SOCIAL MEDIA & SPORTS: AN EVALUATION OF THE INFLUENCE
OF TWITTER AND MOBILE APPS ON BRAND-RELATED CONSEQUENCES

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ABSTRACT

The goal of the sports brand is to create meaningful associations with fans that connect with their core values. A strong sports brand allows the consumer to incorporate the team into their day-to-day activities (Couvelaere & Richelieu, 2005, p. 25). Arvidsson (2006) suggests that consumers create brand value through their shared experiences with the brand and through an emotional connection to the brand through social identification. A strong relationship between the sport team and its fans leads the fan to engage in behaviors that support the team (Fisher & Wakefield, 1998).

Social media and mobile apps are changing the way marketers approach their branding strategies (Simmons, 2007). Professional sport brands are developing online branding strategies to convert casual fans to highly identified fans (Ioakamidis, 2010). Online social networks specifically for sport allow for increased levels of fan engagement and fan loyalty, which is necessary to meet relationship-marketing goals.

The present study provides an empirical analysis of the SIBE model. The SIBE model is a largely a conceptual work, with only one study testing the model (Boyle & Magnusson, 2007); this study explores the relationships between each individual component as well as testing a comprehensive model. Additionally, this project incorporates the use of social media into the model to further understanding of its use in increasing sport team brand equity. Social media allows sports fans the opportunity to engage with other fans and the team, publicly display their identification with the team, and feel connected to the team despite separation from the team.
geographically. Finally, this study assesses the influence of brand relationships and brand experience on customer-based brand equity. The role of brand relationships and experience on customer-based brand equity will be evaluated through consumer interaction with social media. The microblogging site Twitter and mobile apps are studied to determine if user involvement with social media influences brand relationships and brand experience.
LIST OF ABBREVIATIONS AND SYMBOLS

α  Cronbach’s index of internal consistency

β  Standardized coefficient: provides assessment of independent variable on dependent
variable

B  Unstandardized coefficient in multiple regression

$df$  Degrees of freedom: number of values free to vary after certain restrictions have been
placed on the data

$F$  Fisher’s $F$ ratio: A ratio of two variances

$M$  Mean: the sum of a set of measurements divided by the number of measurements

$N$  Sample size

$SD$  Standard deviation

$SE B$  Standard Error (B): multiple regression

$p$  Probability associated with the occurrence under the null hypothesis of a value as
extreme as or more extreme than the observed value

$t$  Computed value of $t$ test

$<$  Less than

$>$  Greater than

$=$  Equal to

$\%$  Percent
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CHAPTER 1
INTRODUCTION

Sports Branding

Watching sports is a favorite pastime of a large section of the U.S. population. Sports like soccer and professional basketball have gained worldwide popularity. Anyone can be a sports fan and by doing so become part of a group that transcends the routine of daily life (Branscombe & Wann, 1991b). The goal of the sports brand is to create meaningful associations with fans that connect with their core values. Some sport franchises have been successful in creating unique brands that avoid devolving into excessive commercialization that some sport fans may find off-putting (Richelieu & Pons, 2006). Sports go beyond the on-field competition; a strong sports brand allows the consumer to “live the brand at different moments of their daily lives,” (Couvelaere & Richelieu, 2005, p. 25). Arvidsson (2006) suggests that consumers create value for a brand through their shared experiences with the brand and its connection to their social identity. A strong relationship between the sport team and fans is evident through behaviors that support the team (Fisher & Wakefield, 1998).

Mason (1999) explains that sports have increasingly become commodified, as the industry itself has become a major player in the recreation and entertainment economies. Sport teams depend on fans for a large part of their financial well-being; providing revenue through
ticket sales, television viewing, and purchasing team-licensed memorabilia (Fisher & Wakefield, 1998). A powerful sports brand is one that can turn sports fans into paying customers through purchasing items that publicly identify them as fans of the team (Richelieu & Pons, 2006). The more people identify as fans of the team, the more desirable the team looks to others thereby increasing the brand equity of the team.

Despite the consensus that spectator sports are a service-oriented product, most of the original work in sport brand equity research has relied on measures related to physical goods (Ross, 2006). Recently, researchers have begun developing models of brand equity specific to the sport industry. Gladden, Milne, and Sutton (1998) developed a framework for assessing brand equity in collegiate sports based on team-related antecedents and marketplace consequences. Ross (2006) developed a framework called the spectator-based brand equity model (SBBE) for understanding experience-induced antecedents that lead to an increase in spectator-based brand equity. Ross, Russell, and Bang (2008) tested this assumption and found support for the SBBE model. Underwood, Bond, and Baer (2001) developed another model of sport brand equity called the social identity-brand equity (SIBE) model, which assumes that the more one socially identifies with a sport team, the more the team’s brand equity increases. Sport marketers can manipulate certain characteristics of the service marketplace to increase identification with the team. This study continues the work of Underwood et al. by empirically testing the components of the model, as well as incorporating social media and other brand-related variables to provide a more comprehensive understanding of the roles of social identification, social media, brand relationships, and brand experience on a sport team’s brand equity.
Social Identification

Social identification theory assumes that individuals identify with an organization with which they feel a sense of belonging, are able to categorize into in-group and out-group status, and individuals in the group tend to adopt similar attitudes and beliefs in group settings (Ashforth & Mael, 1989; Tajfel, 1982; Tajfel & Turner, 2004). The knowledge that a person is a member of a social group becomes a part of a person’s social identification and a defining characteristic of their personal identity (Bergami & Bagozzi, 2000; Fisher & Wakefield, 1998). Members of a particular group categorize themselves and others in terms of group membership (Ashforth & Mael, 1989), which for sports teams naturally appears through team rivalries. A sense of belonging provides the individual with an emotional attachment to the group, which subsequently is important for service-sector brand such as sport teams (Underwood et al., 2001).

According to the original SIBE model, social identification is the main variable that leads to increased customer-based brand equity for a sports brand (Underwood et al., 2001). The more one identifies themselves as a fan of a sports team, the more the team’s customer-based brand equity increases for the individual. The more identified a sports fan is, then the more likely they are to find ways to publicly demonstrate their fandom (Wann & Branscombe, 1993); thus increasing the brand awareness and brand associations for the sport team to less identified consumers and making group affiliation appear more desirable. This study posits that highly identified sport fans will be more likely to use social media (e.g. Twitter and team-sponsored mobile apps) to connect with the team and to publicly demonstrate their social identification with their favorite team.
Social Media

For many, using social media has become a part of their daily routine, from interacting with friends and family to communicating with brands. Correa, Hinsley, and de Zuniga (2010) report that nearly 75 percent of U.S. adults go online to communicate with others. Social networking sites have been instrumental in the development of brand communities that bring together brand enthusiasts from all over the world (Kaplan & Haenlein, 2010; Muniz & O’Guinn, 2001). Small group brand community is a group of consumers who interact with one another through their shared commitment to a brand and develop a social group in which members share common goals associated with the brand (Bagozzi & Dholakia, 2006). In the sports world, communication technology through social media and mobile apps has provided fans unprecedented access to sport organizations regardless of geographic location (Kerr & Gladden, 2008). Seo and Green (2008) remark that most of the appeal of online sport websites comes from highly identified fans who log on daily to connect with their favorite team and others fans as well as to gain insider information about the happenings of the team. Simmons (2007) suggests that by using the Internet as part of the overall marketing strategy, brands can reach the same audience as mass media but in a personalized way through the interactive features of social media. Social media (Twitter and mobile apps, specifically) provide sports fans with a platform to talk about their favorite team and express their opinion (Seo & Green, 2008). Professional sport teams are developing online brand strategies to increase their fan base and to convert casual fans to highly identified fans (Ioakamidis, 2010). Teams like the Phoenix Suns and Seattle Seahawks have created social networking sites for fans to engage with one another and with the team (Williams & Chinn, 2010). Interacting with the team and other fans on these types of websites allow the sports fan to feel more connected to the team, which increases fan loyalty.
Fan loyalty is a desired outcome for relationship marketing strategies (Williams & Chinn, 2010). Thus, research investigating how sport fans interact with teams through social media can have practical implications for sport brand managers.

Founded in 2006, Twitter is one of the most popular social networking sites that features microblogging (Kaplan & Haenlein, 2011a). While most social media sites support interactions among existing social networks, Twitter facilitates interaction among audiences that are less connected in the offline world (e.g. being a fan of a sports team) (boyd & Ellison, 2008). Additionally, the interactive features of Twitter allow for two-way communication between Twitter users (Kwon & Sung, 2011). Brands, especially sport brands, have taken to Twitter as part of their overall marketing strategy to build and maintain consumer relationships (Clavio & Kian, 2010). This project suggests that highly identified sports fans can enhance their relationship with their favorite sport team through Twitter use, which will have a positive effect on the team’s brand equity.

Mobile social media are available on various applications (mobile apps) accessible through smart phones and tablet devices. Mobile social media applications are predicted to account for over half of the market in the near future (Kaplan & Haenlein, 2010) and many sport brands have developed apps for their fans. NBA teams that have developed mobile apps include the Miami Heat, Dallas Mavericks, and New York Knicks. The current study argues that mobile apps provide an outlet for sport brands to extend the brand experience for highly identified sport fans, which will have positive effects for the brand equity of the team.

Working with the SIBE model, a conceptual model developed by Underwood, Bond, and Baer (2001) this study contributes to the existing literature on sports branding, use of social media as facilitator of communication between consumers-brands and consumers-consumers,
and the role of brand relationships and experiences. Research is guided by three overarching goals: (1) empirically test the SIBE model and assess the strength of relationships among its components, (2) incorporate the use of social media into the model to further understanding of its use in increasing sport team brand equity, and (3) assess the influence of brand relationships and brand experience on customer-based brand equity. The SIBE model is a largely a conceptual work, with only one published study testing the model (Boyle & Magnusson, 2007); this project remedies this by exploring relationships between each individual component as well as testing the model as a whole. Second, social media allows sports fans the opportunity to engage with other fans and the team, publicly display their identification with the team, and feel connected to the team despite being separated from the team geographically. Third, the role of brand relationships and experience on customer-based brand equity will be evaluated through consumer interaction with social media. The microblogging site, Twitter and mobile apps, will provide context for the research to determine if user involvement with social media influences brand relationships and brand experience.
CHAPTER 2
REVIEW OF LITERATURE

SIBE Model: Identifying Antecedents of Social Identification

Underwood et al. (2001) developed a conceptual framework for a social identification based model of sports branding. The social identity-brand equity model (SIBE) posits that social identification (Tajfel & Turner, 2004) leads in increased customer-based brand equity (Keller, 1993). Underwood et al. postulate characteristics of the service marketplace can be used and manipulated to strengthen a customer’s social identification with the brand; these characteristics include (1) group experience, (2) history and tradition of the team, (3) venue, and (4) team rituals. The SIBE model posits that social identification (i.e. fan identification) can enhance a team’s customer-based brand equity (Underwood et al.). Social identity is the central point where one’s emotional connection to a sports team can be influenced by market characteristics that are controllable by brand managers (Boyle & Magnusson, 2007). Through identifying potential antecedents of social identification, the SIBE model provides brand managers a starting point for developing strategies that lead to increased social identification with the sport brand.

Boyle and Magnusson (2007) empirically tested the SIBE model in the context of a collegiate basketball team. In the study, the researchers divided group experience into two groups – salient group identification and community identification. Salient group identification was conceptualized as the extent to which the sporting event serves as a mechanism for social interaction and identification with a desired reference group (Boyle & Magnusson, 2007). For
community group identification, the sports team becomes a symbol for the community. The model was tested on three groups of fans of a college basketball team – students, alumni, and the general public. Results of the study indicated social identification has a significant positive effect on brand equity across all three categories of fans. This project seeks to continue this work by testing the model in the context of professional sports as well as assess the strength of relationships among the variables.

**Figure 1. Original SIBE Model**

![Figure 1. Original SIBE Model](image)

*Service-place Market Characteristics*

**Group Experience**

Sports are inherently social events and unique in that they provide a group experience characterized by an enhanced in-group perception and bias against out-group (i.e. the opposing team) (Underwood et al., 2001). Whether attending a game in-person or watching at home with other fans, sports bring people together and in a way that contributes to a sense of self that is connected with the success and failure of the team (Underwood et al.). Underwood et al. postulate that through social interaction among members of the group, social identity and feelings of belonging to the group increase.

Boyle and Magnusson (2007) contend that the common bond formed among sports fans is what separates them from just being a spectator. Heightened social identification with a sports
team moves the sports fan from spectator to active participant whose role in the event is perceived to be tantamount to team success (Boyle & Magnusson, 2007). Phua (2010) adds, that involvement in crowd events like sport games results in high social identification where people become responsive salient group norms. The bond formed among fans of a sports team creates an in-group sense of solidarity and an “us vs. them” atmosphere when facing the opposing team and their fans (Phua, 2010). Additionally, fans that identify with sports brands that are perceived as high status groups (or have a high customer-based brand equity) also enjoy an elevated social status (Carlson & Donavan, 2008).

History and Tradition

For the sports fan, having a connection to the history of the team is an important component of their identity and provides an additional emotional connection to the team (Underwood et al., 2001). Underwood et al. suggest that history is important for service-based brands because it provides a tangible representation to the brand. Understanding and feeling connected to the history of the team provide a sense of obligation to the team for fans to publicly support the team (Boyle & Magnusson, 2007; Underwood et al.). Through continued presence and support, the sport fan is actively participating in continuing that history of the team. Developing a deep appreciation and understanding for the history of the team could also enhance one’s identity with the team (Boyle & Magnusson, 2007). For these reasons, Underwood et al. postulate that the more a brand communicates its history and tradition, the likelihood of social identification with the brand increases.

Incorporating a team’s history (i.e., throwback uniforms, recognition of former star players) into the marketing strategy provides an outlet for brand differentiation. By highlighting the team’s unique history and tradition, fans are better equipped to make unique associations
with the brand, which has a positive influence on brand awareness and image (Underwood et al., 2001). Richelieu and Pons (2009) add that the historical components of a team brand provide an outlet for fans to develop attachments to the team. By participating in a rivalry with an opposing team, fans can exhibit their loyalty to the team through in-group and out-group comparisons. Wann (2006) also suggests that sports teams should remind fans of their rich history and tradition to increase fan identification with the team. An example of incorporating history into the current game comes from the University of Alabama where at home football games, a pre-game video is shown to fans that celebrate the team’s tradition of winning championships. Through this video fans are able to connect with the history of the team and feel as if they are contributing to continuing that tradition.

**Venue**

For some teams, the physical facility the team plays is as much of a draw to fans as actually watching the team play (i.e. Madison Square Garden, Soldier Field, Yankee Stadium, Fenway Park, etc.) and provide a tangible representation of an intangible product (Underwood et al., 2001). The venue provides a link from the past to the present. The Chicago Cubs are one of the most recognizable sport brands, despite a lack of on-field success. One can argue that Wrigley Field is one of the reasons the team enjoys high brand equity (Underwood et al.) due to its historic design and rich history. Reysen, Snider, and Branscombe (2012) examined fan reaction to corporate renaming of a historic stadium. Results of the study indicated that fans believed that changing the stadium’s name would hurt the team, losing an element of distinctiveness that separates the team from competitors. The findings of this study indicates that some fans can have a strong connection with the venue where the team plays just as they do with the team itself.
The environment in which the service product is consumed has an impact on consumers’ perspective of the quality of service (Turley & Moore, 1995; Underwood et al., 2001). For service-sector brands, the location where the product is consumed or purchased is often more influential than the actual product (Hightower, Brady, & Baker, 2002). Research by Bauer, Stokburger-Sauer, and Exler (2008) support this assumption. Results of their study indicated that non-product related attributes (i.e. stadium, logo, team traditions) had more influence on brand-attitude and brand-loyalty outcomes than product-related attributes.

The venue where the team plays is an integral part of the group experience for many sports fans (Underwood et al., 2001). A facility that is strongly integrated into the brand allows for increased group identity formation through attending events at the venue (Boyle & Magnusson, 2007). Underwood et al. cite two ways the facility can be utilized to increase identification with a sports team: (1) integrate the facility into the organization’s brand identity; and (2) design the facility with amenities that lead to group identity. Buildings that have a stand-alone brand separate from the team (i.e. Madison Square Garden) and amenities, such as a bar, outdoor eating area, pre-game concerts, area for children, etc., bring people together outside of the context of watching the game, which further enhances the group experience of attending the event (Boyle & Magnusson, 2007; Hightower et al.). Therefore, the more the venue where the team plays is incorporated into the sports team’s brand identity, the greater the likelihood of social identification with the team (Underwood et al.).

Service goods are more likely consumed for “affective gratification” which means that customers look for additional benefits beyond the core service. Hightower et al. (2002) claim that within the service-sector, non-product related attributes (anything not associated with the actual game) should provide an all-encompassing experience for the consumer. One method that sports
marketers have initiated to enhance the experience of attending the event is to upgrade the facility to encompass a more “comprehensive entertainment objective” (Hightower et al.). In a study investigating customer-based brand equity in sports teams, Bauer et al. (2008) found that non-product related attributes (team logo, stadium, etc.) had a significant influence on positive brand-attitude and fan loyalty. Therefore, using the facility to generate a comprehensive group experience can have positive benefits for the sport brand.

