

## **Understanding Professional Athletes' Use of Twitter: A Content Analysis of Athlete Tweets**

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The online social network Twitter has grown exponentially since 2008. The current study examined Twitter use among professional athletes who use Twitter to communicate with fans and other players. The study used content analysis to place 1,962 tweets by professional athletes into one of six categories: interactivity, diversion, information sharing, content, promotional, and fanship. Many of the tweets fell into the interactivity category (34%). Athletes used Twitter to converse directly with their followers. Those with the most followers had more interactivity tweets. A large percentage of tweets (28%) fell into the diversion category, because many of the tweets involved non-sports-related topics, and relatively few of the tweets (15%) involved players discussing their own teams or sports. In addition, only 5% of the tweets were promotional in nature, indicating that professional athletes may not be taking advantage of the promotional opportunities Twitter may provide.

**Keywords:** online social networks, professional sports, uses and gratifications theory

Since 2008 Twitter has become a popular online social network for professional athletes seeking to connect with their fans (Fisher, 2009). For example, Allen Iverson kept fans abreast of his off-season conditioning and possible trade to another team through Twitter (Sheridan, 2009). Lance Armstrong once posted a message on Twitter asking fans to join him for a bike ride at a specified time and location. Several hours later, more than 1,000 cyclists showed up to participate (Cromwell, 2009). Athletes can use Twitter to connect directly with fans instead of having their messages filtered through the public relations departments of sports organizations and mainstream-media outlets. Online social networks have created a significant shift in the sports communications paradigm; therefore, it becomes necessary to understand the nature of this newest communication tool and how it may affect the relationship between athletes and fans specifically and sport communication in general.

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Started in 2006, Twitter grew from 2.3 million U.S. users in August 2008 to an estimated 50 million global users by June 2009 (Fisher, 2009). Users of the online social network can post messages ("tweets") of 140 or fewer characters on their personal Twitter pages. They can also follow the tweets of others. Tweet content runs the gamut from the insignificant to the influential. Users may tweet about mundane topics like what they ate for breakfast and what they plan to watch on television (Pogue, 2009). Of greater consequence, doctors share information about their research and medical procedures. Businesses, both small and large, accept customer feedback and promote their goods and services (Miller, 2009). Journalists from established news sources like *The New York Times* and CNN cite tweets as information sources in their articles and other news coverage (Cohen, 2009). Sportswriters have also capitalized on Twitter as an information source. ESPN cited Allen Iverson's tweets as trade talks developed with teams like the Charlotte Bobcats and New York Knicks (Sheridan, 2009). Lance Armstrong used Twitter to announce his second retirement from professional cycling. *VeloNews* quoted his tweets as an information source in subsequent stories ("Lance Armstrong," 2010).

Twitter gives sports fans the ability to connect with other fans as they read and discuss tweets provided by their favorite sports, teams, and athletes. Twitter also allows them to create personalized spaces where they can express support for their favorites and discuss sports. For instance, Twitter users can use the online social network while playing fantasy football. They can search for player statistics, ask and answer questions about potential draft picks and weekly lineups, and post fantasy-league results. Online social networks like Twitter give users the ability to connect with fans in the same office fantasy league in the same office or halfway around the globe. Interacting through online social networks may prove important for individuals who share common interests but not common locations (Pogue, 2009).

Similarly, sports organizations can use Twitter to connect with their fans worldwide. They have used it to provide game information, sell tickets, and increase brand awareness and product sales. For example, the Women's National Basketball Association (WNBA) had game correspondents post tweets during their All-Star Game. The WNBA also used Twitter to distribute an online survey to its followers. The survey asked fans to discuss their online social-network use and their preferences for receiving tweets regarding game updates and player information. The National Lacrosse League (NLL) and its players use Twitter to provide in-game play-by-plays and update followers on team rosters and coaching changes. In addition, the NLL has created cross-promotions between Twitter and Facebook, another online social network. One such promotion advertised the NLL's fundraising efforts to combat breast cancer. These examples of Twitter use are just a couple of the many ways sports organizations can use the online social network to reach their consumers.

Twitter can offer fans unprecedented access to professional athletes and their personal and social lives. Athletes can develop their own Twitter pages and use them to discuss their playing performances and interact with teammates and fans. This accessibility to teams, and, more important, to players, is an important antecedent to the development of team identification (Sutton, McDonald, Milne, & Cimperman, 1997). Accessibility can be an important outcome for sports organizations as highly identified sports fans engage in supportive, or loyal, behaviors directed toward the team. Such behaviors include greater frequency of game attendance (Wann & Branscombe, 1993), more time and money invested in the team (Wann &

Branscombe, 1993), and greater intentions to purchase a team sponsor's products (Dees, Bennett, & Villegas, 2008). Thus, if sport marketers are able to reach current and potential consumers through online social networks, this contact may result in a number of desirable outcomes for sports organizations.

