1983) and has grown to become a staple in marketing operations (Williams & Chinn, 2010). Furthermore, today's consumers expect businesses to engage them and build relationships (Tapscott, 2009). Relationship marketing is not a new concept to the sport industry, as many sport organizations utilize its functions within their marketing operations (Harris & Ogbonna, 2009; Lapio & Speter, 2000; Stavros, Pope, & Winzar, 2008). The potential benefits social media

offers to sport organizations to meet their relationship marketing goals is significant and may be important in support of consumers as they become active contributors (Williams & Chinn, 2010).

Grönroos's (2004) relationship marketing process model focused conceptually on communication, interaction, and value. The primary purpose behind relationship marketing is to build long-term relationships with the organization's best customers (Williams & Chinn, 2010). Stavros, Pope, and Winzar (2008) further suggest that relationship marketing contributes to stronger brand awareness, increased understanding of consumer needs, enhanced loyalty, and added value for consumers. A fundamental process of relationship marketing is existing customer retention and development, while understanding the mutual benefits to each beneficiary (Copulsky & Wolf, 1990). Additional work has described the interactions, relationships, and networks as core components of the relationship marketing process (Gummesson, 1999). Grönroos's (2004) work further defined this concept as "the process of identifying and establishing, maintaining, enhancing, and when necessary terminating relationships with customers and other stakeholders, so that objectives of all parties are met" (p. 101).

According to Grönroos (2004), there are many dimensions to relationship marketing; however, social media provides the opportunity to focus on two of the three core components, communication and interaction. Williams and Chinn (2010) suggest relationship marketing relies on planned messages and can be achieved through two-way or multi-way communication. Furthermore, communication is achieved through social media as organizations have direct contact with the end users, which provides them with the opportunity to land planned messages, such as advertising or sales promotions. However, research suggests there should be more than simple communication between organizations and users; for example, service messages and unplanned messages (Duncan & Moriarty, 1997).

Social media applications allow consumers to interact on several levels. It permits interactions from consumers to consumers and consumers to the organization. These interactions develop into what becomes the consumer's experience. Interactions occur on four levels in regard to building relationships (Holmlund, 1997). According to Holmlund (1997) interactions start basic; in social media this could be an invitation to follow the organization. Then interrelated interactions come together to become episodes, episodes form together to become sequences, and finally, the sequences combine to become a relationship (Holmlund, 1997). Social media could be seen as

the initial interaction with the purpose of transforming into a relationship.

#### Motivation in sport consumption

Identifying specific motivations for sport fan's consumption can be difficult, as there have been numerous studies that have examined motivational factors of consumption and recently, there have been more efforts to study the motivations of online sport consumption behaviors. The following determinants of motivation have been found in this research: entertainment (Gantz, 1981; Sloan, 1989; Zillman, Bryant, & Sapolsky, 1989); a fan's sense of affiliation to a team (fanship); the ability to connect with other fans and not have the feeling of estrangement (Branscombe & Wann, 1991, 1994; Guttman, 1986; McPherson, 1975; Sloan 1989; Smith 1988; Wenner & Gantz, 1989). Further research has identified a scale for online sport consumption motivations titled the Motivation Scale for Sport Online Consumption (MSSOC) (Seo & Green, 2008). Since Twitter is an online source available to sport fans, this scale will help identify motives for fans' consumption. Seo and Green (2008) point out in their study that people often want to express their opinions and talk about their favorite teams and players with other fans. Some fans intermingle at games, some at bars, or through radio talk shows. Twitter is quickly becoming a medium for this type of interaction between people.

Seo and Green (2008) pulled from the work of Funk, Mahoney and Ridinger (2002) for fanship and fan support, technical knowledge of sport (James & Ridinger, 2002; Trail, Fink & Anderson, 2003), entertainment (Chen & Wells, 1999), information (Korgaonkar & Wolin, 1999), escape (Korgaonkar & Wolin, 1999; Rubin, 1981; Trail et al., 2003), economic (Korgaonkar & Wolin, 1999; Wolfradt & Doll, 2001), personal communication (Wolfradt & Doll, 2001), passing time (Rubin, 1981), and content (James & Ridinger, 2002; Rubin, 1981). Therefore, Seo and Green's (2008) MSSOC provides insight into online consumer behaviors as they pertain to certain websites. Based on motivation theory and existing literature, researchers employed an online survey to determine respondents' motivations for consuming Sport Twitter. Based on the previously mentioned classification of social media, this study did not examine every motivation element.