*Ritual*

Underwood et al. (2001) conceptualizes ritual as social interaction among people who share a common interest, for instance, being a fan of a sports team. Rituals develop as a result of a team’s history (Boyle & Magnusson, 2007). Participating in team rituals furthers the emotional connection the fan has with the team and shared experience with other fans thus increasing social identification with the team (Boyle & Magnusson, 2007; Underwood et al.). Fans of the Texas A&M football team pride themselves on being part of the “12th Man” at Kyle Field. Participating in this ritual fosters a feeling of group connection to each other and to the team. Participation in team rituals is one way for fans to publicly demonstrate their team identification (Boyle & Magnusson, 2007). Within the SIBE model, Underwood et al. suggest the incorporation of this type of ritual leads to increased social identification with the team.

*Social Identification Theory*

Underwood et al., (2001) suggest, that increased levels of social identification lead to a greater level of customer-based brand equity. As a person sees him or herself as more connected to the team, the team’s brand equity increases (Boyle & Magnusson, 2007). A person has both a personal identity and a social identity (Fink, Parker, Brett, & Higgins, 2009). Personal identity is made of individual-specific attributes such as talents and interests. A person’s social identity is
the representation of group membership. Tajfel (1982) defines social identity as the knowledge that a person is a member of a group and the emotional significance they place on that membership. Strong social identification with a brand leads to the development of meaningful consumer-brand relationships (Bhattacharya & Sen, 2003) and provides an outlet for emotional attachment between the consumer and the brand.

For service-sector brands, creating a sense of emotional loyalty around the brand is an important step in developing a consumer-brand relationship (Underwood et al., 2001). Manufacturers of commercial goods, including Harley Davidson and Jeep create an emotional connection through organization-sponsored events that bring brand enthusiasts together (McAlexander, Schouten, & Koenig, 2002; Underwood et al., 2001). Within the SIBE model, social identity is the variable that allows for a consumer to make an emotional connection with the brand (Underwood et al.). Ashforth and Mael (1989) write, “…in crediting a collectivity with a psychological reality beyond its membership, social identification enables the individual to conceive of, and feel loyal to, an organization or corporate culture,” (p. 26). For professional sport teams, high levels of identification between the team and fans engender the same type of emotional connection and brand loyalty experienced through brand communities (Parker & Stuart, 1997). The more attractive the group (i.e. a higher customer-based brand equity), then the more likely outsiders would choose to identify with the brand because as scholars have suggested, affiliation with a high-status organization enhances positive social identity and self-esteem (Fisher & Wakefield, 1998; Bergami & Bagozzi, 2000; Carlson & Donavan, 2008).

Social identity is conceptualized as the knowledge that a person is a member of a social group, which is a collection of individuals who share a common bond and pronounce themselves as members of the same social category (Ashforth & Mael, 1989; Stets & Burke, 2000; Tajfel,
Identification is defined as the perception of oneness with an organization (Ahearne, Bhattacharya, & Gruen, 2005; Ashforth & Mael, 1989; Bergami & Bagozzi, 2000). Tajfel (1982) lists three components necessary to achieve identification – (1) a cognitive awareness of membership; (2) an evaluative component in which the awareness is related to group values; and (3) an emotional investment in the awareness and evaluation of group activities (p. 2). Ahearne et al. imply that consumers who are not actual members of an organization may be more likely to become members if they find the organization attractive and group membership is likely to have a positive influence on their social identity.

People tend to use group affiliations and memberships as self-defining characteristics (Fisher & Wakefield, 1998). Identifying and associating with others is an inherent need in humans (Wann, 2006). Membership in an organization provides an anchor point for self-definition. As a person’s identification with a group increases, they begin to internalize the values of the organization, which in turn influences brand attitudes and opinions (Phua, 2010; Underwood et al., 2001). Factors that influence the level of social identification include satisfaction, reputation, involvement, and relationship with the organization (Sutton, McDonald, Milne, & Cimperman, 1997). Research has demonstrated the greater the individual’s need for affiliation, the greater the likelihood of social identification with an organization, including sports teams (Carlson & Donavan, 2008). Membership in social groups can have psychological benefits including increase in self-esteem (Branscombe & Wann, 1991b; Fisher, 1998). Fisher (1998) concludes one describes themselves based on group affiliations and the emotional attachments associated with those relationships. Identifying with a sports team provides an individual with not only a feeling of belonging to a group but an increase in self-esteem and overall well-being.
The knowledge that one is affiliated with a group is how one achieves social identity (Bergami & Bagozzi, 2000). As an individual becomes more identified with the group, the self-concept becomes depersonalized where in a sense, “I becomes we” (Brewer, 1991, p. 476). However, it is important to note that one does not necessarily have to interact with other members of the group to achieve social identity with the group; the perception of being a group member satisfies the need for group affiliation (Ashforth & Mael, 1989). Referred to as a psychological group, Ashforth and Mael (1989) claim this is “the greatest contribution that social identification theory makes to the literature on organizational behavior” (p. 26). Despite not physically interacting with the group or experiencing interpersonal relationships related to group membership, the knowledge and declaration that one is part of the group can have a tremendous influence on the individual’s behavior (Ashforth & Mael, 1989). Psychological groups provide an explanation for how an individual socially identifies with a group even if they do not live in the same area (i.e. a New York Yankees fan living in Colorado) or are able to identify with a group using social media or mobile apps.

Social identity theory is concerned with intergroup relations – that is how one sees themselves as a member of one group in comparison to another group (Stets & Burke, 2000). Social identity theory assumes (1) one socially identifies with a group when they perceive feelings of belonging and membership in the group; (2) social identification occurs through categorization of other groups (in-group vs. out-group); and (3) as one identifies with a group, they tend to take on the attitudes and actions of the group (Ashforth & Mael, 1989). Social classification serves two functions for the individual –it provides order to the social environment by providing a schema for defining others and allows the individual to define himself (Ashforth & Mael, 1989).
Social identification is the perception of oneness and belonging derived from being a member of an organization (Ashforth & Mael, 1989). Bergami and Bagozzi (2000) propose, through membership in an organization one attempts to create a positive social identity through group affiliation. People take an active role in joining social groups that reflect how they view themselves (Boyle & Magnusson, 2007; Lock, Taylor, Funk, & Darcy, 2012). The individual chooses social identities, even though at times group membership may be mandatory. They can be activated at different times, with priority going to one social group over another at a particular time (Brewer, 1991). Boyle and Magnusson (2007) add for most people, the decision to identify with an organization is situation-specific, influenced by brand communication, experience, and reference groups. As a person identifies with an organization, that identification affects how they perceive and interpret events, which has consequences for both emotional attachment and behavior (Hogg, Terry, & White, 1995; Underwood et al., 2001). As identification with an organization becomes more salient, the organization becomes self-defining for the individual (Donavan, Carlson, & Zimmerman, 2005).

A tenet of social identification theory is that people categorize themselves and others in terms of group membership (Ashforth & Mael, 1989; Tajfel, 1982). Carlson and Donavan (2008) explain through social identity individuals make sense of the world through defining one and others in terms of group membership and categorization. The very act of categorizing oneself into one group creates an in-group/out-group mentality (Tajfel, 1982). Stets and Burke (2000) define in-group as others who are categorized with the self and share a common social identification and out-group as people who are not part of the in-group. As the differences between the in-group and out-group are enhanced, an individual sees themself as an “exemplar of their social group” and are motivated by a need to maintain a positive self-concept through
group membership and intergroup comparisons (Bergami & Bagozzi, 2000; Phua, 2010). This leads to judgment and evaluations of out-groups to maintain the perceived superiority of the in-group.

Individuals tend to use social categories to define others and themselves in a social environment (Donavan et al., 2005). However, it is important to note that most people do not fit into assigned categories but must develop their own categories (Underwood et al., 2001). As Ashforth and Mael (1989) continue that social identification varies by degree, one may feel a more intense identification with one group than another. This assumption provides some support for the casual sport fan versus the highly identified sport fan. As there are varying degrees of social identification, so also are there varying degrees of fan identification.

In the sports world, this “us vs. them” mindset is most evident in the rivalries that exist among teams. Phua (2010) asserts “positive social identity is achieved through intergroup differentiation from rival teams,” (p. 192). The need to belong to a group, even low-status groups, drives people to maintain their group affiliation. The tendency to make positive evaluations of one’s in-group provides one possible explanation for team loyalty despite a losing team record. Sutton et al. (1997) provide support for this sentiment, claiming that fan identification contributes to long-term fiscal success and a sports team’s position in the market. Teams with highly identified, loyal fans can overcome a stretch of poor performance on the strength of their brand and social identification with that brand.

For socially identified group members, the values and emotions of the group are internalized creating a sense of shared identity (Phua, 2010). Highly identified group members tend to adopt beliefs and behaviors of the group and are motivated to maintain these actions to ensure group membership (Christian, Bagozzi, Abrams, & Rosenthal, 2012). This mentality
often results in conduct that is stereotypical group behavior (Hogg et al., 1995). The more a person is involved with the group, the more salient the group identification becomes (Christian et al.) and the more likely they are to replicate behaviors and attitudes of the group. Research has demonstrated that in-group identification motivates the individual to further their commitment to the organization, even for groups with lower social status (i.e. teams with a losing record) (Stets & Burke, 2000).

Research has examined the role of identification on consumer-brand relationships and brand perceptions. Bergami and Bagozzi (2000) examined organization prestige and organization stereotypes in the development of social identification with an organization. He, Li, and Harris (2012) studied customer-brand relationships through a social identity perspective and found that social identification plays an important role in the development of brand loyalty. In a study looking at the antecedents of identification, Donavan, Carlson, and Zimmerman (2005) suggest that the personality traits of extraversion, agreeability, need for arousal, and materialism had a positive affect on group affiliation. Thus, as research suggests, developing strategies that foster a sense of social identification among members and prospective members is important for sports brands.

Fan identification

Sports fans range from casual spectators to highly involved, from watching or attending a game every now and then to being a season ticket holder and attending or watching as many games as possible (Funk & James, 2001). Fan identification is a manifestation of social identity theory in the sports context (Underwood, et al., 2001). Team identification is defined as the psychological connection a fan has to a sports team and the extent the fan views the team as an extension of their self-concept (Wann, 2006, p. 273). Sutton et al. (1997) define fan
identification as the commitment and involvement sport consumers have with the organization. Both definitions emphasize the connection between the fan and the sports organization and the value that connection holds for the sports fan. For highly identified sports fans, being a team follower is an integral component of their social identity (Wann, Royalty, & Branscombe, 2000). Wann and Branscombe (1993) explain, highly identified sport fans should be more willing to invest time and money in the team as well as attempt to attend as many sporting events as possible. Additionally, Wann and Dolan (1994) emphasize that for highly identified fans, one’s team identification is a defining characteristic of their self-concept to the point that team success and failure impacts their self-esteem. Heere and James (2007) have suggested that the concept of team identification should be extended to allow for highly identified fans to be a part of the actual sport organization. Recognizing the special relationship fans have as members of the sports organization can have benefits for the team’s brand including strengthening the team’s brand equity and loyalty from consumers (Heere & James, 2007).

**Sports and Social Identification**

Sports teams are likely targets of social identification (Heere & James, 2007). Sutton et al. (1997) suggest involvement with sports provides an outlet for communication with other fans, brings people together, and provides a common bond for that group through shared symbols, rituals, and traditions. Since most sports teams are linked to cities and communities, fan identification is typically higher and more persistent (Phua, 2010) and provides a symbolic representation of social identification with community life (Heere & James, 2007). Team identification brings together individuals to form a cohesive group and part of the self-concept of the group members includes protecting the image of the group (i.e. the sports team) (Phua, 2010). Wann and Branscombe (1993) suggests highly identified sports fans should show
remarkably different behavior toward the team than casual spectators in that they are more likely to invest time and money in following the team. As a result, sports marketers should create opportunities for interaction between fans and the team to strengthen the existent emotional connection a fan has with the team (Apostolopoulou & Biggers, 2010). By investing in consumer-brand relationships, the consumer will develop favorable, strong, and unique brand associations with the brand improving the overall brand image, leading to high levels of fan loyalty (Apostolopoulou & Biggers, 2010).

Fan Identification: Feelings of Belonging to a Group

As with traditional definitions of social identification, fan or team identification provides an individual with a sense of belonging and an increase in self-esteem (Branscombe & Wann, 1991b; Donavan et al., 2005; Heere & James, 2007). Carlson and Donavan (2008) suggest fans that identify with an athlete are more likely to form an attachment to the team. Donavan et al. indicate that feeling a sense of belonging with an organization leads one to form a perception of “psychological ownership” in the organization (p. 31). The concept of the psychological group also holds true for individuals who socially identify with sports team. A person need only perceive oneness with the group to attain membership status (Donavan et al.). Wann (2006) found that fan identification with a sports team could have a positive impact on an individual’s overall psychological well-being through a shared connection with other sports fans. Funk and James (2001) add that through strong social identification with a sport team the wins and losses of a sports team become part of a fan’s sense of accomplishment.

Fan Identity: In-group/Out-group Comparisons

While maintaining the assumptions of social identity theory, sports fans also make in-group/out-group comparisons. For instance, fans of the Boston Celtics define themselves in
terms of their shared connection as Celtics fans, but also in relation to their rival out-group, Los Angeles Lakers fans (Donavan et al., 2005). Fans use the rival (e.g. the out-group) as a reference to reinforce their identity and differentiate themselves from other groups. Fink et al. (2009) go on to suggest that individuals who identify with a sports team are more likely to make positive judgments toward other fans and are more critical of the rival team’s fans. One reason for making in-group/out-group distinctions involves enhancing the self-esteem of the individual through their group affiliation.

Individuals who identify themselves as a fan of a sports team are likely to demonstrate their team allegiance through actions. As the individual grows more attached to the team, the fan’s commitment to the team develops into a form of brand loyalty. Loyalty to the team is a manifestation of the psychological and emotional commitment a fan makes to the team (Bauer et al., 2008). Typically, the degree of sports fan identification does not change and is positively related to team loyalty (Reysen et al., 2012). Highly identified fans are more likely to know more about the team and their history, participate in discussions about the game with other fans, purchase licensed merchandise from the team (Donavan et al., 2005). Team loyalty can be translated into behavior by attending games live, watching the team on television, wearing the team’s colors and logos, and recruiting others to be a fan of the team (Bauer et al.; Fink et al., 2009). These outward actions by fans increase the customer-based brand equity of the sport team. Making the team look desirable leads others to want to identify with the team.

Fan Identification: Behavior Assimilation

Unlike other entertainment choices for consumers, sports evoke a high level of emotion and attachment from fans (Sutton et al., 1997; Underwood et al., 2001). An individual is likely to choose to identify with a team when identification leads to positive social identity and self-
enhancement (Donavan et al., 2005); therefore establishing an emotional connection with the
team to maintain their social status. Bee and Kahle (2006) explain, that most sport consumers are
highly involved with the brand; such involvement is manifested through purchase of tickets,
attendance at games, and purchasing team-related merchandise. Donavan et al. echo this
sentiment claiming that the behavior of highly identified fans is driven by a sense of “emotional
ownership”, which includes devoting time to following the team (p. 32). When sports fans enter
into a relationship with a sports team, they commit to the team without regard to other available
choices (Bee & Kahle, 2006). Even in the face of a losing season, a sports fan is likely to remain
committed to their team through the emotional connection they share with other fans and the
organization itself (Wann & Branscombe, 1993). This indicates that most highly identified fans
are not likely to switch team allegiances easily due to their emotional attachment to the team.

Fan identification is an important concept for developing the sport brand. As Underwood
et al. (2001) assert in the SIBE model, a sport brand manager can create a sense of loyalty
through fan identification with the team by manipulating the service-place market characteristics
associated with the brand. He, Li, and Harris (2012) argue that the more one identifies with an
organization, then the more likely they are to engage in behavior that supports the brand.
Marketing and communication strategies between the team and fans can minimize the effects of
poor team performance and secure the team brand (Sutton et al., 1997). Publicly demonstrating
their fandom is one way that sports fans can engage and maintain in a relationship with the sport
brand (Bee & Kahle, 2006; Fisher, 1998). Research has demonstrated that fans who feel like they
have a positive relationship with the sports team will be more likely to use media to seek
information about the team, spend money and time following the team, purchasing team-licensed
products, and go to games (Bee & Kahle, 2006; Kim, 2008). Fisher (1998) summarizes, through
social identification, sports fans must maintain group requirements including how they publicly and privately support the team. Therefore, establishing and maintain a relationship with strongly consumers who are strongly identified with the team is important for sports brand managers.

Donavan et al., (2005) note that social identity theory provides a useful framework for studying fan behavior because fandom involves interpersonal and group relationships, which are observable, sport rivalries provide a context for in-group/out-group comparisons, and identification with a team leads to emotional involvement and becomes a self-defining characteristic for the individual. Specific to fan identification, Wann and Branscombe (1993) found fans who were highly identified with a sports team were more likely to be involved with team activities. Carlson and Donavan (2008) found that identification with an athlete endorser is a determinant of team and brand outcomes. Phua (2010) studied the media use of sports fans and found that fans often use media to find out about their favorite team and media acts as a moderating variable between fan identification and collective self-esteem. Participation in sports media (especially online) reinforces the fan experience allowing fans to bond with other sport fans, which creates a positive social identity. Recently, Lock et al. (2012) applied social identity theory and the psychological continuum model to team identification for new sports teams. Results of qualitative interviews indicated that as team identification developed into an important part of the individual’s self-concept, it influenced more day-to-day actions. Other studies of social identity in the sports context have examined fan identification and self-esteem (Wann et al., 2000); on-field success (Fisher & Wakefield, 1998); off-field behavior of athletes (Fink, Parker, Brett, & Higgins, 2009); brand equity (Boyle & Magnusson, 2007); group identity (Heere & James, 2007); motivations for fan identification (Sutton, McDonald, Milne, &
Cimperman, 1997); and fan identification (Branscombe & Wann, 1991a and 1991b; Wann & Dolan, 1994).