Athletes, teams, and leagues have long used mainstream media to communicate with their publics to achieve these outcomes, and considerable research has investigated the nature of the communications. Yet newer technologies like Twitter have changed the nature of communication between athletes and sports fans. As such, little is known about what is communicated and how it is communicated. Therefore, the purpose of the current study is to examine the content of professional athletes' tweets and explore the communication exchanges between athletes and fans.

## Literature Review

Much of the debate about Twitter and the sport environment has relied primarily on anecdotal evidence. Sports executives, while forging new paths, still express uncertainty about using Twitter and other online social networks to effectively reach sports consumers. Sports organizations are unclear about how to transform Twitter from a trendy marketing tool into a viable revenue source (Fisher, 2009). Academic researchers have started conducting studies to gain more insights into online social networks and their potential benefits or detrimental effects in various settings. For sports organizations and others to use online social networks like Twitter effectively, they must first understand the nature of the application: what it does, what messages are distributed, how users can take advantage of it, and what potential outcomes may arise as a result.

### Online Social Networks

The rapid advancement of computer technology has allowed multiple online social networks to proliferate. Since its inception in 2004, Facebook has expanded its membership base to 120 million global users, and MySpace now has 110 million users (Fisher, 2008). Other online social networks predate these networks, starting and evolving with the advent of the Internet. Listservs, chat rooms, community forums, web logs ("blogs"), and even e-mail have given users the opportunity to congregate online and share information, ideas, and resources. Older tools that facilitated extensive conversations have been surpassed by more popular ones like Facebook and now Twitter, which promote quicker exchanges via abbreviated posts (Pogue, 2009).

Studies have shown that online social networks can create benefits for users, particularly in helping them make important social connections, share information, and increase personal self-esteem (Ellison, Steinfield, & Lampe, 2007; Raacke & Bonds-Raacke, 2008). Although the newer applications emphasize maintaining friendly relationships, older online social networks like blogs, Web portals, and listservs promote other uses such as exchanging information about new products and conducting business and organizational activities (Ewing, 2008). The findings suggest an evolutionary trend with online social networks, which appear initially as faddish—albeit fun—environments to chat with friends. These same networks may later evolve into more serious or dedicated places to exchange valuable resources.

Individuals reluctant to embrace newer applications like Facebook and Twitter may see few long-term benefits of using the tools. Yet online social networks may transform into valuable marketing and information-sharing applications as blogs and listservs have done over time. By first identifying what is currently available and transmitted via online social networks like Twitter, researchers and practitioners can begin to assess and propose how the networks can be used more broadly and effectively and observe their evolution over time.

## Uses and Gratifications Theory

Researchers have started conducting studies on the nature of Twitter, its role in a sports fan's or sports organization's environment, and how it can be harnessed effectively. The exponential growth of the online social network may justify the need for researchers to continue analyzing Twitter as they have done with other online applications and the Internet in general. Previous studies focused on both the benefits received from using the Internet and the motives for using it. Some studies applied uses and gratifications theory, a theory from the communications field that focuses on how users engage in different activities and their motives for doing so (Ruggiero, 2000). These motives help articulate what users stand to gain from their participation or conversely what they may lose or miss by opting out. The popularity of uses and gratifications theory derives from its ability to better illuminate motives for areas as varied as personal hobbies and political events (Ruggiero, 2000).

The theory has been used in online settings to compare the motives for participating in related activities. Ruggiero (2000) identified three key benefits of online use: interactivity, demassification, and asynchronicity. The Internet facilitates interactivity, giving users the opportunity to correspond with other users, share information, and form personal relationships. With demassification, users can pick and choose activities of interest to them. They can also select with whom they interact, custom fitting the Internet to their specific needs. Finally, the Internet's asynchronicity provides users with more flexible communications. They can post messages for other users and read and respond to messages when it is most convenient for them (Ruggiero, 2000).

Uses and gratifications theory can be applied to online social networks like Twitter and may help explain Twitter's extensive growth. Researchers have identified a variety of motives to explain online consumption. Motives consistently identified include accessing information and technical knowledge (Raacke & Bonds-Raacke, 2008; Ruggiero, 2000), finding entertainment and diversion (Ruggiero, 2000), and communicating with like-minded users (Raacke & Bonds-Raacke, 2008). Other motives are developing personal identities and keeping in touch with the larger world (Ruggiero, 2000). These studies focused on motives for general Internet use and nonsport applications. Other studies have examined online use from a sports perspective. The identified motives parallel those cited above with gathering information and technical knowledge, as well as receiving entertainment and diversion (Hur, Ko, & Valacich, 2007; Seo & Green, 2008). Hur et al. examined sport-related Internet purchases and employed the following motives definition: "Motivation for online sport consumption can be defined as an activated state within a sport consumer that leads to using the Internet for sport-related activities" (p. 524). Motives

specific to these purchases are receipt of economic benefits (Hur et al., 2007; Seo & Green, 2008) and convenience (Hur et al., 2007). Other activities include using the Internet to learn about teams and athletes and express team support (Hur et al., 2007; Seo & Green, 2008).