Information Motivation (IM): This measure was asked to assess the subject's levels of motivation for obtaining information. This was adapted from Seo and Green's (2008) original Motivation Scale for Sport Online Consumption. Additionally, a majority of the websites for teams visited referred to Twitter as a way to stay connected and up to date on all things new with the

organization and athletes. This follows the concept of information sharing, as Twitter is being used to supply new or upcoming information about a team or athlete.

Pass-Time Motivation (PTM): To assess the respondents Twitter consumption based on how they occupy their time, PTM measured if subjects were motivated to consume Twitter in order to simply passtime. The simplistic nature of Twitter could make it appealing for individuals to use their free time to check in on their favorite athlete. Further, Twitter has the capability of sending a follower an alert to the fact the athlete they follow has just tweeted. Being limited to 140 characters makes this medium a quick and easy way to stay informed about the people any user is following.

Fanship Motivation (FM): This item measured whether or not the degree to which one considers him/herself a fan would be a motivating factor to use Twitter. Fanship has been identified as a motivating factor to participate in sport as well as consume it through many mediums, such as television (Gantz, 1981). Fanship involves an emotional connection to a team or athlete (Guttman, 1986). Fanship is active, participatory, and empowering with the passion and pleasure it generates (Fiske, 1992; Grossberg, 1992).

Entertainment Motivation (EM): This item measured if a respondent was motivated to use Twitter as a means to gain entertainment if they found enjoyment from using Twitter as a medium for sport. Entertainment motivation, in relation to media effects, was examined in television consumption and was found to motivate fans to consume sport as a form of entertainment (Gantz, 1981).

It should be noted that several of the existing motivations mentioned were not tested within this study. Twitter is a free social media application for users; therefore, the economic motivation was not tested. Furthermore, technical information has been suggested as a motivating factor for sport consumption (James & Ridinger, 2002; Trail et al., 2003). However, since Twitter is not a source for individuals to acquire technical information about rules and skills due to the limitation of 140 characters, this motivation was not included in this study. Interpersonal communication was not included based on the items used to describe it in Seo and Green's (2008) study. As an example, items discussed sharing of personal problems and how to get along with others. The escape motivation was not utilized in this study because Twitter is a medium which will not allow an individual too much extra free time. The limitation of using 140 characters limits the amount of actual time it takes to navigate through and read responses from athletes. The motivation to support your team was not used because the focus of this

study was on the interaction between individuals, not the organization or team.

#### Constraint in sport consumption

Constraint theory is used in research to understand the reasons that people do not participate in a particular activity while others will engage in it. Studies in consumer behavior have also examined constraints, but there have been few studies to examine constraints to online consumer behaviors. Past studies have looked into time, income, inter-household differences and consumer knowledge (Michael & Becker, 1973). Additional research in consumer behavior has focused on external or situational constraints on consumer behavior (Folkes, 1988). Suh, Lim, Kwak, and Pedersen (2010) examined constraints in fantasy football, a form of social media. Their study suggested that certain conditions such as time conflicts, lack of a social connection, and accessibility could affect fantasy sport consumption (Suh et al., 2010). Further research has suggested that two common constraints in leisure activities are time and cost factors (Jackson, 2005).

Crawford and Godbey (1987) provided research that has become the backbone for today's leisure constraint research by proposing three types of constraints: intrapersonal or individual psychological states and attributes, such as stress or anxiety; interpersonal or the result of interpersonal interaction, such as social interaction with family and friends; and structural or intervening factors between preference and participation, such as financial resources, time and accessibility. Participation can be seen as the process of overcoming these three constraints and each is applicable to Sport Twitter Consumption. A few years later, Crawford, Jackson, and Godbey (1991) introduced the "hierarchy of importance," which suggests that constraint levels are arranged on a spectrum from proximal or intrapersonal to distal or structural.