Social Media

Mobile social media is an emerging technology that has potential to be advantageous for brand managers, especially sport brands, by providing a platform for promoting two-way communication with consumers (Igenhoff & Koelling, 2009). Wallace, Wilson, and Miloch (2011) suggest that through built-in, motivated fan bases, sport teams are better positioned to use social media to encourage interaction among fans and the sport brand. Sports organizations have used Twitter to connect with fans, provide information about the team, sell tickets, promote the team, and increase overall brand awareness (Hambrick, Simmons, Greenhalgh, & Greenwell, 2010). Additionally, as mobile devices become more sophisticated with more interactive capabilities, social media applications are increasingly gaining relevance in the world of mobile social media marketing (Kaplan, 2012). Arvidsson (2006) argues that mobile social media provides an omnipresent branded space that infuses the brand into different aspects of the consumer’s life.

Williams and Chinn (2010) define social media as the platforms and applications that allow users to connect, communicate, and collaborate with other users. The term social media is often used as an umbrella term that encapsulates all different types on online activity (Kaplan & Haenlein, 2011b) that occurs on social network sites. According to boyd and Ellison (2008), social network sites are web-based services defined by three characteristics: (1) users create a public or semi-public profile within the system, (2) users publicly display a list of acquaintances (or friends) on the site, and (3) other users can peruse the list of connections and make connections with others through a web of mutual acquaintances. Thus through the capabilities of
social networking sites, social media provides a virtual platform where users can interact, give and receive information, voice their opinion, collaborate with users, and live shared experiences with others (Pegoraro, 2010; Smith, 2010). Social media is different from other forms of communication in that it promotes high levels of interaction among users (Williams & Chinn, 2010). Different social media sites provide a different outlet for consumer electronic word-of-mouth communication (eWOM), blogs (CNET blog), microblogs (Twitter), social networking (Facebook), content sharing (YouTube) and collaborative sites (Wikipedia) (Kwon & Sung, 2011).

The two-way dialogic capabilities of social media provide brands with an unfiltered outlet for communicating the consumers. Wallace et al. (2011) argue that strong brand identity is reinforced through communicating directly with consumers through social media. Contact with consumers provides the sports team with an opportunity to build a stronger relationship with fans and as posited by the SIBE model, the stronger the fan identification with the team, then the stronger the brand equity for the team (Underwood et al., 2001).

Researchers have proposed that the Internet will continue to play a key role in socialization and communication about sports-related content among sports fans (Phua, 2010). Through the Internet and mobile apps, sports fans can log on at anytime and have unlimited access to information regarding their favorite sports team, interact with other fans, and even watch games through live streaming capabilities. Sports and marketing research have investigated the influence of online and social media activity in sports. Phua (2010) found that participation in online media had the greatest influence on fan identification and collective self-esteem. Recent studies have involved examining motivations for online sport consumption (Hur, Ko, & Valacich, 2007; Seo & Green, 2008), professional athlete’s use of Twitter (Pegoraro,
Social media has become an essential tool for brand managers and marketers (Wallace et al., 2011) to meet highly identified consumers. Social media allows brands to communicate with consumers in a timely, cost-effective, and efficient manner (Kaplan & Haenlein, 2010). Sports marketers have begun to promote their teams as brands and have invested in strategies to strengthen their connection with fans (Richelieu & Pons, 2009). Brands that have a strong social media presence are better equipped to garner consumer attention, increase brand awareness, and maintain communication with consumers (Kwon & Sung, 2011). The current study proposes that through the interactive and structural features of Twitter, brands can connect with consumers in a way that fosters higher levels of consumer-brand relationships.

Fans who are highly identified with a sports team demonstrate their affiliation by participating in sports-oriented websites and social media sites (Hambrick et al., 2010; Real, 2006). Participating in team-related online sports communities reinforce the fan experience and acts as a socializing agent for fans (Phua, 2010). Through social media such as Twitter or interacting with other fans on mobile apps, a sports fan can affirm their in-group status, and maintain positive social identification with the sports team (Phua, 2010). Twitter allows athletes and fans a channel for expressing support for their favorite sports organizations (Hambrick et al.; Pegorar, 2010). Smith (2010) implies that Twitter is more than a platform for expressing one’s opinion and for identifying with a community of like-minded individuals. Sport fans can come together as a community through the interactive capabilities of social media.

The increased use of social media by sports fans have made this technology an important tool for sports organizations allowing fans unprecedented access to teams, coaches, players, and
other fans (Pegorar, 2010). Social media can contribute to fan identification (Hambrick et al., 2010). Through the Internet and social media, sports fans can access large amounts of information about their favorite team as well as a way to connect with sports fans all over the world (Mahan & McDaniel, 2006). Hambrick et al. suggest that accessibility to team-related information and other fans in an antecedent to fan identification. This newfound connectedness has had a profound influence on the sports world, as Mahan and McDaniel (2006) explain, “all of this occurs across the chasm of time and space that – until now – has rendered sports fans a relatively anonymous and disjointed population,” (p. 424).

Through social media, sports organizations have an unprecedented opportunity to establish and nurture a relationship with their fans as well as having a platform to create a brand community among fans. Interacting with sports fans through social media can create desirable outcomes for sport organizations (Hambrick et al., 2010) including reaching fans who live outside of the team’s immediate area but want to identify with the team and provide emotional and financial support for the team (Kerr & Gladden, 2008; Foster & Hyatt, 2008; Real, 2006). Therefore, identified sport fans can connect with their favorite teams through social media no matter their geographic location.

As sports teams begin to invest more money into developing social media and mobile social media strategies to reach fans, research is necessary to determine how these tools can be used effectively. To date, research has confirmed that making relational connections is important for service-oriented brands, like sports. Social media tools such as Twitter or mobile apps provide a new outlet for studying consumer-brand relationships. Williams and Chinn (2010) add, that sports provide an interesting and relevant context for studying the use of social media in relationship marketing practices.
Twitter and Brand Relationships

Twitter is a social networking site that allows users to post short messages (also known as microblogs) of 140 characters called Tweets (Gilpin, 2010; Xifra & Grau, 2010). The site is quickly becoming the most popular site among a category of social networking sites that specialize in microblogging (Kaplan & Haenlein, 2011a). The purpose of Twitter is to allow users an outlet for posting messages about what they are doing, share observations, and provide information to followers. Twitter users create a personal profile that describes the user and shows others who they follow and who is following them (Fisher & Reuber, 2011; Kaplan & Haenlein, 2010). Within the Twitter community, users function as both creators and consumers of tweets. As a user posts original messages or tweets, that message is sent to their followers. Users receive tweets from those they follow and have the option of retweeting those messages; retweeting is defined as the act of forwarding messages from a Twitter user to one’s followers (Twitter, 2012).

Twitter is a platform for connecting consumers and brands as well as a media channel for promoting brand activities (Smith, 2010). Unlike other forms of social media (i.e. Facebook), messages on Twitter are generally shorter, accessible through a variety of platforms, and are broadcast to a large audience (Lin & Pena, 2011) and allows users to share with followers what is happening in their immediate environment while choosing information they want to receive in return (Kwon & Sung, 2011). Fisher and Reuber (2011) summarize Twitter as a dynamic social networking site that is less oriented to a user’s personal network, unlike the popular social networking site Facebook that revolves around one’s personal network. Twitter users are active co-collaborators in the creation of content (Constantinides & Fountain, 2008; Jansen, Zhang, Sobel & Chowdry, 2009; Smith, 2010).
Twitter users can participate in conversations by using hashtags (Kwon & Sung, 2011). Hashtags are used in Twitter to organize the broad topics of conversation in Twitter (Twitter, 2012). Sports fans frequently use this feature; for instance, Twitter users can tweet about the game by using a team-identifying hashtag (e.g. #NYKnicks). Sports teams will often provide hashtags for fans to use while watching the games (e.g. #BullsVsHeat for fans watching Chicago play Miami). Hashtags can also be used as a tool to rally fans online; during the 2011-2012 playoffs, the Miami Heat encouraged fans to tweet #LetsGoHeat and make the hashtag a trending topic. This Twitter feature allows fans to connect with each other as well as with the team itself and provides an outlet to publicly demonstrate fandom thus intensifying ones social identity with the team.

Social media and Twitter, in particular, have made it possible for brands to communicate with thousands of followers about their products or services (Mangold & Faulds, 2009). Kaplan and Haenlein (2011a) suggest that Twitter is useful in all three stages of the marketing process, from pre-purchase (marketing research), to purchase (marketing communications) to post-purchase (customer service). Interacting with users on Twitter allow brands to connect with motivated consumers (Kwon & Sung, 2011). Mangold and Faulds (2009) list two functions of Twitter in consumer-brand interactions: (1) brands are able to talk to consumers and (2) consumers are able to communicate with one another. The ability to connect consumers with each other allows an outlet for creating online brand communities (Ioakimidis, 2010; Mangold & Faulds, 2009), which strengthens the consumer-brand relationship and enhances the consumer experience with the brand.

Twitter provides an effective tool for building and maintaining consumer-brand relationships (Kwon & Sung, 2011; Waters, Burnett, Lamm, & Lucas, 2009). Marketing scholars
have suggested that relationship marketing should include high levels of consumer involvement (Kittle & Ciba, 2001). The interactive capability of Twitter allows the possibility of continuous dialogue between consumers and brands (Kaplan & Haenlein, 2010; Kwon & Sung, 2011; Lin & Pena, 2011; Smith, 2010; Williams & Chinn, 2010). Kwon and Sung (2011) explain that through the structural and interactive features of Twitter, the brand can engage in continuous conversation with consumers. Java, Song, Finin, and Tseng (2007) found users who engage in conversations on microblogging networks, including Twitter, are more likely to have close relationships with other users; therefore, the argument that can be made that through Twitter, interactions between brands and consumers can follow typical rules for interpersonal behavior. This level of two-way communication is necessary for consumers to feel that they are benefitting from the relationship with the brand.

Mangold and Faulds (2009) suggest that when consumers are able to provide product feedback, they are more likely to feel engaged with the brand. Twitter provides consumers with a platform for directly interacting with brands and providing them with valuable feedback (Kaplan & Haenlein, 2011b). Open communication between consumers and brands creates a sense of community that enhances customer engagement with the brand (Mangold & Faulds, 2009). Twitter allows marketers to provide consumers with information that is timely and relevant thus increasing consumer brand knowledge and awareness (Kwon & Sung, 2011).

One of the advantages of Twitter is that it can be used with other media to increase brand exposure and awareness (Fisher & Reuber, 2011; Kwon & Sung, 2011). Twitter works seamlessly with other online tools; allowing for access to the network on a variety of platforms. Kwon and Sung (2011) suggest that brands can use Twitter with other media to gain the attention of consumers and drive traffic back to their website.
Mobile Apps and Brand Experience

Mobile social media provide a new outlet for sport brands to connect with fans. Kaplan (2012) conceptualized mobile social media as “a group of mobile marketing applications that allow the creation and exchange of user-generated content,” (p. 131). Apps available on smartphones allow users to connect with their interpersonal network (Facebook), read (Kindle), make restaurant reservations (Open table), and monitor their weight (Lose It!). Many professional sport teams have created mobile apps that allow users to have “inside information” about the team. Many of these apps have interactive features that connect fans to each other through the app itself or links to other social media outlets like Facebook and Twitter.

Gowalla (founded in 2007) and Foursquare (founded in 2009) were two of the first companies to create apps that specialize in mobile social media (Kaplan, 2012). Kaplan (2012) defines mobile marketing as “any marketing activity conducted through a ubiquitous network to which consumers are constantly connected using a personal mobile device,” (p. 130). Three conditions are necessary for mobile marketing to take place: (1) network availability at all times, (2) users must always have access to this network, and (3) and a personal mobile device, such as phone, netbook, or tablet, to access the network (Kaplan, 2012). Everyday interactions using mobile social media are expected to provide shared experiences and content that provide the basis for customer-based brand equity (Arvidsson, 2006).

The advantage Internet-based marketing strategies (including social media and mobile social media) have over traditional marketing strategies is the ability to create this shared experience through online interactions. Thus, the Internet is more than just an outlet for information dissemination. Simmons (2007) suggests that the Internet can be a powerful force in developing strong brand perceptions through stories and dialogue among users. Using mobile
apps to extend the brand experience provides brand managers with a way to combine information, entertainment, and interaction in a distinctive manner that leads the consumer to identify more strongly with the brand.

Kaplan (2012) characterizes users of mobile social media apps into one of four categories: strangers, groupies, victims, and patrons. When communicating with strangers, a brand broadcasts as general message to mobile users. A consumer is considered a groupie when they opt-in to receive information from a brand through mobile social apps. Victims receive information from the brand but did not give permission to be contacted. Finally, patrons, grant brands permission to contact them with personally relevant information about services and products provided by the brand. One of the advantages of engaging with consumers through mobile social media is that the brand has intimate knowledge of their consumer including information about the users current locations and consumption habits (Kaplan, 2012). Consumers often consent to providing this information through app features such as “checking-in” at certain times and locations.

Mobile apps can act as centralized information hubs, a convenient tool for accessing information about sports teams. In addition to team information, apps have the potential to enhance the fan experience with the team by acting as a mobile extension of the team. Brands who are interested in engaging consumers in mobile social media can create apps that integrate mobile social media activities into the daily life of the consumer, take care to individualize the app to consumer’s preferences and interests, involve the user through interactive features, and initiate the creation of user-generated content (Kaplan, 2012). Kaplan (2012) explains that installing a brand-related application on their mobile device indicates a strong level of trust from the consumer.
The Internet, and mobile apps in particular, has provided brand managers with an outlet for generating brand experience (Underwood et al., 2001). Brand experiences are conceptualized as behaviors associated with a brand including purchase and consumption of the good or service. Constantinides and Fountain (2008) add, that brands should identify ways to enhance the user’s experience with the brand in ways that meet the information needs of the consumer. Through its capabilities of real-time response and geo-localization, mobile apps can create a unique brand experience for consumers (Kaplan, 2012). Kaplan (2012) suggests that mobile social media should provide high levels of interaction that facilitate the creation of a shared experience between the user and the brand. Mobile social media promises to take mobile branding to the next level by creating brand value that centers on a creating a unique brand experience for users (Arvidsson, 2006). Through high quality online brand interactions, consumers develop positive brand associations that lead to increased brand loyalty and identification (Simmons, 2007).

An example of using mobile social media marketing to reach sport consumers involves a promotion from the NBA’s New Jersey Nets. In April 2010, working with Gowalla, the Nets gave away five hundred tickets to a Monday night game against the Charlotte Bobcats. Consumers could receive a free ticket to the game by checking in at various locations around New York and New Jersey. The promotion was considered a success as fifteen percent of people who found a ticket attended the game (Kaplan, 2012). Users can engage with the team through Twitter using mobile apps as well. Many teams use Twitter to promote the team to followers. The San Antonio Spurs will often ask followers a trivia question to win tickets for an upcoming game. The Miami Heat offered a special pre-sale for playoff tickets exclusively for Twitter followers. Twitter followers of the brand can use their mobile devices to access Twitter and
participate in these types of promotions. These activities not only enhance the relationship between the fan and the team but also enrich the fan’s experience with the team.

The present study focuses on two forms of social media – Twitter and team-related mobile apps. Despite the other social media choices available, including Facebook, Four-Square, and blog sites, Twitter and mobile apps were selected because of the unique features each format. While other sites do offer unique features and interactive capabilities, Twitter provides a more likely outlet for two-way communication between brands and consumers and mobile apps provide a more immersive, interactive experience.

Since the early years of mass media research, communication scholars have studied the influence, use, and motivations of mediated technology consumption. Studying social media is important for communication research for two reasons. First, the Internet itself and to an extent social media serves as a conduit to other forms of media. For instance, one can watch a television show on Hulu or listen to the radio on Pandora. Users are still engaged in traditional media use (watching television or listening to the radio) but this task can now be accomplished on a variety of platforms including personal computers, tablet devices, and smart phones. Specific to social media, users can post links to a New York Times article on their profile page or they can post a link to a YouTube video promoting an upcoming movie making these traditional forms of media accessible to all of their followers. Second, social media allows users the opportunity to exchange ideas and information in a collaborative environment. User interaction adds a new element to the medium not present in other forms of traditional media. In the branding context, social media allows consumers to have a voice where they can praise, complain, or seek customer services directly from the brand (Williams & Chinn, 2010). One purpose of this study is to better understand the role of social media to facilitate communication between sports fans.
and their favorite teams as well as the possibility of interactions among sports fans creating a community of followers.

Building a Brand

Simmons (2007) defines branding as the value attributed to the brand through satisfying customer experience. Strong brands contain components that are “identifiable, enduring, and meaningful” for consumers and allows one to distinguish the brand from competitors (Wallace et al., 2011). Having a strong brand is important for service goods because the value attached to it by consumers differentiates the brand in crowded marketplace (Bergstrom, 2000; Berry, 2000). An effective brand provides information to the consumer; therefore, simplifying the time-consuming process of searching and comparing services from other competitors (Simmons, 2007).