The motives are similar to those identified for sport consumption in off-line environments such as attending sporting events and watching sports on television. The off-line sport-consumption motives include interest in the sport, team, and players; entertainment (Funk, Mahony, & Ridinger, 2002); and team support (Funk et al., 2002). Other motives are information and knowledge, escape, and vicarious achievement (James & Ridinger, 2002), along with family bonding and social opportunities (Funk et al., 2002; James & Ridinger, 2002). Studies of off-line sport consumption have measured and found a connection between increasing the strength of these motives and subsequent fan behaviors such as team loyalty (James & Ridinger, 2002), heightened fan identification, and purchasing sports merchandise and other related products more frequently (Trail, Fink, & Anderson, 2003).

The link between these usage motives and positive outcomes has been clearly established in off-line sports settings. The question becomes whether a similar connection can be drawn between using online social networks such as Twitter and the same motives and outcomes. Yet before usage motives for Twitter can be assessed, it may be necessary to understand what communications or information exchanges are taking place through the online social network.

Researchers have become increasingly interested in studying the phenomenon of Twitter and have tried to define and explain the online social network under the larger umbrella of social media and Web 2.0 applications (Kaplan & Haenlein, 2010). Other studies have explored ways to use Twitter for activities such as brand management and marketing (Jansen, Zhang, Sobel, & Chowdury, 2009), data mining and trend monitoring (Mathioudakis & Koudas, 2010), innovation diffusion (Huberman, Romero, & Wu, 2008), and personal identity management (Dunlap & Lowenthal, 2010).

Fewer studies have examined Twitter as it relates specifically to the sport industry. Kassing and Sanderson (2010) studied professional cyclists who used Twitter to communicate with one another and fans during the 2009 *Giro d'Italia*. Their study revealed that cyclists used the online social network to discuss race conditions and their personal physical condition, giving Twitter followers a behind-the-scenes look at the race as it unfolded. The authors suggested that future research explore the levels of personal interaction between athletes and their followers, as well as fan tolerance for discussing topics other than sports (Kassing & Sanderson, 2010). Clavio and Cooper (2010) collected data from three populations to examine how and why individuals use Twitter. In the first data set, they studied followers of a retired professional athlete and found that respondents used Twitter to stay connected to the athlete by reading her tweets and gathering interesting personal information about her. The second data set contained responses from college football fans, and the results showed that almost 80% of the survey participants did not use Twitter. In the final data set, only 43% of college students and other media users surveyed used Twitter. Reasons for not using the online social network included limited interest or simply perceiving it as "silly." Clavio and Cooper concluded, "Twitter as a medium may be ahead of its time for sports" (p. 21). Sports organizations interested in using Twitter may need to educate their markets about its purpose and benefits before relying on the online social network for marketing purposes.

The cited studies reveal the growing interest in Twitter by professional athletes and researchers alike. Athletes are using Twitter to stay in touch with fellow athletes and fans. Researchers are trying to understand Twitter more fully in the sport environment from the perspectives of both athletes and their fans as Twitter followers. The purpose of this study is to examine professional athletes' tweets and understand this communications mechanism more fully.

## Method

Professional athletes' tweets were examined. A sample of tweets was drawn from sportsin140.com, a Web site devoted to identifying verified athlete Twitter accounts. Athletes from the following sport categories were randomly selected for inclusion in the study: NFL, MLB, NHL, NBA, WNBA, MLS, PGA/LPGA, auto racing, minor-league baseball, and other sports (e.g., mixed martial arts and tennis). Subjects in each category were listed alphabetically. The original sportsin140.com list of sport product categories ("The SEC and Social Media," 2009) contained 616 Twitter accounts. After deleting nonathletes and retired athletes, the total sample was reduced to 510. Stratified random sampling was used to ensure that the selected tweets were representative of multiple sports. In each sport-product category, every fifth athlete was selected randomly for inclusion in the study. Twitter accounts of 101 athletes were analyzed (NBA = 16, MLB = 4, WNBA = 10, NFL = 32, NHL = 4, MLS = 4, golf = 11, auto racing = 6, minor-league baseball = 2, and other sports = 12). The 20 most recent tweets (the entire first page of tweets on a Twitter user's home page) were chosen from each athlete's Twitter account. In total, 1,962 tweets were used.

Content analysis was then employed to categorize and analyze the tweets. The technique is defined as "any qualitative and sense-making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings" (Patton, 2002, p. 453). Content analysis is commonly used to analyze various types of communications. Researchers have used the technique extensively in sport to study sports-related advertising in a variety of contexts, including celebrity athlete endorsements (Jones & Schumann, 2000; Stone, Joseph, & Jones, 2003), advertisements featuring female Indy Racing League drivers (Cuneen, Spencer, Ross, & Apostolopoulou, 2007), advertising content of Super Bowl commercials (Kelley & Turley, 2004), and the potential for advertising clutter on the Golf Channel (Carroll, 2009). Other content-analysis studies have examined the role of tobacco-industry sponsorships in motor sports such as NASCAR (Morrison, Haygood, & Krugman, 2006), published sponsorship policies (Cunningham, Cornwell, & Coote, 2009), motivations for making financial contributions to a intercollegiate athletic fund (Gladden, Mahony, & Apostolopoulou, 2005), spectator interest in a sports organization's corporate social-responsibility efforts (Walker & Kent, 2009), motives for playing sports video games (Kim, Walsh, & Ross, 2008), customer satisfaction at sporting events (Greenwell, Lee, & Naeger, 2007), and the relationship between male news personnel and sports coverage of female athletes (Pedersen, Whisenant, & Schneider, 2003). Although we do not provide a complete list of sport-related studies using content analysis here, those cited highlight the popularity and importance of using such a technique when examining sport issues.