Research by Alexandris and Carroll (1997) later built on that idea, showing empirical evidence for the negative relationship between perception of constraint and recreational sport participation. STC can be examined by this same process. In order to participate in social media, an individual will face each of the above constraints to some extent. There are very few studies that actually examine constraint factors for social media. No constraint is experienced with equal intensity by everyone and no individual is entirely free from constraints to leisure participation (Hinch, Jackson, Hudson, & Walker, 2005).

Research on how constraints affect sport and leisure participation has been conducted for the past two decades by scholars, including Samdahl and Jekubovich (1997) and Fredman and Heberlein (2005).

Conceptually, leisure has been defined in the literature as activities that bring enjoyment, freedom of choice, relaxation, intrinsic motivation, and the lack of evaluation (Shaw, 1985). Based on this conceptualization of leisure, Twitter would apply as users have the choice to participate and it could be a source of enjoyment and relaxation.

Researchers utilized the following constraints proposed by Crawford and Godbey (1987).

Economic Constraints (EC). While this study did not see the theoretical value for including an economic motivation, a constraint based on economic factors was used. The primary reasoning behind this was to determine if economic reasons would keep people from using Twitter. This will allow researchers to assess whether individuals fear that it might take money to follow athletes on Twitter. If people are not aware they can interact directly with their favorite athletes who use Twitter at no cost, then this could be a potential barrier for STC. Further, Internet access does require a service fee to an Internet provider if the individual does not choose to seek out places that offer free Internet access. Finally, Internet devices such as a computer or smart phone can be costly for an individual, which could limit their access to social media applications like Twitter.

Social Constraints (SOC): This item was used to assess whether or not people would use Twitter based on their social environment. If those who surround them socially are using Twitter then this would not be constraining them. Additionally, by interacting with an athlete on Twitter, users are opening themselves up to all other Sport Twitter consumers who also follow that same athlete.

Skill Constraints (SC): This item was used to assess if skill was a factor in Twitter consumption. If an individual was not sure where or how to access Twitter, it would hinder his/her ability to use the service. This also involves the individual's ability to gain the accurate information on how to follow his/her favorite athletes.

Accessibility Constraints (AC): To assess whether people had access or a means to use Twitter, this scale was utilized to measure how it might have impacted their consumption. Accessibility could come in the form of lack of Internet access or equipment to use the Internet. Additionally, access to athletes might not always be an option for some individuals.

Interest Constraints (IC): This item measures an individual's interest in following athletes on Twitter. If respondents have a lack of interest in following athletes, then this would pose as a possible constraint to Sport Twitter Consumption. Furthermore, an individual may simply not have interest in Twitter or social media in general.

Table 1. Cronbach's Alpha, Indicator Loadings, Construct Reliability, Average Variance Extracted, and Means

Means	3.13	3.09	3.04 2.94 3.26	3.08 3.23 3.13	3.35 3.02 3.24	2.24 2.56 2.38	1.94 1.91 2.37
AVE	99.0		09.0	0.58	09.0	0.49	0.43
Construct Reliability	0.88		0.86	0.85	0.87	0.82	0.80
Indicator ( Loadings F	0.91	0.89 0.83	0.91 0.87 0.86	0.86 0.90 0.82	0.89 0.87 0.91	0.87 0.79 0.90	0.79 0.79 0.89
Indi			0.00				0.79 0.79 0.89
Items	IM1: I follow athlete Twitter accounts because it provides quick and easy access to large volumes of athlete information IM2: I follow athlete Twitter accounts because I am able to obtain a wide range	or information IM3: I follow athlete Twitter accounts because I can learn about things happening in the athlete's world	EM1: I follow athlete Twitter accounts because it is exciting EM2: I follow athlete Twitter accounts because it is cool EM3: I follow athlete Twitter accounts because it is amusing	PTM1: I follow athlete Twitter accounts because it gives me something to do to occupy my time PTM2: I follow athlete Twitter accounts because it passes the time away, particularly when I'm bored PTM3: I follow athlete Twitter accounts during my free time	FM1: One of the main reasons I follow athlete Twitter accounts is that I consider myself a fan of the athlete's team FM2: One of the main reasons I follow athlete Twitter accounts is that I am a huge fan of athletes in general FM3: One of the main reasons I follow athlete Twitter accounts is that I consider myself to be a big fan of my favorite athlete	EC1: Following athletes on Twitter requires more money than I can spend EC2: I do not have disposable money to spend on Twitter EC3: Following athletes on Twitter requires more money than I am willing spend	AC1: There are no appropriate places for me to gain access to the Internet AC2: I do not use Twitter because I do not have a personal computer AC3: Athletes on Twitter are not easy to access
Factor	Information Motivation		Entertainment Motivation	Pass-Time Motivation	Fanship Motivation	Economic Constraint	Accessibility Constraint