Service brands are characterized by their intangible nature, simultaneous production and consumption, and limited time for consumption (de Chernatony & Riley, 1999; Ross, 2006). A consumer watches the game as it is played resulting in simultaneous production and consumption (Ross, 2006). Since the product is created and consumed simultaneously, the consumer does not have an opportunity to evaluate the quality prior to purchase (Firth, 1993). One cannot determine the quality of a sporting event prior to the game. Secondly, the service brand must maintain service consistent with quality (Ross, 2006). The sport consumption experience is fleeting due to its “intangible, inconsistent, and perishable nature” (Gladden et al., 1998, p. 5) thereby making the consumption of a sporting event in one-time transaction. Thus, the sports team brand plays an integral role in defining the quality of service. As a result, the sport brand consists of a series of perceptions of the experience and associations the sport consumer shares with the brand.
Brand development is important for any consumer good, whether product- or service-based, but for service-based brands that lack a tangible product and operate in a homogenous market, branding development is crucial (Underwood et al., 2001). de Chernatony and Riley (1999) explain that the brand image is sold along with the service. Service brands differ from product-related brands in that the organization (in this case the sports team) is the brand (Berry, 2000). Service brands do not have a label, product, or package to display as a result of the brand experience. Instead, a strong brand for service marketers is conceptualized as “what the organization says the brand is, what others say, and how the organization performs the service – all from the customer’s point of view,” (Ross, James, & Vargas, 2006, p. 261).

Service marketers are thought to exist along a continuum of consumer involvement and emotional commitment; in the case of professional sports, consumers are considered to be highly involved with the brand (Cliffe & Motion, 2005; Gladden et al., 2001; Underwood, et al., 2001). For sport fans, interest and involvement with the sporting event will continue even after the game (Funk & James, 2001). For highly identified fans, their connection with the team manifests itself through outward actions such as wearing clothing associated with the team or participating in online sport communities. Conversely, less identified sport fans may watch a game and quickly forget about it (Funk & James, 2001). Involvement with interactive marketing strategies is analogous to social experiences (Mathwick, 2002). The unique experiences and brand associations afforded by sports teams allow the consumer to identify more strongly with the brand (becoming a fan) (Wallace et al., 2011). Given a built-in base of highly involved consumers, sports provide an ideal context for studying the use of interactive marketing through social media and apps and their influence on brand equity.
Establishing an emotional connection with consumers is vital for service brands (Underwood et al., 2001). The sport team’s brand uses the emotional attachment that fans have with the team to instill an increased sense of loyalty among identified fans (Couvelaere & Richelieu, 2005). This form of “emotional loyalty” can be developed through regular interactions between the team and fans (Gladden, Irwin, & Sutton, 2001). Embodying a customer’s core values is one method service brands can use to develop an emotional connection with consumers and the Internet provides an efficient method for developing the consumer’s sense of emotional loyalty to the brand (Berry, 2000; Gladden et al.; Underwood et al.). Scholars have suggested that online interaction is different from other relationship marketing techniques in that it allows people to feel a deeper connection and more open to candid communication. This results in a rich online relationship experience (Mathwick, 2002).

Consumer experience with a brand plays an important role in creating brand perceptions (Cliffe & Motion, 2005). Developing and maintaining consumer-brand relationships is one strategy that service-marketers can use to enhance consumer experience, which should, in turn, heighten the consumer’s sense of brand loyalty. Within the marketing literature, it is widely assumed that consumers can engage in relationships with brands following the norms of interpersonal relationships to guide brand assessments (Aggarwal, 2004).

Simmons (2007) suggests that brand can build relationships with consumers through providing unique, personalized messages to consumers. Mathwick (2006) remarks that for relationship marketing to be effective, the relationship must be mutually beneficial for both the brand and the consumer. In addition to providing core services, brands should seek to understand, communicate, and maintain ongoing interactions with consumers (Simmons, 2007). Social media provide a platform for brands to maintain this kind of interaction between
consumers and brands (Kwon & Sung, 2011). Practitioners and researchers alike have stressed the importance of creating emotional connections with consumers that lead to consumer loyalty and commitment that translates into daily brand use (Arvidsson, 2006).

Gladden et al., (2001) list four ways that sport teams can enhance their consumer-brand relationships: (1) seek ways to understand the consumer, (2) create opportunities for interaction between the brand and the consumer, (3) reward customer loyalty, and (4) integrate marketing associations to maintain a consistent message across platforms. The Internet provides an outlet for brands to develop active and meaningful relationships with consumers (Arvidsson, 2006). Social media and mobile apps provide a channel for achieving all of these goals. For instance, a sport brand can listen to fans on Twitter to get feedback on services to better understand consumers; they can interact with consumers on Twitter by offering special promotion for followers; brand loyalty can be rewarded for repeat check-ins at the stadium through the team’s mobile app; and all forms of social media can be used to disseminate “privileged, insider-information” for fans.

Brand equity can be quantified through measuring four constructs: perceived quality, brand awareness, brand associations, and brand loyalty. Perceived quality is the overall judgment a consumer places on the excellence of a brand (Gladden et al., 1998). Brand awareness and brand associations are often thought of in tandem, as a way for a consumer to be familiar with a brand (awareness) and relative to other points of reference (brand associations). Brand loyalty is the extent to which the consumer will repeatedly choose one brand over other options. The following sections will further explicate the concepts of brand awareness, brand associations, and brand loyalty and discuss their impact on customer-based brand equity.
Brand Awareness and Brand Associations

Brand awareness is the likelihood that a consumer will recall a brand name (Keller, 1993) and that brand will satisfy the consumer’s needs (Keller, 2003). Brand awareness aids consumers in making decisions through influencing the strength of the brand associations they have with the brand (Keller, 1993). Wallace et al. (2011) add through brand awareness and brand associations, consumers identify with the brand ultimately becoming loyal customers. As consumers come into contact with the brand through traditional and online media, they develop greater brand associations and brand awareness as well as repeat purchase experience (Wallace et al.). Sports brands can use a combination of traditional and online media (social media and apps) to enhance the sports fan’s brand experiences.

Consumers who are highly identified with a service provider, such as a sport organization, are more likely to process brand information as “personally relevant, processing it deeply, relating it to existing brand knowledge, resulting in strengthened brand associations,” (Underwood et al., 2001, p. 3). Brand associations are attained through consumer experience with the brand. By its very nature, the sports brand allows consumers to develop a wide range of brand associations based on their experience with the team (Gladden & Funk, 2002). Underwood et al. summarize the importance of brand awareness and brand associations in the following:

Heightened identification with a market offering should yield enhanced brand awareness and improved distinctive brand associations, resulting in perceptions of greater quality and increased levels of loyalty to the brand. In turn, this higher level of brand equity serves to make identification with the brand more attractive. (p. 4)

Therefore, the current study argues that through increased brand experiences on mobile apps and enhanced brand relationships on Twitter, the sports fan creates more brand associations that strengthen brand knowledge and consequently provides more favorable customer-based brand equity.
There are three categories of brand associations – attributes, benefits, and attitudes (Keller, 1993). Brand attributes are defined as properties or characteristics of a brand that characterize the product or service (Bauer et al., 2008). Brand attributes can be product-related or non-product-related. External aspects of the product or service are non-product-related brand attributes while product-related attributes are directly related to the product or service (Bauer et al.). Keller (2003) defines brand benefits as the value and meaning attributed to a brand through personal experiences with the brand. Brand attitudes are the summary judgments and evaluations of the brand-related information (Keller, 2003). A brand has high customer-based brand equity when the consumer has developed “favorable, strong, and unique brand associations” about the brand (Bauer et al., p. 209). For sport brands, brand associations are developed through social identification and emotional involvement with the team (Gladden et al., 1998).

Brand Loyalty

Keller (1993) defines brand loyalty as repeat buying behavior that results from favorable beliefs and attitudes toward the brand. Kaynak, Salman and Tatoglu (2008) argue that a loyal fan is beneficial to the process of branding in that it creates increased brand equity. Consumers with high levels of brand loyalty must hold a positive attitude towards the brand (Bristow & Sebastian, 2001). For sports team, establishing a strong brand leads to the increased fan loyalty (Couvelaere & Richelieu, 2005). Bristow and Sebastian (2001) identified three components of consumer brand loyalty: (1) the brand must meet the customer’s expectations regarding performance, (2) a consumer must socially identify with the brand through an emotional connection, and (3) the consumer has a history with the brand.

Brand loyalty plays an integral role in building brand equity. Bauer et al. (2008) explain that brand loyalty guarantees a stable following of brand enthusiasts and allows for the
opportunity of brand extensions. Heere and Dickson (2008) suggest that consumer loyalty can provide a brand with a “halo effect” that can protect the brand from threats from competitors. In the sports context, this halo effect can be useful for periods of time when the team does not live up to fans’ expectations. The Dallas Cowboys provide an example of this, after dominating the professional football league for most of the 1990s, the team has been subpar for most of the 2000s; however, because of a strong following from loyal fans, the team remains one of the most valuable sport brands in the United States. Because the brand already has a committed and loyal following, this indicates that followers will be more likely to consume other products or services from the brand.

*Brand Equity*

Brand equity can be considered the value of the brand (Bauer et al., 2008). Establishing strong brand equity is important for service-providers in that it increases the effectiveness of marketing strategies, enhances brand loyalty, provides a basis for brand extensions, and the ability to charge premium prices (Guenzi & Nocco, 2006). The main idea of the SIBE model for sports branding is that by enhancing the customer experience through service-place market characteristics, a service brand can increase their customer-based brand equity. Within the sport context, much of the value of the brand is inherent in the intangible experiences of interacting with the brand (i.e. through attending games, supporting the team, identifying with the team). Therefore, brand equity should not be valued through only fiscal standards but should include the intangible components personified through brand loyalty, perceived quality, brand awareness, and brand associations (Gladden et al., 1998).

Customer-based brand equity occurs when a consumer has a high level of brand awareness with the brand holds unique brand associations that result in repeat purchase behavior
(Keller, 1993). For effective customer-based brand equity, the power of the brand lies in the mind of the consumer (Underwood et al., 2001). The first step in developing customer-based brand equity is to establish knowledge structures about the brand for consumers (Keller, 1993). This is accomplished through creating unique brand associations that distinguish the brand from its competitors. Consumers can build these associations through their relationship and experiences with the brand as well as advertising and marketing strategies. Strong brand equity should be the end-goal of a sports organization’s branding efforts (Richelieu & Pons, 2009).

An individual can identify with a brand and incorporate the brand into their social identity through brand associations and experiences that influence brand attitude (Underwood et al., 2001). Brands have the capability of creating value for consumers, which reinforce their social identity (O’Cass & Frost, 2002). Consumers who strongly identify with a brand do so because the brand may hold many of the same values or traits that is similar to their own personal identity“ (Underwood et al.). Gladden et al. (1998) affirm that social identification is an antecedent and consequence of customer-based brand equity. High levels of commitment and involvement, both characteristics of social identification with a brand, make the brand look more attractive to others thereby enhancing the likelihood that others will also choose to identify with the brand (O’Cass & Frost, 2002; Underwood, et al.). When a brand appears to be desirable to others, brand loyalty is likely to increase.
CHAPTER 3
HYPOTHESES AND RESEARCH QUESTION

The present study has three overarching goals: (1) empirically test the SIBE model and the relationships that exists among its components in the context of professional sports, (2) assess the influence of social media use on the perceived customer-based brand equity of a professional sports team, and (3) assess the influence of brand relationships and brand experience on customer-based brand equity. Interaction with the sport brand is incorporated into the SIBE model through use of Twitter and interactions with the team and other fans through their mobile app. The current study hypothesizes that interactions on Twitter will have a positive effect on the consumer’s perception of their relationship with the sport brand and interactions with the team’s mobile app will enhance the consumer’s experience with the brand. Both positive brand relationship and positive brand experience are hypothesized to have a positive effect on the team’s overall brand equity.

Testing the Original SIBE Model

As previously discussed, the SIBE model assumes that by manipulating service-place market characteristics (i.e. group experience, tradition and history, venue, and ritual) the brand manager can increase social identification with the team thereby increasing the brand equity of the team. Boyle and Magnusson (2007) tested the model and found support for it in the context of a college athletic department. This study attempts to further this work by testing the original model in the context of professional sports. Collegiate sports have many external variables that
can influence their brand equity (i.e. school reputation, many different sports under one brand, or built-in fan base of students), whereas professional sport is more of a stand-alone brand.

Taken together, group experience, history and tradition, venue, and ritual can all be used by sports marketers to enhance social identification with the team, ultimately leading to increased brand equity for the team. As Sutton et al. (1997) explain, “the expression of common symbols, history, shared goals, and the fan’s need to belong links the team to the community and provides an identity for the team that is inseparable from that of the community,” (p. 18). Underwood et al. (2001) posit that group experience among identified fans of the team, history and tradition of the team, the venue where the team plays, and rituals affiliated with the team will have a positive effect on the likelihood that a consumer will socially identify with the team. In the current study, fan identification is a synonymous to social identification (Underwood et al.); therefore fan identity and social identity will be used interchangeably. In keeping with the original SIBE model, the following hypotheses regarding service place market characteristics and social identification are proposed:

H1a: Group experience will have a positive effect on social identification with the team
H1b: History and tradition will have a positive effect on social identification with the team
H1c: Venue will have a positive effect on social identification with the team
H1d: Ritual will have a positive effect on social identification with the team
H1e: Social identification will have a positive effect on brand equity

One study has provided empirical support of the SIBE model (Boyle & Magnusson, 2007), this project tests all components of the SIBE model to provide support for the conceptual framework. Identifying which of the service-place market characteristics is more likely to lead to
social identification can have practical implications for sport brand managers. Therefore the following research question is posed:

RQ1: What is the extent to which each service-place market characteristic identified in the SIBE model contributes to social identification with a sport team?

The SIBE model assumes brand managers and sport marketers can manipulate the service-place market characteristics to increase social identification of sport fans (Underwood et al., 2001). Group experience is conceptualized as the feeling of camaraderie and socialization that occurs among sports fans at a game (Boyle & Magnusson, 2007). Sport marketers should create opportunities for socialization among fans that lead to feelings of belonging among members of the group (Apostolopoulou & Biggers, 2010). As social identification theory posits, feelings of belonging to a group leads to increase in social identification (H1a) (Ahearne, Bhattacharya, & Gruen, 2005; Ashforth & Mael, 1989; Bergami & Bagozzi, 2000; Stets & Burke, 2000; Tajfel, 1982).

Promoting the history and tradition of the team is second strategy the SIBE model proposes to lead to increased social identification. Celebrating the history of the team allows the fan to connect with the team on an emotional level. Sports fans who understand and appreciate the history of their favorite team tend to publicly demonstrate their appreciation by supporting the team in the present, as if they are part of that history (Boyle & Magnusson, 2007; Wann, 2006;). Therefore, promoting the history and tradition of the team also leads to positive social identification (H1b).

The facility the team plays in often becomes the tangible representation of the brand and plays an important role in facilitating the group experience for fans of a team (Underwood et al., 2001). Berry (2000) suggests that for service brands, the organization itself is the brand. Given
the intangible nature of service-based brands the building, which houses the team becomes the stand-in representative for the team. Based on this, the venue where the team plays is hypothesized to lead to increased social identification with the team (H1c).

Finally, ritual is hypothesized to lead to increased social identification (H1d). Participating in team rituals provides a way for fans to publicly demonstrate their identification with the team (Underwood et al., 2001; Boyle & Magnusson, 2007).

Social identification theory posits: (1) a person socially identified with a group will experience feelings of belonging with the group, (2) social groups categorize themselves and others for the purpose of intergroup comparison, and (3) the more one identifies with the group, the more likely they are to take on similar attitudes and actions of the group (Ashforth & Mael, 1989; Tajfel & Turner, 2004). One of the main characteristics of customer-based brand equity is the brand value is in the mind of the consumer through brand awareness and brand associations through lived and mediated experiences with the brand (Underwood et al., 2001). Therefore, the more identified a consumer is with a brand (a sports fan is with the team), then the more positive associations the consumer will have with the brand thus increasing the brand equity of the team as hypothesized in the model (H1e).

Hypotheses related to service place market characteristics and social identification was adopted from the original SIBE model (Boyle & Magnusson, 2007; Underwood et al., 2001). One could argue that these four characteristics could also have some direct influence on brand equity; however there is a stronger argument that these characteristics have a stronger direct influence on social identification. Based on the assumptions of social identification theory, group experience reinforces feelings of belonging with the group, history and tradition provide an emotional connection to the group, venue provides a tangible representation of the group
experience, and rituals provide a public forum for identifying as a member of the organization (i.e. fan of the sport team).

Social Media

The present study attempts to incorporate sports fans’ use of social media into the SIBE model. Social identification is an antecedent to the development of customer-based brand equity (Gladden et al., 1998; Underwood et al., 2001). The original SIBE model proposes that social identification with a sports team has a direct, positive effect on a team’s brand equity. Individuals who are strongly identified with an organization will seek ways to publicly demonstrate their affiliation with the group and will be more motivated to seek out team-related information through social media and social media apps. The current study includes the addition of measures of social media involvement, therefore social identification is hypothesized to have a positive effect on the use of social media (Twitter and mobile apps).

H2a: Social identification will have a positive effect on Twitter use related to the sports team
H2b: Social identification will have a positive effect on use of mobile apps associated with the team

Strongly identified sport fans should be more motivated to seek out team-related information through online media. Specifically, through the use of Twitter and mobile apps, highly identified fans can interact with other users, publicly demonstrate their commitment to the team; gain information about the team; and connect with the team, players and coaches. Because of this, the current study proposes that strongly identified sport fans will be more likely to interact with the brand through Twitter (H2a) and mobile apps (H2b). This does not discount that less identified fans also interact with the team through various forms of media, but based on the
assumptions of social identification theory, it is more likely that highly identified fans will use social media to connect with the team.