To ensure interrater reliability, we coded each tweet independently into one of six categories that were developed based on motives predictive of online sport

consumption in two studies. Seo and Green (2008) examined the motives for using sports-related Web sites, and Clavio (2008) studied the use of intercollegiate athletics message boards. The categories derived from the two previous studies and used in the current study were interactivity, diversion, information sharing, content, fanship, and promotional.

- *Interactivity* is a professional athlete's direct communication with fellow athletes and fans. The category originates from Clavio's (2008) message-boards study. Clavio defined interactivity as message-board users "giving input and opinions, participating in discussions, communicating with fellow fans, and sharing information" (p. viii) with other users. The current study modified the category to reflect the conversations athletes have with other Twitter users via direct messages or responses to posted tweets.
- *Diversion* is non-sports-related information provided by professional athletes. Tweets in the diversion category can range from stories about friends and families to conversations about favorite movies and restaurants. Clavio (2008) defined diversion as "non-sports related elements of message boards, including politics, religion, staying in touch with old classmates, and non-athletic news about the user's alma mater" (p. viii). Similarly, the current study used diversion to reflect any athlete tweets with a non-sports message, whether they discussed friends and families or other personal interests such as video games, music, and fashion.
- *Information sharing* is insight into an athlete's teammates, team, or sport, such as details about practices and training sessions or recent competitive events and results. The category is similar to Clavio's (2008) information gathering, which he defined as "unique sport and team-related content available on college sport message boards, including content generated by other users" (p. viii). Clavio examined message-board users who post information about athletes or players secondhand. The current study examines professional athletes and their firsthand accounts provided through tweets.
- *Content* includes links to pictures, videos, and other Web sites such as an athlete's blog or a team's official Web site. The category derives from one of the 10 motives identified by Seo and Green (2008) for why individuals use the Internet to consume sports. Their content motive was listed as the "motive to see photos and download media" (p. 86). Athletes can embed links in their tweets to share pictures and various Web sites of interest with their followers.
- *Fanship* occurs when athletes discuss sports other than their own teams and teammates. The current study combined Seo and Green's (2008) fanship motive of "reason that one considers oneself a huge fan of particular sports and teams" (p. 86) with Clavio's (2008) argumentation category of "engaging in 'smack talk' and arguments with other users and observing the comments of fans of rival teams" (p. ix). The current study's fanship category incorporates both definitions and includes athlete tweets with either positive or negative comments about players and teams other than their own.
- *Promotional* is publicity regarding sponsorships, upcoming games, and related promotions such as discounted tickets or giveaways. The category derives from Seo and Green's (2008) economic motive, which they defined as the "motive to get promotional incentives that a team provides" (p. 86). The current study

expanded on the definition. Athletes may use Twitter to promote sponsorships, upcoming activities, and events (e.g., autograph signings, TV appearances), in addition to providing information about discounted tickets or game-day promotions.

The athletes' tweets were sorted into the appropriate categories by four independent raters. Raters initially agreed on over 90% of the tweets, indicating a high level of interrater reliability (Kassarjian, 1977). When raters disagreed, differences were resolved through discussion. After these discussions, agreement equaled 100%.

## Results

The analyzed tweets were placed in one of six categories. The category with the most tweets was interactivity (671 tweets, 34%), indicating that athletes use Twitter as a medium for direct interpersonal communication with friends and fans. Professional athletes in this study often follow other athletes on Twitter and comment on their tweets. For example, professional cyclist Levi Leipheimer responded to cycling coach Davis Phinney in regard to an upcoming event: "@davisphinney Davis, we would be honored to have you & your family participate anytime. See you sometime soon." Martin Havlat of the NHL held a question-and-answer session with fans and answered a series of questions, including "Any personal goals for the season? Personal goal is to win the Cup. That's all."

Diversion, or non-sport-related communication, had the second highest number of tweets (545, 28%). Although professional athletes earn their living playing sports, they also engage in non-sport-related activities and frequently tweet about those activities, discussing everything from what they ate for dinner to what movies they want to see. For instance, MLB's CC Sabathia posted the following tweet: "Enjoyed the off day with my family. We don't have many of them so they mean a lot." Austin Rester of the AVP said, "Moving from Huntington back up to Manhattan today. It's like no matter how hard I tried, I couldn't get away from the South Bay."