Cronbach's Alpha, Indicator Loadings, Construct Reliability, Average Variance Extracted, and Means Table 1, continued

Factor Items		Indicator Loadings	Construct AVE Reliability	AVE	Means
Social Constraint SOC1: I cannot find any friends or colleagues that use Twitter SOC2: No one I know participates in Twitter	s or colleagues that use Twitter ites in Twitter	0.86	0.80	0.57	2.38
SOC3: I do not like to follow athletes on Twitter Skills Constraint SC1: Getting information on Twitter is not easy SC2: I do not know where or how I can participe	SOC3: I do not like to follow athletes on Twitter with strangers SC1: Getting information on Twitter is not easy SC2: I do not know where or how I can participate in following athletes on Twitter	0.62 0.81 0.82	0.76	0.37	2.44 2.44 2.41
SC3: I am not good at certain spreading and understanding play Twitter	SC3: I am not good at certain special skills for following athletes on Twitter, such as reading and understanding player and team statistics or using online features of Twitter	0.71			2.42

Based on existing literature in marketing, consumer behavior and mass communication on motivations and constraints, the following items were tested: entertainment, information, pass time, and fanship as motivations; and skill, economic, interest, social, and accessibility as constraints. It should be noted here that the decision to not measure the lack of time constraint was based on the reasoning that the actual time it takes to consume Twitter is rather short; therefore, there is little rationale to include the lack of time constraint within this study. The following research questions were tested based on these motivations and constraints.

RQ1: Which motivational factors will have more effect on an individual's Sport Twitter Consumption?

RQ2: Which constraint factors will have more effect on an individual's Sport Twitter Consumption?

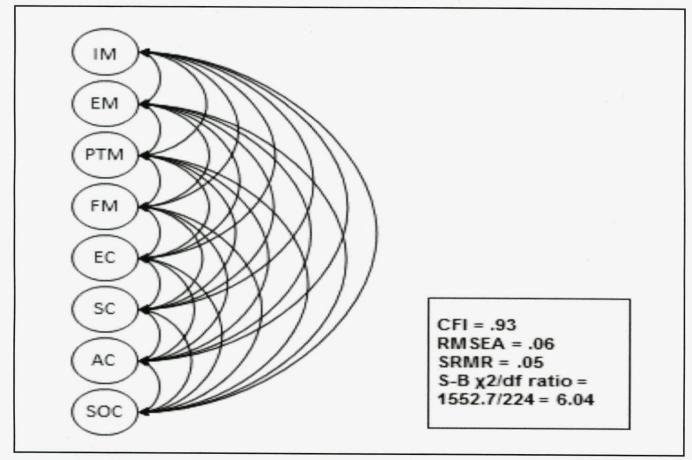
## Methodology

Data were collected using undergraduate students at a Midwestern University. Using convenience sampling, participants (N = 1124) were recruited from an introductory level business school class and sport management courses. Surveys were administered using a web-based survey program. Participants were not required to have previous knowledge of Twitter prior to this study. Since motivations and constraints were being measured, previous knowledge was not a requirement as it would aid in the understanding of potential constraint factors such as skill, accessibility, and social constraints. The sample for the study included both male (n = 682) and female (n = 442) participants. The majority of participants (99.8%) represented the age group that makes up the largest amount of Twitter users, which is 18-34 years old, representing 45% of Twitter users in the United States (Quantcast, 2011). The participants in this study ranged in ages from 17-40 years of age (M = 20.12, SD= 1.49).