Social Media and Brand Consequences

This study contributes to the understanding of the role of social media in sports branding by incorporating measures of social media use (through Twitter and mobile apps), brand relationships, and brand involvement into the existing social identity-brand equity model for sports marketing. Based on the review of literature, the present study hypothesizes that Twitter provides an outlet for the growth of consumer-brand relationships (Smith, 2010; Kaplan & Haenlein, 2011a). Through the two-way dialogic capabilities of Twitter (Kwon & Sung, 2011), brands can listen and participate in conversations with consumers using the site. The ability to engage with consumers on an interpersonal level is an important component in establishing consumer-brand relationships (Mangold & Faulds, 2009; Walters et al., 2009; Kittle & Ciba, 2001). Mangold and Faulds (2009) posit that the more feedback consumers are able to provide to a brand, the more likely they are to feel engaged and committed to the brand, thus creating a positive consumer-brand relationship.

Mobile apps are hypothesized to have a positive influence on a consumer’s brand experience. Through high levels of interaction, mobile apps provide a platform for creating a unique brand experience for consumers (Kaplan, 2012; Arvidsson, 2006). Through mobile apps, sports fans have access to information about the team, connect with other fans, and publicly display their fandom. These types of interactive capabilities constitute a consumer’s experience with the brand. Mobile apps represent a new area of research related to tools for branding and marketing. The current study is among the first to identify specific brand-related consequences of using this new form of social media.
Given the prevalence of Twitter as a popular social networking site, one can assume that it would be more likely that sports fans would use Twitter before using mobile apps and that the team would promote the use of their mobile app through their Twitter site. For the current study, Twitter use is hypothesized to have a positive influence on the perceived brand relationship with the sports team, use of team-related mobile apps, as well as a direct influence on brand equity. Mobile apps are hypothesized to have a positive influence on brand experience and brand equity. The current study also hypothesizes that brand experience will have a positive influence on the brand relationship. Having a positive experience with the brand leads one to feel closer to the team, therefore enhancing the brand relationship. Related to Twitter, the following hypotheses are proposed:

H3a: Interaction with the team through Twitter will have a positive effect on a person’s relationship with the sport team’s brand
H3b: Interaction with the team through Twitter will have a positive effect on the sport team’s brand equity
H3c: A positive brand relationship with a sports team will have a positive effect on a sport team’s brand equity

Related to the use of mobile apps, the following hypotheses are proposed:
H4a: Using a team’s mobile app will have a positive effect on a person’s experience with the sport team’s brand
H4b: Using a team’s mobile app will have a positive effect on a sport team’s brand equity
H4c: A positive brand experience with the sports team will have a positive effect on a sports team’s brand equity
Additionally, positive brand experience is assumed to have a positive influence on one’s perceived relationship with the brand, therefore the following hypothesis is proposed:

**H5**: A positive brand experience with the sports team will have a positive effect on a person’s brand relationship with the team.

As previously discussed, the structural features of Twitter allow for the use of continuous, two-way dialogue between consumers and brands (Kaplan & Haenlein, 2010; Kwon & Sung, 2011; Lin & Pena, 2011; Williams & Chinn, 2010; Smith, 2010). As a result, the present study hypothesizes that sports fans that use Twitter to interact with the sports brand will have a positive influence on the consumer’s perception of their relationship with the brand (H3a). Twitter use is hypothesized to have a positive effect on the team’s overall brand equity (H3b). Brand equity is created through strengthening the consumer’s brand knowledge and positive brand associations (Underwood et al., 2001). Consequently, a positive brand relationship on Twitter should result in increased brand equity (H3c).

Previous research has suggested that consumer-brand relationships should include high levels of consumer involvement (Kwon & Sung, 2011; Waters et al., 2009). Mobile apps provide an immersive experience for users where they can get updates about the team, learn about the team’s history, connect with other fans, get game-day information about the facilities, and participate in promotions specifically for app users. Because of these highly interactive features that facilitate an immersive experience, the use of mobile apps is hypothesized to have a positive influence on a consumer’s experience with the sport brand (H4a). Similar to Twitter, use of mobile apps is hypothesized to have a direct influence on brand equity through involvement with the brand through the app (H4b). This involvement is expected to create unique brand associations that lead to increased brand equity. This study hypothesizes that brand experience
will have a positive influence on brand equity (H4c). A positive brand experience is assumed to leave the consumer feeling positive about the overall relationship with the brand and improve the brand’s overall equity (H5).

As previously discussed, brand equity exists when “the consumer is familiar with the brand and holds some favorable, strong, and unique associations in memory,” (Keller, 1993, p. 2). A positive consumer-brand relationship and brand experience both lead to favorable and unique associations with the brand that comprise brand equity (H3d and H4c). Therefore, as a result of social media use, both brand relationship and brand experience are hypothesized to have a positive effect on brand equity.

Figure 2. Proposed Model
CHAPTER 4

METHODOLOGY

Research Setting

Data collection was conducted among three NBA teams that currently have mobile apps - Dallas Mavericks, Miami Heat, and New York Knicks. Arguably, these three teams are among the more recognizable professional basketball brands. According to the Forbes (2013) list of most valuable basketball teams, each of these teams selected are listed in the top ten (New York Knicks #2, Dallas Mavericks #4, and Miami Heat #6). Two of the teams are the most recent NBA champions (Miami Heat ’11-12, Dallas Mavericks ’10-11). Finally, these teams each highlight a different component of the model under investigation – Dallas Mavericks emphasize connecting the fan base through social media; New York Knicks have a rich tradition and history; and the Miami Heat through their high profile players and recent success embody desirable brand outcomes such as increased brand awareness and associations.

Dallas Mavericks. The Dallas Mavericks organization sponsors a social media site (friends.mavs.com) exclusively for Mavericks fans. On this site, fans are required to register and during which they are asked a question about the team that presumably keeps the site primarily to Mavericks fans. Additionally, the Mavericks have active Twitter, Facebook, and a mobile app where fans can post and reply to comments.

Miami Heat. The Miami Heat has won the most recent NBA championship with a team featuring three superstars – LeBron James, Dwyane Wade, and Chris Bosh. This Heat team has also
endured much controversy including the telecast of “The Decision” when LeBron James announced that he was leaving the Cleveland Cavaliers to join the Miami Heat. This type of star power has brought considerable attention to the team that has increased the brand awareness for the team among less identified basketball fans.

New York Knicks. The New York Knicks embody the history and tradition of the sport and play in an historic venue, which is noted as a service-place market characteristic that leads to increased social identification (Underwood et al., 2001). It could be established for future research that the fame of Madison Square Garden is a mitigating factor; however, that was not deemed a consideration in this initial design. The Knicks were one of the founding members of the National Basketball Association and is considered “one of the benchmark franchises in American sports” (New York Knicks, 2012, no page). The Knicks play home games in Madison Square Garden, but the building is also home to the New York Liberty (WNBA) and New York Rangers (NHL) and is used to host high profile concerts, boxing matches, dog shows, conventions, and more; thus the building that houses the team should incur recognition beyond the Knicks. The Knicks enjoyed considerable success in the 1990s but the 2000s have been less remarkable. Despite the lack of recent success for the Knicks, their history, location, and home court make the Knicks a recognizable sport brand with fans of the team all over the world.

In addition to collecting data for the three teams previously discussed, the survey included a questions for three teams that do not have mobile apps available for download: San Antonio Spurs, Oklahoma City Thunder, and Memphis Grizzlies. These teams do not have apps and therefore do not fit into the proposed model analysis. The primary purpose of collecting this data is for use in future research. Relevant to the current study, this data was incorporated into the model data to further explore RQ1 – assessing the strength of relationships among
antecedents of social identification and providing further analysis of the SIBE model. This data was not used in the analysis for the model under investigation; it was only used for examining the SIBE model. Respondents were recruited using the same strategy as the teams with apps. Appendix 2 summarizes the team breakdown and demographic information for this sample of responses.

Data Collection

Data-collection took place during the 2012-2013-basketball season. Respondents completed a 10-minute online survey, specific to each team under investigation, which assessed their opinions and experiences about their favorite team (i.e. Dallas, Miami, and New York). The survey was created using the Qualtrics program and distributed to respondents using social media. The survey measures included (1) service-place market characteristics (group experience, tradition and history, venue, and ritual), (2) fan identification, (3) social media use (Twitter and mobile apps), (4) brand relationship through Twitter, (5) brand experience through the mobile app, and (6) customer-based brand equity. Additional measures on the survey asked about technology use, specifically their use of app-enabled devices (i.e. iPhone, iPad, Android smartphone, Android tablet).

All teams under investigation have integrated social media networks, meaning fans can connect their Twitter or Facebook account to the app, so content posted on the app will also appear on their Twitter feed, for example. Since the present study investigates sports fans use of social media, going directly to Twitter and the mobile app provides a way to access highly identified fans who use the social media under investigation. Posting the survey on each team’s personal fan forum and Facebook page provided access to identified fans of each team, who are motivated to participate in online activities involving the team, which increases the likelihood
that they are involved in other forms of social networking with the team (i.e. Twitter and mobile app). The goal of using the forums and Facebook page is to try to ensure more variety among respondents so that all respondents are not exclusively Twitter or exclusively mobile app users and maintain some differentiation among the two groups. The first question on the survey provided respondents with a list of the six NBA teams examined in the study. Participants were asked to identify themselves as a fan of one of the teams under investigation as well as rate themselves as a fan on a scale of one to seven, with one being not much of a fan and seven being a highly identified fan. Respondents were then asked about their social media use in following their favorite team. For each survey, several media outlets were listed and respondents were asked which of the following media they use to follow the team as well as questions about their current involvement with the team (i.e. are they currently a season ticket holder, how many games have they attended, etc.). Once this general information section of the survey was completed, respondents answered questions measuring the service-place market characteristics, brand equity, brand relationship, and brand experience. General demographic information collected included questions of social media use, age, location, race and technology use.

Measures

Screening question. The first question asked respondents to indicate their favorite team from the teams on the list. Participants who selected either the Dallas Mavericks, Miami Heat, or New York Knicks they were directed to the team-specific survey. Participants then answered questions related to their favorite team including what types of media they use to follow the team.
Customer-based brand equity. Customer-based brand equity is operationalized as value of the brand in the mind of the consumer (Bauer et al., 2008) and can be measured through the constructs of brand loyalty, perceived quality, brand associations, and brand awareness. Measures for brand equity were adopted from Aaker (1991), Boyle and Magnusson (2007), and Yoo and Donthu (2001). Respondents were asked to what extent they disagree or agree with 8-items regarding their overall perception of their favorite team on a 7-point Likert scale (i.e. I believe that, overall, the [team] organization is a high quality team; Attending a [team] game is worth the money and time to do; I can quickly recall the logo of the [team]).

Brand relationship through Twitter. Brand relationships are conceptualized as the attitude and behaviors of consumers toward the brand and subsequently, the brand’s attitude and behavior toward the consumer (Blackston, 2000). Brands that reach out to consumers through outlets such as social media provide consumers with a sense of engagement with the brand thereby increasing their feelings of a positive brand relationship (Mangold & Faulds, 2009). Sports fans use of Twitter is presumed to have a positive effect on their relationship with the team. Brand relationship was measured using scaled adopted from Hsieh, Chiu, and Chiang (2005). Respondents were asked to what extent they disagree/agree with 5-items using a 7-point Likert scale (i.e. The [team] keeps in touch with me; I receive special treatment after I became a fan of the [team]).

Brand experience through mobile apps. Sports fan use of team-sponsored mobile social apps is presumed to have a positive effect on the fan’s experience with the sports organization. Underwood et al. (2001) conceptualize brand experience as behaviors associated with a brand including purchase and consumption. Brakus, Schmitt, and Zarantonello (2009) developed scales to measure a consumer’s experience with a commercial brand. The author used this as a guide to
create scales that are more appropriate for use in the sport-team context. A 6-item scale was used to ask respondents to what extent the statements reflect their use of their favorite team’s mobile app on a 7-point semantic differential scale (i.e. The [team] app makes me feel connected with the [team] fans; The [team] app allows me to be involved with the team).

Fan identification. Fan identification is operationalized as the psychological connection a fan has to a sports team resulting in behaviors that reflect their commitment to the team (Sutton et al., 1997; Wann, 2006). Fan identification was measured as a continuous variable using a 5-item scale adopted from Wann and Branscombe’s (1993) fan identity scale. Respondents were asked to indicate the extent the items related to their feelings toward their favorite team on a 7-point Likert scale (i.e. How strongly do you see yourself as a fan of [team]; How often do you display the [team] logo at your place of work, where you live, on your clothing).

Group experience. Group experience is one of the service-place market characteristics hypothesized to increase social identification with a sports team. Community group experience indicates that the team serves as a symbol for the community and for salient group experience the sports team is considered a conduit for socializing with a reference group. This study adopts Boyle and Magnusson’s (2007) measures for community group experience. The 3-item scale asks respondents to what extent they agree/disagree with the statements on a 7-point Likert scale (i.e. It’s hard to think about the city of [team city] without thinking about the [team]; It’s more important for me to have fun with a group of people at a game than for the [team] to win).

History and tradition, venue, and ritual. The SIBE model assumes that by manipulating service-place market characteristics (group experience, history and tradition, venue, and ritual), a sport brand can increase social identification among organization members. Survey items measuring history and tradition, venue, and ritual were adopted from Boyle and Magnusson (2007).
Respondents were asked to complete the 9-item scale by indicating to what extent they agree/disagree with the statements on a 7-point Likert scale (i.e. I have a lot of great memories from events I attended at [facility]; The rich tradition of [team] is something you don’t find at most other places; My participation in [team] game rituals is important to the success of the team).

_Social media use._ Social media use is incorporated into the SIBE model into the current study. Sports fans use of Twitter and mobile apps are hypothesized to have a positive influence on brand relationship and brand experience, which will have a positive effect on brand equity. Measures were adopted from Wallace, Giese, and Johnson (2004) where respondents were asked to indicate to what extent the items related to their feelings toward using Twitter and mobile social media to connect with the sport team on a 7-point Likert scale (i.e. Following the [team] on Twitter means a lot to me, is a valuable use of my time, is appealing to me, and so on).

_Demographic and technographic information._ Basic demographic and technographic information about the respondents was collected. Demographic information includes age, gender, and race. Technographic information includes technology devices used and time spent downloading and using mobile apps (“Which, if any, of the following devices do you currently own and personally use?”; Approximately how many apps have you downloaded on your portable devices, e.g. iPad, iPhone, Android smartphone, Android tablet?”; “Approximately what percentage of the apps that you have downloaded do you actually use on a regular basis. Please enter a number in the space provided”; “Approximately how often do you use apps (anything other than email and phone) on all of your app-enabled devices (select one answer)?”).
Pretest

A pretest was conducted to verify the appropriateness of the scales used in the survey. The pretest was conducted from December to January and social media, particularly Facebook, was used to recruit participants. A total of 36 surveys were completed. According to Qualtrics, the average time to complete the survey was eight minutes, which indicated that the survey could be completed by the target time of 10 minutes. Respondents answered all items on the survey.

An open-ended question on the pretest survey allowed respondents to provide feedback for improving the instrument. The only suggestion from respondents was to include more page breaks to separate sections of the survey. At the time of the pretest, the Boston Celtics were included as a team that did not have apps; however before data collection began in January the team released an app and was replaced with the Memphis Grizzlies. The only other changes made to the survey from the pretest were technical – adjusting the skip logic and adding IRB mandated consent forms.

Reliability

The scales used in this study were all adopted from existing studies and are commonly accepted as reliable. Reliability for each scale was calculated using Cronbach’s alpha scores. All scales were above the acceptable level between .80 and .90. Reliability scores are as follows: group experience = .82, history = .80, venue = .80, ritual = .87, fan identification/social identification = .89, twitter involvement = .94, mobile apps involvement = .95, brand relationship = .95, brand experience = .99, and brand equity = .88. Table 1 summarizes measurement items and scale reliability.
Table 1. Scale Reliability

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\alpha$</th>
<th>$N$ items</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group experience</td>
<td>0.82</td>
<td>3</td>
<td>Boyle &amp; Magnusson (2007)</td>
</tr>
<tr>
<td>History</td>
<td>0.80</td>
<td>3</td>
<td>Boyle &amp; Magnusson (2007)</td>
</tr>
<tr>
<td>Venue</td>
<td>0.80</td>
<td>3</td>
<td>Boyle &amp; Magnusson (2007)</td>
</tr>
<tr>
<td>Ritual</td>
<td>0.87</td>
<td>3</td>
<td>Boyle &amp; Magnusson (2007)</td>
</tr>
<tr>
<td>Fan Identification</td>
<td>0.89</td>
<td>5</td>
<td>Wann &amp; Branscombe (1993)</td>
</tr>
<tr>
<td>Twitter Involvement</td>
<td>0.94</td>
<td>10</td>
<td>Wallace, Giese, &amp; Johnson (2004)</td>
</tr>
<tr>
<td>Mobile App Involvement</td>
<td>0.95</td>
<td>10</td>
<td>Wallace, Giese, &amp; Johnson (2004)</td>
</tr>
<tr>
<td>Brand Relationship</td>
<td>0.95</td>
<td>5</td>
<td>Hsiegh, Chiu, &amp; Chiang (2005)</td>
</tr>
<tr>
<td>Brand Experience</td>
<td>0.99</td>
<td>6</td>
<td>Brackus, Schmitt, &amp; Zarantonello (2009)</td>
</tr>
<tr>
<td>Brand Equity</td>
<td>0.88</td>
<td>8</td>
<td>Yoo &amp; Donthu (2001); Aaker (1991); Boyle &amp; Magnusson (2007);</td>
</tr>
</tbody>
</table>

**Analysis**

Structural equation modeling (SEM) was used to analyze the data for its ability to specify direct and indirect relationships among variables and the variance present in the model (Schumacker & Lomax, 1996). SEM revalues relationships between latent and observed variables (Schumacker & Lomax, 1996). Reinard, (2006) defines latent variables as “underlying factors or dimensions that are not observed directly” (p. 452). As Schumaker and Lomax (1996) suggest, “given the importance of establishing relationships among theoretical constructs, structural equation models have become widely used in the social and behavioral sciences,” (p.
The current study investigates the relationships among latent variables (social identification, use of social media, brand relationships and brand experiences) on brand equity.