Information sharing, or providing insights directly related to the athlete's team or sport, had considerably fewer tweets than the prior non-sport-related categories (298, 15%). Athletes use Twitter to discuss their latest sports-related activities, whether practices, games, or other events. IndyCar driver Alex Lloyd tweeted, "Getting ready for qualifying. Practice went OK in Pf. Out fourth in Q and with GrandAm rubber won't be great but still should have a good runabout." NBA player Andrew Bogut also talked about his practice, saying "Shootaround just finished @ Detroit, about to get a bite to eat then relax until the team bus."

Content (254, 13%) had the next highest number of tweets; athletes used Twitter to direct readers to personal pictures, Web sites, and blogs located elsewhere on the Internet. For example, Drew Brees of the NFL used Twitter to discuss his charitable activities with the post, "Looking for charitable projects to fund in New Orleans area thru the Brees Dream Foundation. Send recommendations ASAP to info@drewbrees.com." NBA player Randy Foye shared pictures with his followers: "I posted 16 photos on Facebook in the album 'Wizards 30th Anniversary China Trip': <http://bit.ly/15oxbU>."

The promotional category had relatively few tweets (102, 5%); athletes did not devote much communication to promoting or publicizing upcoming sport-related events and activities. Athletes used Twitter periodically for promotional purposes.

Crystal Langhorne of the WNBA said to fans, "For the first 50 people that call 1-877-DC-HOOP1 and mention this tweet, you get center preferred seats for \$28 for Thursday's game." Professional tennis player Serena Williams tweeted, "I will be on The Jimmy Kimmel Show on the 16th. . . . If you want tickets read my latest blog."

Finally, the fanship category had the fewest tweets (92, 5%), indicating that athletes did not spend much time communicating about sports other than their own. Athletes who did tweet about other sports often expressed their admiration for various teams and players. Colby Armstrong of the NHL said, "I'm going to find a white Vikings Adrian Peterson jersey. That guy is the man." The LPGA's Meredith Dunn responded to another golfer: "@TheIreneCho I'll root for your Trojans only if you root for my Tigers!"

Data were further analyzed to examine potential differences between the categories based on number of followers and number of tweets. The athletes in the current study had an average of 168,035 followers. This average was skewed by several athletes with over a million followers each. Athletes with the most followers were Serena Williams, Dwight Howard, Reggie Bush, Ryan Sheckler, Chad Ochocino, and Lance Armstrong. Removing these athletes dropped the average to 56,080 followers per athlete. All of the athletes were split into three relatively equal groups (low, medium, high) based on their number of followers. Those with fewer than 4,000 followers were placed in the low group, athletes with 4,000–20,000 followers were placed in the medium group, and athletes with more than 20,000 followers were placed in the high group. The results revealed that athletes in the low and high groups had the most interactivity tweets with 34% and 44%, respectively, versus the medium group with 29%. Conversely, athletes in the medium group had more diversion tweets, with 31% versus 28% for the low group and 20% for the high group.

The data were also examined by the number of tweets an athlete had posted since initiating his or her Twitter account. On average, athletes in the current study have written 2,462 tweets. More gregarious athletes like Chad Ochocinco, Kerri Rhodes, Bernard Berrian, and Bryant McKinney have posted over 13,000 tweets each since opening their accounts. Removing these athletes dropped the average to 1,714 tweets per athlete. Again, all the athletes were placed into one of three groups (low, medium, high) based on their number of tweets. Athletes with fewer than 400 tweets were placed in the low group, those with 400–2,000 tweets were placed in the medium group, and those with more than 2,000 tweets were placed in the high group. Athletes in the high group had 62% of their tweets in the interactivity category, compared with 26% for the low group and 27% for the medium group. On the other hand, athletes in the low category had 37% of their tweets in the diversion category, compared with the medium and high groups with 25% and 15%, respectively.

In summary, the analyzed tweets in the current study were placed into one of six categories, and the interactivity and diversion categories contained 62% of all tweets. Athletes with the most followers and those who posted the most had more of their tweets categorized as interactivity. Athletes with the fewest followers also had more of their tweets in the interactivity category. Those with the fewest tweets had more tweets in the diversion category. The results showed that professional athletes used Twitter to communicate with fellow Twitter users—whether fellow players or fans—and to discuss nonsports topics.

## Discussion

This study was one of the first attempts to examine Twitter content as it relates to the sports industry and understand this growing phenomenon. Twitter represents an opportunity for sport marketers and athletes to reach a large audience, as evidenced by Shaquille O'Neal's 2.5 million followers and Lance Armstrong's 2.2 million. Findings from this study suggest that Twitter communications may be quite different from mainstream sport communications. Rather than sanitized, impersonal communications about the latest game filtered through a team's public relations department, professional athletes' tweets tend to be more direct and address topics beyond sport. A further analysis of the results may lend insight into the nature of these communications.