## Measure Development

The overall motivation scale included four measures gauged by three items each (Entertainment, Information, Pass Time, and Fanship). All motivations were measured using a five-point Likert scale composed of three items. The constraint scale initially included five items. However, the lack of interest constraint did not achieve a level of internal reliability; thus it was not able to be utilized in this study. In sum, there were twelve items for this scale measuring the four different constraints (Skill, Accessibility,

Figure 1.



Economic, and Social). Each constraint was measured using a five-point Likert scale through three questions. Table 1 shows a description of all the variables included in the study.

## **Data Analysis**

To control for variance accountable to demographics, regression analysis was utilized. Additionally, confirmatory factor analysis and structural equation modeling (SEM) were employed to test the proposed model. The proposed model (see Figure 2) suggests that motivations and constraints have a direct effect on Twitter consumption for sport purposes. Analysis of this model was constructed using AMOS 18. The model included four items for motivations and four items for constraints. The measurement and structural model, the Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR) are reported.

In order to determine if demographics explained the variance in STC among college students, regression analysis was performed. Variables tested were gender, age, and Internet age. The Internet age variable described the respondents' years of experience online.

#### Results

#### **Descriptive Statistics**

The summed means of the predictor variables for motivation were 3.19 (Information Motivation), 3.08 (Entertainment Motivation), 3.14 (Pass-time Motivation), and 3.20 (Fanship Motivation). The standard deviations ranged from .99–1.03. The summed means of the predictor variables for constraints were 2.39 (Economic Constraint), 2.42 (Skill Constraint), 2.07 (Accessibility Constraint), and 2.57 (Social Constraint). Standard deviations spanned .89–.98.

## Regression Analysis

Demographic items were tested to determine if they were the actual predictors of STC among college students. The results of the regression analysis found that none of the demographic variables (gender, age, Internet age) were significant predictors of STC among college students. Therefore, further analysis into the motivation and constraint variables was warranted.

#### Measurement Model

Before testing the proposed model, a first order confirmatory factor analysis was conducted to evaluate the appropriateness of the measurements used with the

Table 2.
Factor Correlations Among Motivation and Constraint Constructs

	IM	EM	PTM	FM	EC	SC	AC	SOC
Information								
Entertainment	.73*	-						
Pass-time	.64*	.64*	-					
Fanship	.65*	.61*	.59*	_				
Economic	-0.04	-0.02	-0.04	-0.07	-			
Skill	-0.05	0.02	0.02	-0.10	.68*	-		
Accessibility	0.01	.07*	0.04	0.04	.70*	.74*	-	
Social	-0.15	-0.11	-0.10	-0.18	.59*	.71*	.59*	_

Note: IM = Information; EM = Entertainment; PTM = Pass-time; FM = Fanship; EC = Economic; SC = Skill; AC = Accessibility; SOC = Social

## Construct Correlations Constraint

Motivation -0.07

eight latent constructs (i.e., information motivation, entertainment motivation, pass-time motivation, fanship motivation, economic constraint, skills constraint, social constraint, and accessibility constraint; see Figure 1).

The measurement model attained an acceptable level of S-B 2/df ratio (i.e., 1552.7/224 = 6.04, p < .05). Additional fit indices suggested the model reached satisfactory fit for the data (CFI = .93; RMSEA = .06; SRMR = .05; Hair, Black, Babin, Anderson, & Tatham, 2005). All scaled measures reached satisfactory reliability levels measured by Cronbach's alpha ranging from .76 to .88 (see Table 1) (Bagozzi & Yi, 1988). All the constructs showed acceptable average variance extracted (AVE) levels of greater than .50 (Bagozzi & Yi, 1988; Hair et al., 2005) with the exception of accessibility constraint (AC), Skill Constraint (SC) and economic constraints (EC) (see Table 1). IM, EM, PTM, FM, SOC reached .66, .60, .63, .60, and .57 respectively, while EC and AC had AVE scores that approached the .50 acceptable range at .49 and .43 respectively. Furthermore, all factors in the measurement model showed convergent validity, as all items were significant at p > .05, ranging from .79–1.00. As suggested by Kline (2005), discriminant validity is attained when the correlations between the latent factors are below .85. As shown in Table 2, the correlations between the latent factors never exceeded this level.