The proposed model (Figure 2) was analyzed using SPSS 21.0 to determine descriptive statistics and AMOS version 20.0 to analyze the model. The AMOS program allows researchers to create a diagram of the proposed model and analyze the relationships among variables in the model (Reinard, 2006). AMOS is appropriate for use in theory-testing models, such as the current study, rather than as a theory exploration tool (Reinard, 2006).

Research question one investigates the influence of the service-place market characteristics on social identification. A multiple regression analysis was conducted using SPSS 21.0 to answer this question.
CHAPTER 5

RESULTS

Sample

Participants were recruited using the social networking sites Twitter and Facebook. Messages were posted on each team’s Facebook page asking fans to participate in an online survey. Similarly, messages were posted on Twitter using hashtags as identifiers (i.e. #NBA or #Mavs) and Twitter handles for each team (i.e. @NYKnicks). Using social media to recruit NBA fans to participate in the survey was a logical choice given the goal of the study is to investigate the influence of social media on NBA teams. To ensure an adequate sample for the survey while maintaining generalizability, contact was made with individuals living in areas where the teams were located to help distribute the survey among fans.

A total of 240 surveys were completed and used in the analysis. The mean age of respondents was 22 years old ($SD = 5.266$ years), with a reported range from 19 to 59 years old. The gender of respondents was nearly even with 50.4 percent of respondents was male ($n = 121$) and 49.6 percent were female ($n = 119$). The race of respondents was as follows: Asian ($n = 12$, 5 percent), African American ($n = 30$, 12.5 percent), Hispanic ($n = 13$, 5.4 percent), Native American ($n = 1$, .4 percent), White/Caucasian ($n = 181$, 75.4 percent), and 1.3 percent of the sample indicated a race other than listed ($n = 3$). According to Scarborough Research (2012), NBA fans are 69 percent more likely to be men ages 18-34. The research company also notes that NBA fans are: 36 percent more likely to be White/Caucasian, 53 percent more likely to be African American, 38 percent more likely to be Hispanic, and 46 percent more likely to be Asian.
Among the three teams examined in the study, the majority of respondents were fans of the Miami Heat \((n = 163, 67.9\text{ percent})\) followed by the Dallas Mavericks \((n = 42, 17.5\text{ percent})\) and the New York Knicks \((n = 35, 14.6\text{ percent})\). The Miami Heat is the reigning NBA champion and at time of data collection was on a 23-game winning streak, one of the longest streaks in NBA history. The Dallas Mavericks have been experiencing a down season and during data collection were below .500. After a solid start and being ranked second in the NBA Eastern conference standings, the injury-plagued Knicks have been on a downward slide. To some extent, this disparity in team success could account for the uneven response rate.

Respondents were asked to rate themselves as a fan of their favorite team on a scale of one to seven with one being not much of a fan and seven being a highly involved fan. The mean score for this item was 4.11 \((SD = 1.755)\) indicating that majority of respondents identified themselves moderately as fans of the team.

**Media Use**

To better understand the media and technology use of respondents, questions were included on the survey that asked about the different types of media they used to follow the team and general technology use. The majority of the sample followed the team by watching television \((n = 228, 95\text{ percent})\). Among popular social media outlets, 48.8 percent of respondents used Twitter to follow their favorite team \((n = 117)\) followed by Facebook \((n = 66, 27.5\text{ percent})\) and YouTube \((n = 33, 13.8\text{ percent})\). For mobile app users, only 8.8 percent of the sample said they used the team-sponsored mobile app to keep up with the team \((n = 21)\). Table 2 summarizes these findings.
Table 2. Media Use to Follow Team

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV</td>
<td>228</td>
<td>95</td>
</tr>
<tr>
<td>Team Twitter</td>
<td>117</td>
<td>48.8</td>
</tr>
<tr>
<td>Team Facebook</td>
<td>66</td>
<td>27.5</td>
</tr>
<tr>
<td>Team Website</td>
<td>55</td>
<td>22.9</td>
</tr>
<tr>
<td>Radio</td>
<td>48</td>
<td>20</td>
</tr>
<tr>
<td>Team YouTube</td>
<td>33</td>
<td>13.8</td>
</tr>
<tr>
<td>Team Mobile App</td>
<td>21</td>
<td>8.8</td>
</tr>
<tr>
<td>Team Text Message</td>
<td>6</td>
<td>2.5</td>
</tr>
<tr>
<td>Team Instagram</td>
<td>5</td>
<td>2.1</td>
</tr>
<tr>
<td>Team Blog</td>
<td>4</td>
<td>1.7</td>
</tr>
<tr>
<td>Team MySpace</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Team Google+</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Fan Forums/Chat</td>
<td>1</td>
<td>0.4</td>
</tr>
</tbody>
</table>

The proposed model explores the social media use among NBA fans, specifically Twitter and mobile apps. For the teams under investigation, Dallas Mavericks, Miami Heat, and New York Knicks, Table 3 breaks down social media use by team.

Table 3. Social Media Use by Team

<table>
<thead>
<tr>
<th></th>
<th>Twitter</th>
<th>Mobile App</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dallas</td>
<td>23</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>16.9</td>
<td>34.8</td>
</tr>
<tr>
<td></td>
<td>97</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>71.3</td>
<td>56.5</td>
</tr>
<tr>
<td>New York</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>11.8</td>
<td>8.7</td>
</tr>
</tbody>
</table>

Use of App-Enabled Devices

The technology used by most respondents in the survey was the iPhone ($n = 187$, 77.9 percent) followed by the iPad tablet ($n = 83$, 34.6 percent). Among Android users, 15.8 percent used an Android smart phone ($n = 38$) and 4.2 percent used the Android tablet ($n = 10$). Less than five percent of respondents indicated use of an e-reader device. Table 4 summarizes these findings.
Table 4. Technology Use

<table>
<thead>
<tr>
<th>Technology</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPhone</td>
<td>187</td>
<td>77.9</td>
</tr>
<tr>
<td>iPad tablet</td>
<td>83</td>
<td>34.6</td>
</tr>
<tr>
<td>Android smartphone</td>
<td>38</td>
<td>15.8</td>
</tr>
<tr>
<td>Kindle e-reader</td>
<td>11</td>
<td>4.6</td>
</tr>
<tr>
<td>Nook e-reader</td>
<td>11</td>
<td>4.6</td>
</tr>
<tr>
<td>Android tablet</td>
<td>10</td>
<td>4.2</td>
</tr>
<tr>
<td>Kindle Fire e-reader</td>
<td>8</td>
<td>3.3</td>
</tr>
<tr>
<td>Blackberry smartphone</td>
<td>4</td>
<td>1.7</td>
</tr>
<tr>
<td>Blackberry tablet</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>None</td>
<td>2</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Specific to app usage, respondents were asked how many apps they have downloaded and use on their app-enabled devices. Fifty-five percent indicated they have downloaded between 10 and 25 apps \( (n = 131) \) and 25.8 percent indicated they have downloaded over 25 apps on their device \( (n = 62) \). The majority of respondents said they used their apps on a daily basis \( (n = 187, 77.9\% ) \).

*Multiple Regression Results*

A multiple regression analysis was conducted to answer RQ1, which provided an independent assessment of the influence of service-place market (group experience, venue, history and tradition, and ritual) characteristics on social identification (measured as fan identification in this study). Data collected from six teams, (Dallas, Miami, New York, Oklahoma City, San Antonio, and Memphis) were used to provide an in-depth analysis.

A standard multiple regression analysis was conducted between the fan identification (dependent variable) and group experience, ritual, venue, and history (independent variables) to determine the extent to which each of the service-place market characteristics predict one’s identification with a sports team. The analysis revealed the model significantly predicted fan
identification with a sports team $F(4, 379) = 54.433, p < .001$. R$^2$ for the model was .36, and adjusted R$^2$ was .35. Table 5 displays the results of the regression analysis.

In response to RQ1, which asks to what extent each of the service-place market characteristics influences social identification (fan identification), further examination of the variables indicates that group experience ($t = 5.93, p < .001$), venue ($t = 3.938, p < .001$), and history ($t = 1.989, p < .05$) each significantly predicted fan identification with a team. The standardized coefficients indicate that group experience ($\beta = .298$) is a stronger predictor of fan identification than venue ($\beta = .226$) and history ($\beta = .111$).

Table 5. Predicting Fan Identification ($N = 384$)

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>B</th>
<th>SE B</th>
<th>$\beta$</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Experience</td>
<td>.145</td>
<td>.024</td>
<td>.298***</td>
<td>4.99</td>
<td>1.51</td>
</tr>
<tr>
<td>Venue</td>
<td>.099</td>
<td>.025</td>
<td>.225***</td>
<td>4.33</td>
<td>1.69</td>
</tr>
<tr>
<td>History</td>
<td>.053</td>
<td>.027</td>
<td>.111*</td>
<td>4.34</td>
<td>1.54</td>
</tr>
<tr>
<td>Ritual</td>
<td>.046</td>
<td>.024</td>
<td>.105</td>
<td>3.48</td>
<td>1.68</td>
</tr>
</tbody>
</table>

*Note. Total R$^2 = .36. F(4, 379) = 53.433, p < .001.*

$p < .05$, *** $p < .001$.

A second standard multiple regression analysis was conducted using brand equity as the dependent variable and the service-place market characteristics and fan identification as predictors (independent variables). The analysis revealed that the model significantly predicted brand equity for a sports team, $F(5, 378) = 82.324, p < .001$. R$^2$ for the model was .52, and adjusted R$^2$ was .51. Table 5 displays the results of this analysis.

Further examination revealed group experience ($t = 6.574, p < .001$), venue ($t = 3.629, p < .001$), and fan identification ($t = 9.065, p < .001$) to be significant predictors of brand equity. Fan identification was the strongest predictor of brand equity ($\beta = .403$) followed by group experience ($\beta = .299$) and venue ($\beta = .184$).
Table 6. Predicting Brand Equity (N = 384)

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan Identification</td>
<td>.618</td>
<td>.068</td>
<td>0.403***</td>
<td>4.11</td>
<td>0.73</td>
</tr>
<tr>
<td>Group Experience</td>
<td>.223</td>
<td>.034</td>
<td>0.299***</td>
<td>4.99</td>
<td>1.51</td>
</tr>
<tr>
<td>Venue</td>
<td>.123</td>
<td>.034</td>
<td>0.184***</td>
<td>4.33</td>
<td>1.69</td>
</tr>
<tr>
<td>History</td>
<td>.043</td>
<td>.035</td>
<td>.059</td>
<td>4.34</td>
<td>1.68</td>
</tr>
<tr>
<td>Ritual</td>
<td>-.061</td>
<td>.032</td>
<td>-.092</td>
<td>3.48</td>
<td>1.68</td>
</tr>
</tbody>
</table>

*Note.* Total R² = .52. *F*(5, 378) = 82.324, *p* < .001.

*** *p* < .001.

Related to results of the previous analysis, of the four service-place market characteristics, group experience and venue were found to be significant predictors of both fan identification and brand equity. History was found to be a significant predictor of fan identification with a sports team. These findings support the original SIBE model in that fan identification (social identification) was found to have a strong, significant influence on a team’s brand equity. The model also attempts to suggest antecedents of social identification; in this analysis support was provided for three of those predictors – group experience, venue, and history. Support was not found for participating in team rituals as a predictor of social identification.

The emphasis placed on history varies by team as some teams are more steeped in tradition than other teams. For instance, in this study the New York Knicks are among the oldest teams in the league and therefore have a more robust history than the Oklahoma City Thunder, the league’s newest addition. Boyle and Magnusson (2007) assert that team rituals also vary by team, thus making a generalizable analysis of team rituals can be challenging in this type of research. The finding that group experience and venue have potential to positively influence social identification with a sports team provide sport team brand managers for a starting point in
developing strategies to increase identification among fans of the team. See figure 3 and 4 for a summary of the multiple regression analysis on the SIBE model.

Figure 3. Service-place market characteristics on social identification

Dotted lines indicate nonsignificant paths.

Figure 4. Results of SIBE analysis

Dotted lines indicate nonsignificant paths.
SEM Results

Table 7 displays the correlation matrix and descriptive statistics for all of the variables in the model. A Pearson correlation was used to assess the relationship among model variables. The total number of cases was 240.

Table 7. Correlation Coefficients and Descriptive Statistics for Observed Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Equity</td>
<td>.643**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan</td>
<td></td>
<td>.603**</td>
<td>.518**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification</td>
<td></td>
<td>.413**</td>
<td>.547**</td>
<td>.374**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Experience</td>
<td></td>
<td>.524**</td>
<td>.540**</td>
<td>.565**</td>
<td>.626**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venue</td>
<td></td>
<td>.297**</td>
<td>.505**</td>
<td>.290**</td>
<td>.610**</td>
<td>.514**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History</td>
<td></td>
<td>.261**</td>
<td>.399**</td>
<td>.163*</td>
<td>.245**</td>
<td>.192**</td>
<td>.346**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ritual Twitter</td>
<td></td>
<td>.142*</td>
<td>.266**</td>
<td>.108</td>
<td>.234**</td>
<td>.233**</td>
<td>.277**</td>
<td>.151*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Involvement App</td>
<td></td>
<td>.005</td>
<td>.231**</td>
<td>.837</td>
<td>.226**</td>
<td>.088</td>
<td>.380**</td>
<td>.292**</td>
<td>.151*</td>
<td></td>
</tr>
<tr>
<td>Brand Relationship</td>
<td></td>
<td>.180**</td>
<td>.293**</td>
<td>.140*</td>
<td>.242**</td>
<td>.244**</td>
<td>.294**</td>
<td>.155*</td>
<td>.064</td>
<td>.125</td>
</tr>
<tr>
<td>Brand Experience</td>
<td></td>
<td>5.70</td>
<td>4.22</td>
<td>11.31</td>
<td>4.10</td>
<td>4.34</td>
<td>3.31</td>
<td>1.95</td>
<td>0.34</td>
<td>1.86</td>
</tr>
<tr>
<td>M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td>1.12</td>
<td>1.56</td>
<td>3.54</td>
<td>1.64</td>
<td>1.44</td>
<td>1.60</td>
<td>1.81</td>
<td>1.08</td>
<td>1.37</td>
</tr>
<tr>
<td>No. of valid cases</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

Goodness-of-Fit

Before examining hypotheses associated with the model, the goodness-of-fit between the model and the data must be determined (Byrne, 2010). AMOS offers several options for determining fit for the model. The chi-square goodness-of-fit statistic is used to determine the fit of the model. A good fit is indicated by a nonsignificant chi-square value (Ki & Hon, 2007). Two commonly reported fit indexes include root mean square error (RMSEA) and standardized root
A model is considered a good fit if the RMSEA is less than .60 and SRMR is less than .09 (Ki & Hon, 2007).

Goodness-of-fit, adjusted goodness-of-fit and baseline comparisons also indicate the model reasonably fits to the data. The goodness-of-fit index (GFI) is a measure of the amount of variance and covariance in a sample and adjusted goodness-of-fit (AGFI) adjusts for the degrees of freedom specified in the model (Byrne, 2010; Schumacker & Lomax, 1996). A model is considered to be a good fit when these values are close to 1.00. Baseline comparisons compare the model to a baseline (Reinard, 2006). Baseline comparisons include the commonly used Normed Fit Index (NFI), Tucker-Lewis Index (TLI), and Comparative Fit Index (CFI). For a model to be considered to have a good fit the NFI, TLI, and CFI should have values above .90, where a value of 1 indicates a perfect fit (Schumacker & Lomax, 1996; Reinard, 2006).

A model is considered to be an acceptable fit if the NFI, GFI, and CFI are within acceptable limits (Byrne, 2010). Marsh and Hocevar (1985) suggest a chi square ratio less than five is acceptable; therefore, the Chi-square analysis indicated a good fit for the data $\chi^2/df = 3.875$. The overall goodness-of-fit indices provide additional support for model fit. The values for RMSEA and SRMR do not fit the data (RMSEA = .11 and SRMR = .221) but the other indexes; GFI, AGFI, NFI, TLI, and CFI all indicate an acceptable fit for the data (see Table 8). The modification index did not reveal any methods for improving the paths in the model. Byrne (2010) suggests the model is a good fit if the NFI, GFI, and CFI are within the acceptable limits; therefore, the model is considered to be a good fit.
Table 8. Goodness-of-Fit Indexes: SEM

<table>
<thead>
<tr>
<th>Goodness-of-Fit Index</th>
<th>SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square (df)</td>
<td>112.377 (29)</td>
</tr>
<tr>
<td>RMSEA &lt; .06</td>
<td>0.11</td>
</tr>
<tr>
<td>SRMR &lt; .09</td>
<td>0.221</td>
</tr>
<tr>
<td>GFI (close to 1.00)</td>
<td>0.922</td>
</tr>
<tr>
<td>AGFI (close to 1.00)</td>
<td>0.852</td>
</tr>
<tr>
<td>NFI &gt; .8</td>
<td>0.915</td>
</tr>
<tr>
<td>TLI (close to 1.00)</td>
<td>0.899</td>
</tr>
<tr>
<td>CFI &gt; .90</td>
<td>0.935</td>
</tr>
</tbody>
</table>

Testing the SIBE Model

Results of the structural equation model are reported in Figure 5. H1a-d suggested group experience, history and tradition, venue, and history would have a positive influence on social identification. According to the analysis only group experience, venue, and ritual were found to have a significant influence on social identification (group experience $\beta = .35$; venue $\beta = .27$; and ritual $\beta = .24$; $p < .001$). Contrary to the assumption of the SIBE model, history did not have a significant influence on social identification in this model, thus the data did not support hypothesis 1b. Group experience was found to have the strongest influence on social identification ($\beta = .35$, $p < .05$). The SIBE model also posits that social identification will have a positive influence on brand equity (H1e); which was also supported in this model ($\beta = .67$, $p < .001$).