First, the largest number of tweets analyzed in the study contained exchanges between users, whether from one professional athlete to another or between athletes and their fans. The results suggest that this new medium provides a more personalized, unfiltered method of communication not often found in mainstream media. In the past, athletes transmitted their messages via public relations personnel or through media outlets such as television broadcasts or newspaper and magazine articles. Now athletes can reach their fans in a more direct manner. They may also engage in direct conversations with other athletes. These conversations can be monitored by anyone who chooses to follow the athlete on Twitter, allowing fans to witness firsthand exchanges between the athletes and with other fans. The most popular and vocal athletes, those with the largest number of followers and number of tweets, respectively, had more tweets fall into the interactivity category. This finding provides evidence that the athletes in the study are using Twitter for one of its intended purposes—to communicate with fellow Twitter users, athletes, and fans. The interactivity gives fans an inside look into their favorite athletes' personal conversations. This experience could have only occurred in the past if fans were sitting in close proximity to an athlete—something not likely to happen to most people. The interactivity element adds another dimension to fan perceptions regarding athletes as fans watch them engage in personal exchanges.

The finding also ties back to uses and gratifications theory, which emphasizes the benefits of using the Internet and, by extension, online social networks. Benefits included the ability to interact with other online users and keep in touch with the larger world (Ruggiero, 2000). Athletes' interactivity tweets emphasize both elements in that athletes share tweets with one another and fans. Likewise, fans have the opportunity to read these tweets and stay up to date with their favorite athletes. The interactions are important because team and player accessibility has been shown to be an important antecedent to fan identification (Gwinner & Swanson, 2003; Sutton et al., 1997). The more opportunities fans have to connect with the team, the more likely it is they will continue identifying with the organization (Gwinner & Swanson, 2003). Typical team associations include player autograph sessions, youth camps, call-in talk-radio shows, and online team message boards. Twitter represents yet another forum in which fans can associate with the sports organization and interact with their favorite players. Higher levels of identification have been linked to desirable marketing outcomes such as increased consumption and decreased price sensitivity toward sports products (Sutton et al., 1997; Wann & Branscombe, 1993).

Moreover, identification has been shown to be positively related to one's need for affiliation with a group (Donavan, Carlson, & Zimmerman, 2005). Groups, by nature, provide a setting for social interactions. If nothing else, Twitter provides an online setting for such interactions, much like team message boards, blogs, and even e-mail. Through their tweets and direct communications (i.e., replying directly to another Twitter user), athletes cater to the needs of individuals most likely to identify with the team or player (Donavan et al., 2005).

It is interesting that almost a third of tweets analyzed in the study fell into the diversion category. These tweets addressed non-sport-related issues—despite the fact that they were written by professional athletes. The athletes used Twitter to discuss everything from their favorite restaurants to how they spent their free time to the content on their Facebook pages. As with interactivity, diversionary tweets provide fans a different view of their favorite athletes. Uses and gratifications theory suggests that online users may receive usage benefits such as entertainment and diversion. These athlete tweets may entertain the athletes who write them and the fans who read them. Athletes are given the chance to write about topics of interest to them, and fans can learn something unique about the athletes potentially not often found in other media outlets. Typically, only the highest profile and most popular athletes participate in extensive interviews in which they can reveal in-depth information about their personal lives. Twitter makes the process more democratic. In the current study, athletes with the fewest number of tweets and followers had more interactivity and diversion tweets. These types of messages may provide greater insights into the personal lives and interpersonal communications of the athletes. With Twitter, even lesser known athletes have the chance to interact with fans and share as much or as little as they like. As a result, athletes can use Twitter as a platform to address their religious and political views, discuss their favorite charitable activities, and philosophize about other topics important to them—and potentially important or interesting to their followers.

The results suggest that Twitter may provide fans with unique insight into the personal lives of athletes and address topics not found to the same extent in mainstream-media sources. The information provided in these tweets gives followers the chance to learn more about their favorite players beyond their athletic activities. Athletes go from one-dimensional figures existing only on the field or the court to two-dimensional individuals who have lives beyond the stadium or arena. Of course fans realize that their favorite athletes are more than the games they play; however, they may recognize this fact more readily as they read personable athlete tweets. Kassing and Sanderson (2010) noted in their study of professional cyclists that the athletes tweeted about daily road conditions and how they felt physically after each day of racing. The cyclists also used Twitter to talk with teammates and other riders about race results, the music playlists on their MP3 players, and the local television programming. These tweets give fans the chance to learn more about the athletes and to potentially experience sides of the athletes not necessarily evident in other forms of media (Kassing & Sanderson, 2010). Athletes may use mainstream-media outlets to talk specifically about the sport and their performances. However, these conversations are often conducted through an intermediary (e.g., the journalist conducting the interview or the athlete's public relations agent) rather than the athlete speaking directly to fans. In addition, the limited time dedicated to an interview may constrain what

an athlete says or how the information is conveyed. Twitter gives athletes more time, flexibility, and control to discuss a wider variety of topics in a more direct and less constrained manner.