#### Structural Model

The fit indices, seen in Table 1, for the structural model suggested that the final model achieved accept-

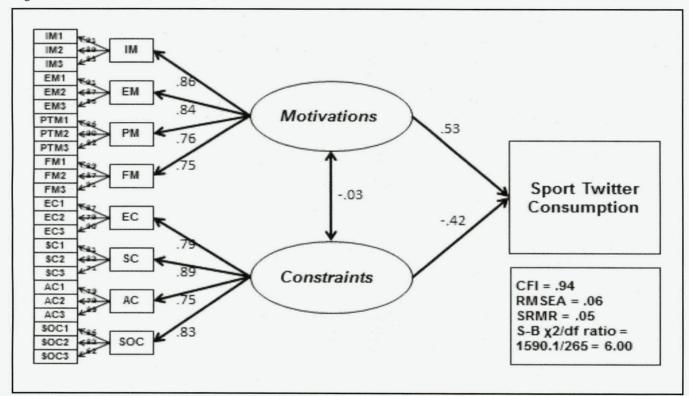
able fit for the data (CFI = .92; RMSEA = .06; SRMR = .06; Hair et al., 2005). Additionally, the structural model achieved an acceptable level of S-B  $\,$ 2/df ratio (i.e., 1590.1/265 = 6.00, p < .05). In the proposed model all paths were significant (p < .05). The path coefficient of motivation to Twitter consumption was .53 and significant at p < .05 level, which indicates the motivation construct was found to be a significant predictor of actual Twitter consumption. Furthermore, the constraint construct had a path coefficient of -.42 and is significant at the p < .05 level, which also indicates the constraint construct to be a significant predictor of Twitter consumption. The path coefficient (i.e., -.03 at p < .05) from constraint to motivation was not significant.

## **Discussion and Implications**

Based on the literature in marketing, consumer behavior, and mass communications, this study investigated motivations and constraints for following athletes on Twitter among college students. Using the existing framework, the data analysis provided information on motivations and constraints impacting college students' STC. Structural Equation Modeling results led us to suggest that the proposed model was a good fit. The current study, therefore, shows support for motivational and constraint factors that have been identified as important in previous studies (Hur, Ko, & Valacich, 2007; Korgaonkar & Wolin, 1999; Rodgers & Sheldon, 2002; Seo & Green, 2008; Suh et al., 2010).

The framework used in this study can be differentiated from previous research through the successful

Figure 2.



merging of motivation and constraint conceptualizations into a single model. Other attempts to combine the measures have found support for motivation or constraint, but struggle when measured simultaneously (Hur et al., 2007). Therefore, the proposed model extends previous studies by providing a combined model of these two factors that impact the consumption of Twitter for sport purposes.

Consistent with theoretical expectations, motivations to utilize Twitter to follow athletes did affect usage in a positive manner. All four of the measured motivation scales came back with a mean response above 3.00. In all four motivating factors, individuals report a high motivation to follow athletes that then continued their motivation to follow athletes on Twitter. This examination suggests that sport organizations' marketing efforts can impact their relationship with college students by increasing the motivations found in the study. In response to RQ1 and according to the structural model, information and entertainment motivations appear to carry higher regression weights (.86 and .84) than pass time (.76) and fanship (.75). Based on this finding, it would appear that consumers are utilizing Twitter more for information and entertainment purposes. Extending this line of reasoning, practitioners should ensure social media is being utilized for both information and entertainment.