Social identification was hypothesized to have a positive influence on social media use, specifically Twitter (H2a) and team sponsored mobile apps (H2b). Findings from this analysis support these hypotheses with social identification having a positive influence on Twitter ($\beta = .40$, $p < .001$) and mobile apps use ($\beta = .27$, $p < .001$). Results indicate that social identification
has a stronger influence on Twitter use than use of mobile app. Figure 5 displays the results of
the SEM analysis.

*Social Media and Brand-Related Consequences*

A goal of this study was to identify brand-related consequences of social media involvement among identified sports fans. Twitter was hypothesized to have a positive influence on one’s perception of their relationship with the brand (H3a) and a direct influence on a team’s brand equity (H3b). Results of the SEM analysis supported H3a ($\beta = .29, p < .001$) but not H3b. There was not a significant direct relationship between using Twitter and a sports team’s brand equity. Similarly, mobile apps were predicted to influence a fan’s experience (H4a) with the sports brand and have a direct influence on a team’s brand equity (H4b). Like Twitter, the SEM analysis revealed mobile apps to have a positive influence on brand experience ($\beta = .94, p < .001$) but not directly on brand equity (see figure 5).

*Influence of Brand Relationships and Brand Experience*

The model hypothesized positive relationships between brand equity and brand relationships (H3c) and brand experience (H4c). Findings from the SEM analysis support H3c, brand relationships were found to have a significant but weak influence on brand equity ($\beta = -.15, p < .05$) but no significant relationship was found between brand experience and brand equity; therefore H4c was not supported. Finally, the model predicted that brand experience would have a positive influence on the fan’s relationship with the sports brand (H5). This hypothesis was not supported by the results of the SEM analysis (see figure 5).
Figure 5. Final Model

Results of Structural Equation Model. Dotted lines indicate nonsignificant paths. The numbers in parentheses indicate standardized error.

***p < .01
**p < .05
CHAPTER 6
DISCUSSION

Examining the Goals of the Study

The goals of this study were to (1) empirically test the SIBE model and assess the strength of the relationship among the antecedents of social identification; (2) evaluate the role of social media involvement, particularly Twitter and team mobile apps, on brand-related consequences; and (3) evaluate the influence of brand relationship and brand experience on customer-based brand equity.

Empirically test the SIBE model. The SIBE model for sports branding provides a framework for identifying antecedents of social identification with a professional sports team; however, to date there are few published studies that further examine the assumptions of this model. A goal of this study was to empirically test this model and assess the strength of relationships among the proposed antecedents of social identification (group experience, history and tradition, venue, and ritual). The model proposes that social identification will have a positive influence on customer-based brand equity. This study investigates the SIBE model with two analyses – first the original model was tested within the framework of the model under investigation and second the SIBE model was tested independently using data collected from teams that offer a mobile app (used for examining the model) and teams that do not offer a mobile app for fans (not used in the model under investigation) using regression analysis.
The SIBE model hypothesizes that group experience (H1a), history and tradition (H1b), venue (H1c), and ritual (H1d) will have a positive influence on social identification. Support was found for group experience, venue, and ritual as antecedents of fan identification using the SEM analysis. Support was not found for history and tradition. Among these variables, the model showed group experience to have the most influence on social identification, albeit the correlation was moderate ($\beta = .35$). Venue and ritual resulted in relatively similar but weak influences on social identification ($\text{venue } \beta = .27; \text{ ritual } \beta = .24$). These findings indicate that among NBA fans in this sample, the experience of being part of a group of fans is more likely to lead one to socially identify with fans.

Practically, for NBA brand managers, more effort should be made to enhance the fan’s experience as a member of a group to increase social identification with a sports team, which as this study supports has a strong influence on a sports team’s customer-based brand equity ($\beta = .67$). Providing fans with outlets to connect with other fans, such as hosting watch parties for away games or hosting pre-game meet and greet sessions with players and coaches can enhance a fan’s experience of going to the game and allow them to socialize with other fans increasing their identification with other fans. Teams should also consider using social media to enhance fan experience by creating apps that allow for fan identification or providing outlets for fans to meet online to chat during games.

Boyle and Magnusson (2007) conducted a similar study that investigated the antecedents of social identification among three groups of sports fans of a collegiate basketball team – alumni, students, and the general public. For group experience, their results indicated similar results; community group experience had a significant influence on social identification among students ($\beta = .34, p < .01$) but did not have a significant influence among alumni and the public.
However, the strength of this relationship is similar to the findings of the current study. Contrary to the findings of the current study, history was found to have a significant influence on social identification among alumni ($\beta = .37, p < .01$) and the general public ($\beta = .36, p < .01$). Venue was found to have the least support among the variables, only the general public found the venue to be a significant influence on social identification ($\beta = .18, p < .05$).

A number of factors could contribute to the seemingly contradictory findings of each of these studies as it relates to identifying antecedents of social identification among sports fans. Boyle and Magnusson (2007) examined these characteristics in the context of collegiate sports among three groups of fans; the current study investigated these characteristics using NBA teams as a context for the study. Unlike the Boyle and Magnusson (2007) study, the current project did not differentiate between types of fans. The difference in the findings for separate research settings indicates that this model may be limited in its generalizability among different sports. Brand managers for collegiate basketball teams may not be able to apply the same service-place market characteristics as professional basketball teams in increasing social identification. While both studies provide strong empirical support for group experience as an antecedent of social identification, the other characteristics may not be generalizable to other sports teams.

Research question one, which determined the extent to which the service-place market characteristics influenced social identification, was analyzed using multiple regression analysis. This analysis incorporated data collected for six teams – Dallas Mavericks, Miami Heat, New York Knicks, Memphis Grizzlies, Oklahoma City Thunder, and San Antonio Spurs. The analysis revealed that overall, the service-place market characteristics were a significant predictor of social identification and group experience, venue, and history were found to be significant predictors individually. Therefore, according to these results, to increase identification with a
team, management and public relations need to develop strategies that further enhance the experience of being a fan of the team as well as celebrate the venue in which the team plays. Additionally, communicating the team’s history with fans, especially younger fans, is important in terms of developing a bond between fan and team.

Further analysis of the total SIBE model using this second data set provided additional support for the model. Group experience, venue, and social identification were found to be significant predictors of a sports team’s customer-based brand equity. Again, these findings along with the SEM analysis reiterate the importance of creating a positive group experience within the context of being a fan of a sport team. Additionally, the regression analysis also suggests that the team’s home venue be utilized within the branding strategy to increase identification with the team. Teams can host open house events or private tours of the stadium to provide fans with an insider’s perspective on the inner workings of the arena.

The regression analysis did not find ritual to be a significant predictor for either outcome (social identification or brand equity) nor was history and tradition found to be a significant predictor of brand equity. These variables are highly team-specific and therefore may not contribute to a generalizable model. Future research concentrating on fans of one team could provide more insight into the influence of ritual and tradition on both fan identification and a team’s brand equity.

Specifically, speaking to the lack of support for history as an antecedent in the model, teams differ in the importance of history to the team identification. Among the three teams in this model – Dallas Mavericks, Miami Heat, and New York Knicks – the Knicks are the oldest team (founded in 1946) followed by the Mavericks (founded in 1980) and the Heat (founded in 1988). In terms of longevity, the Heat and Mavericks have only been in the league for around 25 years
(NBA, 2013). In terms of championships, the Dallas Mavericks have one title, the Miami Heat have two titles won in the last ten years and the New York Knicks are also two-time champions, but those titles came in the 1970s. Contrast that to other teams with more historical significance – the Boston Celtics (founded in 1946) who have won 17 championships and the Los Angeles Lakers (founded in 1960) who have won 16 championships (NBA, 2013). While the Knicks can certainly be grouped with teams like the Celtics and Lakers in terms of longevity, they have not experienced the same type of success. Similarly, the Mavericks and Heat are among the “younger” teams in the league, but have experienced considerably more on the court success than the Knicks. The Mavericks and the Heat share a combined three championships in their 25-year existence, each championship occurring in the last ten years. The Knicks have won two titles, but these occurred during the 1970s, which is before the majority of respondents in this survey were born (mean age of respondents is 22).

With the exception of group experience, the service-place market characteristics identified in the SIBE model are likely to vary among teams. Each team is going to have its own individual history – from its founding to star players to success of the team. Some teams are more likely to have historical significance than others (i.e. the Boston Celtics are more entrenched in the history of the NBA than say the Dallas Mavericks). As Boyle and Magnusson (2007) suggest, rituals are highly specific to individual teams with some teams placing more emphasis on involving fans in team rituals than others. Another consideration for this model is the corporate naming of sports stadiums and venues. Among teams in the sample, only the New York Knicks play in a venue with an independent name – Madison Square Garden. The Heat play in the American Airlines Arena and the Dallas Mavericks play in the American Airlines
Center. Given that two different teams both play in a building named for corporate sponsor American Airlines, identifying with a team based on where they play can be a challenge.

Identifying these features for individual teams can have practical implications for sports brands. Teams that find a higher correlation with history should emphasize their history with their fans. This can be accomplished by creating a YouTube channel with footage from the team’s more significant games or by creating a communication plan that emphasizes the team’s history to its fans. However, as previously discussed, this is going to be highly team-specific and therefore limits the generalizability of this model to sports in general.

Results from the model analysis supported H1e, social identification was found to be a significant predictor of brand equity for the team. The results of the SEM analysis revealed social identification to have a strong influence on customer-based brand equity ($\beta = .67, p < .01$). The brand equity of the team is likely to increase as one sees himself or herself as connected to the team (Boyle & Magnusson, 2007). This connection with the team can facilitate an emotional loyalty to the team, which as Underwood et al., (2001) note is an important first step in developing a strong consumer-brand relationship. Wann and Branscombe (1993) note that highly identified fans are more likely to generate revenue for the team through ticket and merchandise sales. Given that social identification with a sports team can have a positive influence on the team’s brand equity, it is important for teams to determine ways that they can convert casual fans to highly identified fans.

One strategy sports teams could utilize is to enhance the feelings of group belonging among sports fans. The current study did find strong support for group experience as an antecedent for social identification. Branscombe and Wann (1991b) suggest fan identification provides an individual with a sense of belonging and therefore an increase in self-esteem.
According to Donavan et al. (2005) that sense of belonging with an organization provides an individual with a “psychological ownership” with the team. Teams can use social media to facilitate these feelings of group belonging among fans. The Dallas Mavericks host their own social networking page for fans of the team (www.friends.mavs.com) where fans must answer a series of questions about the team before being granted a profile on the site. Once a fan gains admission to the site, they are able to discuss the team or upcoming games with other fans (or MFFLs as they call themselves). Additionally, Carlson and Donavan (2008) suggest that identifying with an athlete on the team leads to increased social identification with a team. Using social media, a sports team can host a special Twitter chat with one of their star players for fans to engage with the player. Social media provides sports teams with limitless opportunities for connecting fans and engaging them with the team and players. As the current study demonstrates, this can have a positive influence on social identification and ultimately the customer-based brand equity of the team.

The current project advances the research on sports branding by providing support for the SIBE model. The SIBE model makes two contributions to the research on sports branding: (1) identifies antecedents of social identification and (2) posits that social identification is a predictor of brand equity. Based on the results of both analyses related to the SIBE model, the current study supports emphasizing one’s experience as a part of the group as an antecedent of social identification. While limited support was found for the other antecedents, group experience was consistently found to be a predictor of social identification with the team. Additionally, this current project advances the SIBE model by providing strong support for social identification as a predictor of brand equity.
Sports branding represents a relatively new area of research and currently there are few models of sports branding available in the literature (see Gladden, Milne, & Sutton, 1998 and Ross, 2006). Based on the findings of the current research project, the next step for sports branding research should build around social identification. The more one identifies with a sports team, the more the team is integrated into their identity thus enhancing the emotional connection between the fan and team (Underwood et al., 2001). In terms of relationship marketing, establishing an emotional connection between the consumer and the brand is an integral part of the relationship building process (Berry, 2000). Results of the analysis in the current project found social identification to have a positive influence on the likelihood of using social media and directly on brand equity. Thus, social identification should be a key component of future sports branding theory development.

Evaluating the brand-related consequences of social media use. The SIBE model suggests antecedents of social identification that can lead to an increase of customer-based brand equity. Identified sports fans are more likely to go online to follow their favorite team. Therefore, social identification is hypothesized to have a positive influence on social media use among sports fans, specifically use of Twitter (H2a) and team sponsored mobile apps (H2b). Phua (2010) found that participating in online media had a positive influence on fan identification. Studying social media use among sports fans has been a burgeoning area of research. The current study contributes to this literature by identifying specific brand-related consequences of using social media. The two-way dialogic capability of Twitter enables brands and consumers to interact on an interpersonal level (Smith, 2010). H3a hypothesized that Twitter would have a positive influence on a fan’s relationship with the sports brand. According to Kaplan (2012), mobile apps provide high levels of interaction that facilitate the creation of a shared experience.
between the user and the brand. Mobile brands create unique brand experience for users (Arvidsson, 2006) that leads to positive brand associations. The current study hypothesizes that mobile apps will have a positive influence on a fan’s experience with the sports team (H4a). Additionally the current model hypothesizes that Twitter (H3b) and mobile apps (H4b) will have a direct influence on a team’s customer-based brand equity.

Results of the analysis support the social media use hypotheses, social identification had a positive influence on use of Twitter (H2a) and mobile apps (H2b). According to the model, social identification had a stronger influence on using Twitter ($\beta = .40, p < .01$) than mobile apps ($\beta = .27, p < .01$). This difference can be attributed to the rate of adoption between Twitter and mobile apps. A recent study by the Pew Center’s Internet and American Life project found that 16 percent of online adults have created an account on Twitter, mainly among 18-29 years olds (Duggan & Brenner, 2013), a demographic that was highly represented in this sample. Use of the social networking site, Twitter, has grown steadily since 2010 (Smith & Brenner, 2012). Uses of mobile devices that allow consumers to use mobile apps have recently reached critical mass on a global scale (Nielsen Company, 2013). A recent report by the Nielsen Company (2013) on the use of mobile devices found 62 percent of Americans use applications on their smartphones with games and social networking apps ranking as the most popular apps downloaded. While use of mobile apps is growing at a rapid rate, trends and preferences for using these devices are still developing. As the use of apps become more stable and as sport teams develop more sophisticated apps, the influence of social identification on mobile apps may increase. Future research should monitor the changes in mobile app development and its influence on brand equity.
One of the primary goals of the current study was to identify brand-related consequences for use of social media. Researchers have cited that social media can be an effective tool for developing consumer-brand relationships and increasing customer-based brand equity, but to date there have been no published studies that have posited specific brand outcomes of social media use. Based on a review of literature on social media, the current study hypothesizes that use of Twitter will lead to a positive perception of a consumer’s relationship with the sport brand (H3a). Brands build relationships with consumers by providing unique, personalized messages to consumers (Simmons, 2007), which can be accomplished using the two-way dialogic capabilities of Twitter (Kaplan & Haenlein, 2011b; Kwon & Sung, 2011). The use of mobile apps is hypothesized to have a positive influence on a consumer’s experience with the brand (H4a). Creating a unique brand experience for consumers is important in generating positive brand perceptions (Cliffe & Motion, 2005). Mobile apps often act as a mobile extension of the team – providing users with a centralized source for information, a platform for interacting with other fans, and connecting with the team. Through these features, mobile apps provide unique brand experiences for the consumer (Kaplan, 2012).

Results of the analysis provide support for each of these hypotheses. Twitter was found to have a positive influence on consumers’ perceived brand relationship (H3a) with their favorite sports team ($\beta = .29, p < .01$), albeit the correlation is weak. Mobile apps were found to have a remarkably strong influence on a consumers’ experience (H4a) with the sports brand ($\beta = .94, p < .05$). Brand experiences are defined as behaviors associated with the brand; this can range from watching the team play to checking out team stats to purchasing a t-shirt from the team (Underwood et al., 2001). A brand experience encompasses many different interactions with the brand and this broad definition could attribute to the strong correlation between brand experience
and use of a team’s mobile app. Brand relationships, however, are much more specific in terms of how they are defined. Much like an interpersonal relationship between two people, a consumer-brand relationship is also “complex of cognitive, affective, and behavioral processes” that requires understanding of “consumers’ attitudes and behavior toward the brand” and “the brand’s attitudes and behaviors toward the consumer” (Blackston, 1992, p. 80). The complexity of defining the consumer-brand relationship partially explains the weaker correlation between use of Twitter and perception of consumer-brand relationship as revealed in the model.

Using social media is hypothesized to have a direct influence on customer-based brand equity (Twitter - H3b and mobile apps - H4b). Brand associations are gained through consumer experiences with the brand. Therefore, the use of social media to interact with the brand should result in increased brand association. Bauer et al. (2009) suggests that brands have high customer-based brand equity when the consumer has developed “favorable, strong, and unique brand associations” with the brand (p. 209). However, the current study did not support these assumptions. Use of either type of social media under investigation did not result in a significant direct influence on customer-based brand equity for the team. Brand equity is the value of the brand in the mind of the consumer (Bauer et al., 2008). Brand equity for sports teams includes intangible experiences of being a sports fan - attending games, supporting the team and interacting with other fans. While logically, using social media to interact with the team should provide a unique experience that generates brand associations that lead to increased brand equity, this was not found in the model. More research on the connection between brand equity and social media use can provide more insight into why this connection was not made.