Contrary to what is commonly found in mainstream media, only 15% of the tweets were information sharing, wherein athletes provided details about their teammates, teams, and the sports they play. One might assume that professional athletes would tweet most often about what has increased their stature in the public's eye—the sports they play. However, athletes in the current study were inclined to tweet more frequently about nonsport subjects. When they did discuss their sport or team, they shared details about different training approaches and conditioning tests. They also discussed arriving at the field to play or how they felt physically and mentally before or after a game. Through these tweets, fans can get an inside look at how athletes prepare for competitive performances, as well as how they respond to both wins and losses. In addition, athletes often tweeted directly after an event had occurred. Such tweets may fulfill fans' needs for immediacy rather than having to wait for SportsCenter or other news programs to hear how players felt about the game. This ability to access and gather information represents a uses and gratifications motive. Athletes in the current study used Twitter to discuss the specifics of games, practices, and training. The followers who read these tweets may satisfy their information needs by doing so. Athletes would be wise to continue providing information-sharing tweets to give fans a timely view of their favorite athletes and sports to fulfill this important motive.

In addition to information-sharing tweets, 13% of the athletes' tweets involved other content. The tweets found in this category reflected when athletes used Twitter to post pictures or links to their Facebook pages, personal Web sites, and blogs. Athletes in the current study posted content links for charitable Web sites so fans could learn more about various philanthropic activities. Other links were for pictures, which gave fans the chance to see athletes in a different light. Posted photos often featured athletes with their friends and family members, typically in relaxed settings away from the playing field. The content category represents an opportunity for professional athletes who tweet. A number of athletes in the current study participate in smaller niche sports or play mainstream sports but have lower profiles and limited star power. The content provided via their tweets can enhance the knowledge and perspectives fans have of these athletes. Twitter limits the number of characters per tweet to 140. Using links to other sites, athletes can extend the interaction with their followers—pulling them in with a quick sentence or two and inviting them to continue the "conversation" via other applications.

This content adds another dimension to the interaction athletes have with their fans; it encourages fans to learn more about athletes in a variety of ways and again fulfill their uses and gratifications need for information about their favorite athletes. The content goes beyond a simple 140-character tweet and may include videos and other media and extended conversations. The content provided may also be of a more personal nature. The tweets may enhance fans' identification with an athlete, leading them to feel as though they know the athlete better than they would by simply watching a quick postgame interview or reading a newspaper story. This access and interaction could prove particularly useful for lesser known athletes who are looking to increase awareness and popularity among fans about themselves, their teams, or their sports.

A very small percentage of tweets—5%—fell into the fanship category, reflecting the admiration players may have for fellow players or teams other than their own. Athletes discussed current popular players such as Adrian Peterson and Brett Favre, as well as legends like Ted Williams. Sports fans may put their favorite athletes on a pedestal. Athletes could use this category to reach out to fans in a different way. Fans who read the tweets may learn something new—that their favorite athletes have their own personal favorites. Again, this information provides a different view of athletes not commonly found in mainstream media and allows fans to learn more about the athletes in a less filtered fashion. Repeat and positive exposures to athletes can help increase fan identification and lead fans to want to learn more about these athletes; it can also create a common bond between athletes and their fans as they share similar sentiments about their favorite players. Uses and gratifications theory highlights interactivity as a benefit of Internet use. The interactivity and information sharing between athletes and fans may be enhanced further as fans recognize they have something in common with the athletes they follow on Twitter. Fanship tweets also present a positive message to sport consumers—a message that not all professional athletes are focused solely on their own careers but, like their fans, also respect other skilled and talented players and readily express such respect.

Finally, of the tweets analyzed, only 5% were categorized as promotional. The limited number of such tweets represents an underutilized opportunity for sports organizations seeking to achieve marketing objectives through online social media. The lack of promotional tweets is not surprising given that the sample consisted entirely of athletes. An example of how Twitter is used as a promotional tool can be seen with the Jacksonville Jaguars. Quarterback David Garrard offered fans the opportunity to meet him and receive free tickets to an upcoming Jaguars game using tweets like the following: “Time to make a handoff at the Winn-Dixie in Neptune beach. Corner of 3rd and Atlantic. . . . Meet me out front right now.” The UFC’s Georges St-Pierre and B.J. Penn have become active Twitter users, and each has around 30,000 followers. Penn has used Twitter to talk about his performances and drive traffic to his Web site, which contains additional information and content such as video blogs (Sievert, 2010). Twitter users interested in accessing information may find promotional tweets an important and useful information source. The tweets may provide inside information and benefits for fans who follow athletes on Twitter. Conversely, those who rely solely on mainstream-media sources to learn about upcoming games and promotions may miss important information.

Online social-media applications like Twitter and Facebook allow players and sports organizations to bypass mainstream-media outlets and attract fans with unique content. The tweets analyzed in the current study revealed that professional athletes use Twitter for a myriad of reasons, from interacting with fellow athletes and fans to recapping their latest sports practices and performances to sharing pictures and Web sites with followers. Surprisingly, many of the tweets were not sport related. Twitter provides an unfiltered forum where the athletes can let their proverbial hair down and wax poetic about whatever suits their fancy. As such, the tweets provide fans unique and unrestricted insight into the personal lives of professional athletes.