Increasing the opportunities for fans to interact and communicate—two core components of relationship

marketing—with the organization and their athletes can lead to stronger relationships with college students. The purpose behind relationship marketing is to establish ongoing relationships in a cooperative manner (Bee & Kahle, 2006). Relationships with fans can be built and maintained through Twitter as a way to keep fans informed and close to the players and organization. Twitter provides fans with the opportunity to interact with their favorite athlete. Therefore, it brings fans closer than they have ever been before to establishing a relationship with their favorite athlete. Relationship marketing theory suggests that partner selection may be a critical element in competitive strategy (Morgan & Hunt, 1994). Sheth and Parvatiyar (1995) suggest the more that marketers develop a relationship with their consumers, the better the response and commitment will be from consumers.

Social media applications provide sport organizations with the initial opportunity to interact with their consumers. The four motivations suggest college students are using Twitter as a medium to gain information, as a form of entertainment, to enhance their fan experience, and simply as a way to pass time. In an effort to enhance the relationship with these specific consumers, sport organizations should use social media to be more informative about their club. For example, sport organizations could use social media to provide an inside story on their athletes, a source where fans could learn facts and details about their

favorite athlete. In regards to entertainment, social media could be used to promote events in addition to upcoming games. Some teams have designated times when their athletes will be monitoring their social media accounts to answer questions from fans. Not only does this provide consumers entertainment, but it can also enhance their experience as a fan increasing their overall fanship. Sport organizations already utilize social media to provide discounts to their fans. However, social media could be utilized as an open form of communication to listen to fans to discover news ideas to increase their level of fanship. Finally, for the college student who uses Twitter to simply pass time, sport organizations need to enhance their options for consumers by focusing on stronger mobile applications for cellular phones. Since relationships can be built on levels of interactions (Holmlund, 1997), social media could be utilized in a more organized manner to move from basic interactions and episodes to sequences and relationships. Of equal importance to understanding motivations, practitioners and researchers need to address and identify means to overcoming constraints.

The findings from the items on the constraint scale fell below a mean response of 3.00. Sport organizations could benefit by building stronger relationships with their fans by lessening the amount of constraints the fans face. As the results suggest, decreasing constraints will increase the likelihood that an individual will connect with the organization through Twitter. In response to RQ2, skill and social constraints had the highest regression weights, .89 and .83 respectfully. Therefore, it would be important for practitioners to discover ways to decrease consumer concerns in regards to their social anxiety. Reduction of the amount of skill required to follow athletes on Twitter needs to be addressed. Each of these could be accomplished by providing the consumers with a tutorial explaining how to navigate their sites to connect with athletes and the security procedures that are in place with social media networks. Further, emphasis should be placed on the notion that not all consumers are fans of the same organization or athlete, which would suggest these constraints cannot be universally addressed and could require a more specialized approach.

#### Conclusion

This discussion looked at the analyzed results from a survey on the motivations and constraints for STC among college students. Twitter is a medium in which sport organizations can achieve timely and direct endusers/consumers contact at relatively low costs. Additionally, social media sites, like Twitter, can help firms achieve higher levels of efficiency than more tra-

ditional communication tools (Kaplan & Haenlin, 2010). The results from this study suggest specific motivation and constraint factors that impact STC among college students. There are many options for sport organizations to grow their relationships with fans, and Twitter represents a new avenue through which a relationship can be enhanced.

The importance of maintaining and enhancing customer relationships needs to be stressed by sport organizations (Bee & Kahle, 2006). This essential component of relationship marketing can be achieved by directing attention to those variables from the proposed model. Studies suggest that relationship marketing is an ongoing cooperative behavior between the marketer and the consumer (Sheth & Parvatiyar, 2000). Twitter provides such an opportunity for organizations to work with their fans to enhance their experiences and meet their needs as suggested by the proposed model. Twitter adoption can be utilized in relationship marketing to attract fans, develop a relationship, and retain consumers. Each of these components was previously identified as a characteristic of relationship marketing (Bee & Kahle, 2006).