The current study examined the relationships between social identification and the use of social media, brand-related consequences of social media use, and the direct influence of social
media use on customer-based brand equity. The emergence of social media as a branding strategy has opened a new area of research and previously no one has said what a brand can expect from using social media. Support was found for social identification with a sports team leading to an increased likelihood in using social media to connect with the team. Support was also found for linking the use of Twitter to an increase in the perception of a consumer’s relationship with the sports brand. Additionally, a strong correlation was found between involvement with the team’s mobile app and perceived brand experience. The data did not support a direct link between using social media and customer-based brand equity.

As previously discussed, service-sector brands such as professional sport teams should employ relationship-marketing strategies that allow the brand to connect with the consumer on an interpersonal level. Through engaging with the consumer on an interpersonal level, the service provider or in this case the sports team, becomes more knowledgeable about the needs of the consumer (or sports fan) and is better able to meet those needs. Social media provides an outlet for brands to connect and interact with consumers as well as their interpersonal network. By identifying specific brand-related consequences of using social media, the current project makes an important contribution to the literature on social media, branding, and relationship marketing strategies. To date there are no published studies that suggest a model incorporating social media into branding strategies. Given the proliferation of social media use among brands, further research building on these findings is necessary.

*Influence of brand relationship and brand experience on brand equity.* The third goal of this study was to connect the consequences of social media use to overall customer-based brand equity for the sports team. This will provide a complete model of social media use for sports branding – starting with identifying antecedents of social identification, the influence of social
identification on use of social media to follow the team, and brand-related consequences of social media use. According to Keller (1993) customer-based brand equity occurs when a consumer has a high level of brand awareness with the brand through unique brand associations. Consumers develop unique brand associations through their perceived relationship and experiences with the brand. Therefore, in addition to the direct influence of social media, brand relationships (H3c) and brand experiences (H4c) were hypothesized to have a positive influence on customer-based brand equity for sports teams.

As a result of involvement with the team using Twitter, a positive brand relationship is proposed to have a positive influence on customer-based brand equity (H3c). Engagement with the team through use of a team sponsored mobile app is hypothesized to have a positive influence on customer-based brand equity for a sports team (H4c). Brand relationship was found to have a significant but weak influence on brand equity providing limited support for H3c. Brand experience did not result in a significant influence on brand equity; therefore H4c was not supported.

Finally, this project hypothesized that a positive brand experience will have a positive influence on the consumer’s perception of their relationship with the brand (H5). The data did not support this hypothesis; brand experiences did not have a significant influence on the consumer-brand relationship. As previously discussed, brand relationships are complex and comprised of many different facets of consumer-brand interactions. More research is necessary to determine what types of interactions lead to positive brand relationships.

In terms of direct influences on brand equity, only social identification and brand relationships were found to have a significant influence; brand experience and direct use of social media did not have a significant influence on brand equity. Brand equity is developed in
terms of unique brand associations one has with a brand (i.e. through their experiences and interactions). Therefore, the findings of the current study are contrary to basic understanding of brand equity. In light of this, the findings should at best be considered inconclusive but highlight an important consideration for the further development of branding theory. The measures used in the survey were developed from existing scales used in research on consumer goods. Given the differences of service-sector brands from consumer brands, the lack of support is likely attributable to inadequacy of consumer brand equity scales in a service-sector context. In order to advance theory on brand equity, new scales relevant to service-sector brands should be developed and used to further explore the influence of social media, social identification, brand relationships and brand experiences on brand equity.

Practically, this study provides sport brand managers with insights into how they can increase social identification of fans with the team and what to expect in terms of fans’ use of social media. The emergence of social media has provided brands with an outlet for connecting with fans but to date no explanation has been provided as to what to expect from a social media strategy. The current model supports the use of Twitter to enhance brand relationships and mobile apps provide a unique brand experience. Additionally the model provided strong support for social identification having a positive influence on customer-based brand equity as well as the likelihood of using social media to follow the team. Therefore, for sports teams, it would be beneficial to find ways to increase social identification of fans with the team.

Limitations

The findings of this study should be considered in light of the study limitations. One such limitation is the small sample of teams used in this study. While arguably, each of the team in the analysis provides a unique contribution to the study, they do not provide a generalizable sample
of NBA teams. The three teams under analysis, Dallas, Miami, and New York, all represent larger markets among NBA teams. Smaller market teams were not represented in the sample. Market size could represent a significant difference in how teams approach using social media and cultivating relationships with fans.

Another limitation to this study is the reliance on self-report data from participants through an online survey. The shortcomings of survey research have been well documented. The survey was pretested to ensure the measures were clear and understandable for respondents. Additionally, although every effort was made to maintain brevity in completing the survey, there is always the risk of survey fatigue among respondents.

The specificity of the survey and criteria for participating in the survey proved to be a challenge for recruiting participants. Out of 30 NBA teams, only three were used in the analysis, which limits the number of people who can participate in the survey. Certainly the teams in the study have an enthusiastic fan base but the challenge for this study was finding those people. Initially relying on social media to recruit participants proved to be slow and ineffective resulting in a data collection period of much longer than anticipated. The recruiting strategy had to be modified to ensure enough participants to complete the study in a timely manner. Contact was made with people who lived in the general area of teams in the sample and the survey was distributed to them in addition to social media. For social media recruiting, a survey retweet from former NBA player and current TNT analyst, Shaquille O’Neal provided a much-needed boost in social media participants. These limitations in recruiting participants should be taken into consideration when conducting this type of research.

As evidenced in the sample, roughly half of respondents (48 percent) indicate they use Twitter to follow their favorite team. Even fewer participants indicated using the team’s mobile
apps (8.8 percent). Care must be taken to not over-inflate these findings given the relatively small number of respondents using the social media under investigation. The strategies discussed in this analysis are applicable to the highly identified fans that participated in this project, but additional research is needed to determine the generalizability of these findings to the population of NBA fans.

Future Research

Brand relationships were found to have a positive influence on customer-based brand equity for sports teams in the sample; therefore, research should continue to examine consumer-brand relationships – attempting to identify antecedents that enhance the relationship, strategies for maintaining relationships, and the subsequent influence on the overall branding strategy.

Future research should examine the complexities of consumer-brand relationships and attempt to identify consumer-brand interactions that lead to a positive perception of consumer-brand relationships. The current study found limited support for the influence of Twitter on perceived brand relationship but did not support the influence of brand experiences on brand relationships. Other forms of social media, such as Facebook, should be examined individually to assess their influence on brand relationships. Like Twitter, Facebook provides a platform for brands to create an interactive and engaging experience with consumers that can lead to an increase in positive feelings for the consumer-brand relationship. Facebook is undeniably a popular form of social media and as Wallace, Wilson, and Miloch (2011) suggest, Facebook can be used to provide a direct communication channel between brands and consumers. However, Facebook is designed to primarily connect a user’s interpersonal network (Kaplan, 2012). Mobile apps can also be studied to ascertain their influence on brand relationships. The current study focuses on Twitter as a catalyst for developing and maintaining relationships between consumers
and brands, but other forms of social media certainly provide an opportunity for brands to engage with consumers.

Use of mobile apps was found to have a strong influence on a consumer’s experience with the sports brand. Research should further explore this relationship and possible links between use of other forms of social media such as Facebook, Twitter, Pinterest, and Vine on a consumer’s overall experience with the brand. While brand experiences were not found to have a direct influence on brand equity or brand relationships in this study, they are still capable of creating unique brand associations that can have positive results for brands.

Future research should address the differences between social media use among NBA fans in the United States and the rest of the world. Social media transcends geographic boundaries and can allow fans from all over the world access to their favorite teams. In particular, the NBA makes an interesting case study in this matter because of the worldwide appeal of the sport.

This project is an exploratory study that provides a foundation for future research on developing a comprehensive model of using social media in sports branding. Using the SIBE model as a starting point, this research provided support for identifying some antecedents of social identification, particularly enhancing the group experience of being a fan of the team. Perhaps more importantly, this study supported the assumption of the SIBE model that social identification is a significant predictor of how one perceives the brand equity of the sports team as well as the proposed hypotheses that social identification will have a positive influence on the likelihood that a fan will use Twitter and mobile apps to follow the team. For the model proposed in this research, social identification is the central piece in terms of using and identifying consequences of social media use. These findings certainly have theoretical applications in terms
of developing a generalizable model of sports branding and practical applications for NBA brand managers and public relations professionals.

Additionally, this study identifies specific brand-related consequences of using particular social media. There has been no research to date that examines the effects of using social media on a brand, much less identifying specific results. The data provided support for use of Twitter to lead to positive perceptions of one’s relationship with the sports brand as well as the use of mobile apps to lead to perceptions of a positive experience with the sports brand. Social media provides brand managers with an efficient and cost-effective tool for communicating with followers of the brand. The interactive nature of social media provides an interesting area of study for researchers examining how consumers and brands interact, which can make important contributions to the relationship marketing literature, particularly among service-sector brands.

Keller (1993) indicates that brand equity is the total evaluations the consumer has about the brand – all of their interactions, experiences, and associations with a brand. The model under investigation identifies brand equity as the end product of social identification, social media use, brand relationships, and brand experience. In the current study only social identification and brand relationships were found to have a significant influence on brand equity. This brings to light an important consideration of using branding scales developed for consumer goods to measure branding among service-sector brands, particularly sports.

This study provides an important first step in taking a comprehensive look at how various components of sports branding influence the team’s brand equity. Using a combination of an existing model, branding research, and literature on social media, a model is proposed that furthers research on sports branding and has practical applications for professional sport team brand managers.
REFERENCES


Byrne, B. M. (2010). *Structural equation modeling with AMOS. Basic concepts, applications,*


APPENDIX A. SAMPLE INSTRUMENT (ONLINE SURVEY)

Screening Question:

1. Of which of the following teams do you consider yourself to be a fan (if you are a fan of more than one of these teams, please click the team of which you are the greatest fan)?
   a. Memphis Grizzlies (proceed to Memphis survey)
   b. Dallas Mavericks (proceed to Dallas survey)
   c. Miami Heat (proceed to Miami survey)
   d. New York Knicks (proceed to New York survey)
   e. Oklahoma City Thunder (proceed to Oklahoma City survey)
   f. San Antonio Spurs (proceed to San Antonio survey)

Section 1: Please answer the following questions about the team.

1. Do you consider yourself a fan of the team?
2. On a scale of 1-7, with 1 being the lowest rating and 7 being the highest rating, how would you rate yourself as a team fan.
3. Several types of media are listed below. Please indicate which of the following; you personally, use to follow the team? (answers vary by team)
4. To date, how many team games have you attended during the 2012-2013 season? (Please enter a number in the space provided)
5. Are you, personally, currently a team season ticket holder?

Section 2: Below is a series of statements about the team. Please indicate the extent to which you disagree or agree with each statement, where a rating of 1 means you do not agree, 4 means you neither disagree nor agree, and 7 means you completely agree.

1. I consider myself to be loyal to the team.
2. The team would be my first choice.
3. I believe that, overall, team organization is a high quality team.
4. The team is competitive with other teams in the league.
5. Attending a team game is worth the money and time to do.
6. I can recognize the team brand among other teams in the NBA.
7. I can quickly recall the logo of the team.
8. Some characteristics of the team come to mind quickly.

Now, please indicate the extent to which you disagree or agree with each statement, where a rating of 1 means you do not agree, 4 means you neither disagree nor agree, and 7 means you completely agree.
1. I see myself as a fan of the team.
2. My friends would say that I am a fan of the team.
3. Being a fan of the team is very important to me.
4. I often display the team name or logo at my work, home, or on my clothes.
5. I fit in with other team fans.
6. Being a fan of the team is not very important to me.
7. I do not fit in with other fans of the team.
8. I do not typically display the team name or logo at work, home or on my clothes.

During the season how closely do you follow the team the following ways (a couple of times per month or less often, once or twice per week, a few times per week, once or twice per day, multiple times per day, never): responses vary by team

Please indicate the extent to which you disagree or agree with each statement about the team, where a rating of 1 means you do not agree, 4 means you neither disagree nor agree, and 7 means you completely agree.

1. It’s hard to think about city without thinking about team.
2. The team is a big part of the culture in city.
3. City would be a very different place without team.
4. It’s more important for me to have fun with a group of people at a game than for the team to win.
5. I won’t go to a team game unless I’m with a certain group of people.
6. I have a lot of fun at team games just being part of the crowd.

Please indicate the extent to which you disagree or agree with each statement about the team, where a rating of 1 means you do not agree, 4 means you neither disagree nor agree, and 7 means you completely agree.

1. I think the arena is a unique place.
2. I have a lot of great memories at the arena.
3. I would be very upset if the arena was torn down tomorrow.
4. Its long and storied past make the team of today something special.
5. The rich tradition of the team is something you don’t find at most other places.
6. The team has a special place in the history of the NBA.
7. Participating in team rituals helps me feel connected to the team.
8. Participating in game rituals allows me to show that I am a team fan.

The following statements may reflect your relationship with the team. Please indicate the extent to which you disagree or agree with each statement, where a rating of 1 means you do not agree, 4 means you neither disagree nor agree, and 7 means you completely agree.

1. The team keeps in touch with me.
2. The team knows me.
3. I received special treatment after I became a fan of the team.
4. The team collects my opinions about them.
5. The team sends me greeting cards or gifts on special days.
Now we would like to ask you some questions about your experiences using the team mobile app. Please indicate the extent to which you disagree or agree with each statement about the team, where a rating of 1 means you do not agree, 4 means you neither disagree nor agree, and 7 means you completely agree.

1. Using the team mobile app makes me feel connected with other team fans.
2. The team app allows me to be involved with the team.
3. The team app allows me to interact with the team.
4. The team app allows me to show my support of the team.
5. I use the team app to get information about the arena.
6. I use the team app to learn about the history of the team.

Section 3: This section asks questions about how you use social media, such as Twitter, Facebook, and mobile apps, to follow the team. For each question you will be asked if you use a particular form of media followed by a series of statements about your feelings towards using that media.

Do you use Twitter/Facebook/Mobile App to follow the team?

For the following statements, please indicate the extent to which you disagree or agree with each statement about your interactions with the team on Twitter/Facebook/Mobile App, where a rating of 1 means you do not agree at all, 4 means you neither disagree nor agree, and 7 means you completely agree.

Following the team on Twitter/Facebook/Mobile App:

1. a valuable use of my time
2. means a lot to me
3. is exciting for me
4. is appealing to me
5. is of concern to me
6. is a waste of my time
7. means nothing to me
8. is boring to me
9. is unappealing to me
10. of no concern to me

Section 4: The following questions ask for basic information about yourself and the technology you use. Please be assured that your information will be kept confidential.

Please enter your age in the space provided.
What is your gender?
What is your race?
What is your zip code?
Which, if any, of the following devices do you currently own and personally use? (Select all that apply)
Approximately how many apps have you downloaded on your portable devices (e.g. iPad, iPhone, Android smartphone, Android tablet)?
Approximately what percentage of the apps that you have downloaded do you actually use on a regular basis? Please enter a number in the space provided.
Approximately how often do you use apps (anything other than email and phone) on all of your app-enabled devices (select one answer)?
APPENDIX B: DEMOGRAPHIC AND SAMPLE INFORMATION FOR NON-APP TEAMS

A total of 144 surveys were completed and used with data from the three teams with apps to assess the SIBE model. The mean age of respondents among the three non-app teams was 26 years old ($SD = 9.84$ years), with a reported range from 19 years old to 63 years old. The gender of respondents was fairly even with 53.8 percent of respondents was male ($n = 78$) and 45.5 percent were female ($n = 66$). The race of respondents was as follows: Asian ($n = 5$, 3.4 percent), African American ($n = 15$, 10.3 percent), Hispanic ($n = 5$, 3.4 percent), Native American ($n = 2$, 1.4 percent), White/Caucasian ($n = 77.2$, 112 percent), and 3.4 percent of the sample indicated a race other than listed ($n = 5$).

Among the three teams examined in the study, the majority of respondents were fans of the Oklahoma City Thunder ($n = 84$, 57.9 percent), San Antonio Spurs ($n = 35$, 24.1 percent) and Memphis Grizzlies ($n = 25$, 17.2 percent).

Respondents were asked to rate themselves as a fan of their favorite team on a scale of one to seven with one being not much of a fan and seven being a highly involved fan. Sixteen percent of respondents described themselves as a four or moderate fan of the team ($n = 23$), 17 percent rated themselves as a seven ($n = 25$) and four percent rated themselves as a one ($n = 6$).
Appendix C. IRB Certificate

December 4, 2012

Brandi Watkins
College of Communication & Information Sciences
The University of Alabama
Box 870172

Re: IRB # 12-OR-390, “Evaluating the influence of Twitter & mobile apps on brand equity: An update of the social identity-brand equity model for sports branding”

Dear Ms. Watkins:

The University of Alabama Institutional Review Board has granted approval for your proposed research.

Your application has been given expedited approval according to 45 CFR part 46. You have also been granted the requested waiver of informed consent. Approval has been given under expedited review category 7 as outlined below:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Your application will expire on December 3, 2013. If the study continues beyond that date, you must complete the IRB Renewal Application. If you modify the application, please complete the Modification of an Approved Protocol form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, please complete the Request for Study Closure form.

Should you need to submit any further correspondence regarding this application, please include the assigned IRB application number.

Good luck with your research.