These tweets can have significant influence and may go beyond the effect achieved by other celebrity tweets. Researchers have found that athletes may hold

greater sway over their fans than other celebrities such as musicians and actors. Carlson and Donovan (2008) reported that of celebrity-endorsement advertisements, 60% involve an athlete. The researchers studied the effect of athlete endorsements via athlete identification, or the personal connection fans feel with athletes. The results showed that respondents who experienced a greater connection to the athlete expressed more positive feelings about the athlete's team and were more likely to purchase products endorsed by the athlete. The study reveals the potential power professional athletes as users of Twitter can have over their followers and highlights the difference between sports figures and other celebrities (Carlson & Donovan, 2008). Twitter can create what fans feel is a personal connection between themselves and the athletes they follow. The online social network facilitates a level of interactivity between fans and athletes not often found in mainstream media (Kassing & Sanderson, 2010). Professional athletes can capitalize on these relationships and use them to promote products and team activities, a benefit of Twitter not currently used to its full potential.

Of the uses and gratifications benefits Internet use provides, interactivity appears to be the most prevalent for Twitter users. Fans who use Twitter have the opportunity to read about and discuss a range of topics regarding their favorite athletes. Yet despite Twitter's benefits, sports organizations must also recognize that this content is unfiltered. Athletes communicate directly with fans, bypassing team public relations staff. This can be problematic, as evidenced by Kansas City Chiefs running back Larry Johnson's tweets containing homophobic comments, which resulted in a one-game suspension ("Johnson Uses Slurs," 2009). If sports organizations and professional athletes are going to use Twitter to reach a larger portion of their fan bases, they must take precautions to ensure that athlete tweets do not result in negative publicity for the team and players. In response to these incidents—or as a proactive measure—some sports organizations have limited or prohibited the use of Twitter. A growing number of NFL teams have banned media, spectators, and players from tweeting during practices and games ("Social Networking Sites," 2009). Chad Ochocinco was fined \$25,000 after posting messages during a preseason game, a violation of NFL policies ("Chad Ochocinco Fined," 2010). The NBA prohibits players, coaches, and other team staff members from in-game Twitter or Facebook use. ESPN issued a policy prohibiting all of its employees, including on-air personalities and journalists, from using online social networks and tweeting about sports on their personal Twitter pages ("Simmons Takes Another Swipe," 2010). Sports organizations must balance the potential negative ramifications of Twitter use with positive outcomes such as greater consumer reach and fan identification. This study's findings indicate that professional athletes are interested in posting tweets about a variety of topics. Sports organizations will want to ensure that the tweets are in keeping with the organization's overall message and goals and objectives.

This exploratory study sought to understand the nature of athlete tweets and Twitter's potential uses through the lens of uses and gratifications theory. The study's findings suggest that Twitter helps users meet needs such as entertainment, diversion, and information gathering. Twitter offers fans unparalleled accessibility to the personal lives of athletes, which may lead to increased identification with the athletes and their teams. As evidenced by the lack of promotional tweets, the

potential for online social-media applications to achieve marketing objectives has yet to be fully realized by athletes. Professional athletes who currently use Twitter should continue using the medium to connect with fans and fellow athletes. They can also extend their use to engaging in more promotional activities. Many of these athletes have a large number of followers, and this captive audience could be easily reached via athlete tweets. Athletes who currently do not use Twitter may be well served to learn more about the online social network and capitalize on some of the identified benefits.

## Limitations

There were several limitations with the current study. First, the content analysis focused on the tweets of professional athletes. Other individuals and groups in the sport industry use Twitter, including college athletes, coaches at the college and professional levels, front-office executives, and members of public relations departments promoting both college and professional teams. Their tweets may contain different content and appear with different frequency than the tweets of professional athletes. In addition, the content analysis was used to examine the first 20 tweets posted on an athlete's Twitter page. Many of the athletes have posted numerous times, some even thousands of times, since initiating their Twitter accounts. As such, the tweets analyzed may not represent the full array of content contained in an athlete's tweets. Finally, the tweets were placed into one of six categories, yet some of the tweets may have fit into more than one. We reached consensus regarding the predominant message contained in those tweets and placed the messages in a single category for the study.

## Future Research

Although the current study examined the information contained in professional athletes' tweets, a future study should investigate the extent to which these content categories predict Twitter use by followers of professional athletes. Such a study could examine whether followers are more drawn to diversion than information sharing when using Twitter and the extent to which some categories predict greater frequency and time spent using Twitter than other categories. Results from this study may provide sport organizations with rich information regarding the content Twitter users seek. Thus, sport organizations and professional athletes could adjust their tweets to address follower needs.

Researchers could examine the relationship between sports organizations and their target markets when using Twitter. Sports organizations typically want to reach key demographics such as sports fans between the ages of 18 and 34 years (Fisher, 2008), but research has shown that more Twitter users are between the ages of 35 and 54. In fact, this age group represents the fastest growing segment of Twitter users (Miller, 2009). Professional athletes and sports organizations using Twitter as part of their marketing strategy may need to consider the type of information transmitted via the online social network to ensure that their messages are appropriate for their target audience. Future studies can examine sports organizations, specifically their online social-media strategies and the effectiveness of these strategies, in greater detail.

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