The results revealed by the proposed model share insight into some practical implications. Organizations could use this information and target fans to position themselves to fully meet their needs. Specifically, practitioners need to focus on ensuring they are utilizing social media primarily as an information source, while providing entertainment. Fans of the athletes appear to want to learn more about the athlete as an individual. Therefore, organizations should attempt to inform their athletes who engage in social media to communicate with their fans by sharing information about their lives. As witnessed during the 2011 FIFA Women's World Cup, many professional female soccer players started to use Twitter to communicate with fans and have continued to do so long after the games were over. For example, Hope Solo is an active member in the Twitter community, frequently responding to fans and letting them into her life.

Further emphasis needs to be placed on aiding fans to connect with the athletes. If college students are struggling to access athletes through Twitter, then the potential could be there for additional consumers. Currently, organizations are utilizing social media as a tool to connect their fans with their organization. In most cases, the terms "fans," "fan zone," or "connect" are being used to represent where social media sites can be located on official team websites. For example, Major League Soccer's D.C. United's official website placed their connections to social media at the very bottom of the site where they were not as easily found. Additionally, the Boston Breakers, of Women's

Professional Soccer, had their social media located on their main navigation bar, but labeled simply as "Fans." A good example of easy accessibility can be seen on the website for the Phoenix Coyotes, of the National Hockey League. Their website has a navigation bar dedicated to social media, and a consumer can directly link to the Coyotes' Twitter account without navigating through the website.

However, to date, sport organizations have not provided easy access to their athletes who use Twitter. Additionally, team sites have not identified any means of security for their fans following athletes, which could decrease an individual's anxiety about connecting with their favorite team or athlete through social media. By protecting fans' information and privacy, sport organizations could potentially develop more opportunities to build relationships with their fans. Organizations could provide documentation to their fans on how to remain private and how the organization will attempt to provide a secure and safe social media experience. By not only offering ways to safely and securely connect to the organization, but also to the athletes, Twitter could provide ways to enhance the consumer/organization relationship by providing fans more direct access to athletes. Sport managers and marketers could use this proposed model, which has been confirmed to predict STC among college students, to verify how their organization is currently employing social media and enhance their current usage and quality to meet the needs of their fans.

Finally, consideration should be given to the impact Twitter could have on the sport organization's brand. Recall and recognition are important factors when evaluating brand management strategies (Walsh, Kim, & Ross, 2008). Walsh, Kim, and Ross (2008) suggest image enhancement and purchase intentions as additional outcomes organizations strive for through brand placement. As previously stated, Twitter can achieve timely and direct end-user/consumer contact. It provides access to consumers who actively choose to follow the organization, which is an opportune way to gauge purchase intentions and image perceptions.

#### Limitations and Future Research

This research sought to identify motivations and constraints in a single study to discover ways to enhance the relationship between college students and the sport organizations through their athletes' use of Twitter. The results of this study show that college students with a high level of motivation to follow athletes are more likely to consume Sport Twitter. Further, this research identified specific constraint factors that will lessen the likelihood these individuals will follow an athlete on Twitter.

However, the study did have a few limitations. A convenience sample of college undergraduate students was used because the study was conducted on a university campus. Therefore, the results cannot be generalized to beyond this population. While our study was able to capture constraints from individuals who are not currently using Twitter, future studies should target actual samples of Twitter consumers to more accurately be able to generalize to this population. Also, as with much survey research, the effectiveness is based on how accurately the participants answered the survey questions. Another limitation comes from the fact that the study of social media is so new, making it somewhat exploratory. Future analysis should include following sport organizations and brands to stretch this line of research.

Finally, this study utilized constructs developed for different mediums and tried to adapt them to analyze Twitter motivations and constraints. The variables used had been determined to affect sport consumption for websites, television, and other forms of media, yet additional variables may be more applicable to social media, and therefore should be explored. This study was a healthy beginning for this line of research; however, theory on the effects of social media in sport needs to be further developed to properly identify additional motivations and constraints.

Previous literature has indicated variables such as quality, customer service, and security (Hur et al., 2007) could be examined to determine if these areas labeled as concerns might additionally impact STC. In the future, studies should continue this line of research and extend into all areas of social media (Facebook, YouTube, Fantasy Sports, etc.) to understand the impact it has on sport consumers. Strengthening this understanding could lead the way to more effective sport marketing strategies designed to connect with fans and enhance the social connection and relationship.

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