

# Choosing Between the One-Way or Two-Way Street: An Exploration of Relationship Promotion by Professional Athletes on Twitter

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## **Abstract**

The purpose of this study was to explore the relationships promoted by professional athletes on Twitter utilizing the theoretical framework of parasocial interaction (PSI). Specifically, this study was a content analysis that examined professional athlete tweets in order to determine whether they predominately promoted social or parasocial relationships. The study also explored with whom athletes were engaging in social interaction as well as the topic of each tweet. The data revealed that professional athletes promoted both parasocial and social relationships equally. When they chose to be social, athletes were communicating with lay people and other professional and college athletes. Most athlete tweets were either general statements or insights into their personal lives. The implications of these and other findings will be discussed further.

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Social media and Internet technologies have had a “profound effect on sport” (Pegoraro, 2010, p. 501), allowing for heightened interaction between athletes and their fans (Sanderson, 2010). One social media platform that is currently reshaping the nature of fan–athlete interaction is Twitter. As a form of communication, which enables quick and dynamic interaction (Fischer & Reuber, 2011), Twitter provides athletes with the opportunity to showcase their personalities (Gregory, 2009). Due to its communication potential, thousands of professional athletes have developed a presence on Twitter. Not surprisingly, Twitter has become a permanent fixture within the sport industry (Wertheim, 2011).

Twitter is a unique medium where both traditional and more interpersonal forms of mediated interaction are possible. Because social media platforms like Twitter provide multiple avenues for interaction, it is vital for sport communication scholars to understand the nature of these communication tools and how they impact fan–athlete relationships (Clavio & Kian, 2010; Hambrick, Simmons, Greenhalgh, & Greenwell, 2010). Though the usage trends of Twitter are beginning to be established, little is known about what is actually communicated and more importantly, how it is communicated (Hambrick et al., 2010). Due to this lack of knowledge regarding communication through social media technologies, further examination of Twitter messages is necessary (Clavio & Kian, 2010).

Furthermore, Clavio and Kian (2010) stated that it would be worthwhile for sport communication scholars to begin formulating an understanding of the interactions taking place between sport personalities (i.e., athletes) and sport consumers (i.e., fans) on Twitter. According to Kassing and Sanderson (2009), “Parasocial interaction provides a means for understanding how Internet technologies have begun to affect the fan–athlete relationship” (p. 186). Therefore, the purpose of this study is to explore the relationships promoted by professional athletes on Twitter utilizing the theoretical framework of parasocial interaction (PSI). Specifically, this study is a content analysis that examines professional athlete tweets in order to determine whether they predominately promote social or parasocial relationships. This study also explores with whom athletes are engaging in social interaction as well as the topic of each tweet. In doing so, this study seeks to provide a more nuanced understanding of how athletes from different sports with varying amounts of followers utilize Twitter to both connect with other users and broadcast their lives.

This study is significant in that it places increased emphasis on the direction of Twitter messages, which provides a more detailed picture of how professional athletes use Twitter from an interaction (or non-interaction) perspective. While content analyses have begun to examine what athletes are saying on Twitter (Hambrick et al., 2010) and to whom they are speaking (Pegoraro, 2010), no quantitative content analysis has examined professional athletes’ Twitter interaction patterns

specifically from a PSI perspective. This study aims to fill that gap in existing sport communication literature.

## **Review of Literature**

### *Twitter and Sport Communication*

"Twitter has made considerable inroads in the sport communication landscape since its introduction in 2006" (Clavio & Kian, 2010, p. 485). From a sport journalism perspective, research has shown that Twitter usage patterns vary based upon the age of the sport journalist. Schultz and Sheffer (2010) found that younger journalists viewed Twitter as a medium that had its own value, while older journalists utilized Twitter to promote their content. Sheffer and Schultz (2010) followed this work with a content analysis in order to see whether journalists' usage patterns matched their usage claims. They found a discrepancy, where claims were based on the ability to break news but usage was based on sharing opinions and commentary.

Professional athletes have also been the subject of popular press inquiries into Twitter usage patterns. This work has demonstrated that athletes utilize Twitter for broadcasting and interaction. Professional cyclist Lance Armstrong once invited his fans to meet him for a ride around Dublin after completing the Tour of Ireland. Surprisingly 1,000 fans showed up hours later (Cromwell, 2009). During the National Basketball Association's (NBA) lockout, Kevin Durant tweeted "This lockout is really boring . . . anybody playing flag football in OKC . . . I need to run around or something!" He ended up being invited to and playing in a flag football game with students at Oklahoma State University (Mayberry, 2011). Antonio Brown, a wide receiver for the Pittsburgh Steelers, tweeted when he arrived in Indianapolis for the Super Bowl. A fan tweeted back to Brown and invited him to lunch. Brown responded and they ended up spending the whole day together (Rovell, 2012). Along with broadcasting and interaction, athletes have used Twitter as a tool for self-disclosure. Professional basketball player Allen Iverson utilized Twitter in order to keep fans abreast of trade rumors (Sheridan, 2009). Michael Beasley, another professional basketball player, posted a photo of one of his tattoos on Twitter, which described his depression and thoughts of suicide. This action (along with many others) called into question professional athletes using social media outlets for self-disclosure (Kriegel, 2009).

Along with popular press articles, empirical research has explored how professional athletes use Twitter. Through a content analysis of the athletes' tweets, Hambrick et al. (2010) determined six uses: interactivity, diversion, information sharing, content sharing, promotional, and fanship. The authors found that the majority of athlete tweets were either in the interactivity or diversion categories. Pegoraro (2010) examined the Twitter accounts of 49 athletes over a 7-day time period. She found that a high percentage of tweets responded directly to fans. Also, most tweets were about the athlete's everyday life. The findings of this exploratory and original study are telling. Overall, Pegoraro's investigation provided a strong foundation upon which to build and expand future social

media research. For instance, while Pegoraro analyzed the most followed athletes within specific sports, the current study examined a more diverse pool of athletes in terms of Twitter characteristics (i.e., # following, # of followers, tweets). This approach was taken in order to possibly gain a truer representation of how athletes use Twitter. Also, while Pegoraro's groundbreaking study involved data collected over a 7-day time period, the current study analyzed a consistent amount tweets per athlete in order to account for athletes who tweeted less frequently. Lastly, in terms of theory, the current study conceptualized athlete interactions within the framework of PSI.

## PSI

PSI is defined as one-sided and mediated interaction that takes place between a media user and a media persona (Horton & Wohl, 1956) where the message is controlled by the media persona (Cohen & Perse, 2003). According to Giles (2002), "In a parasocial relationship, the media user is a 'stranger' throughout" (p. 284). However, Giles goes on to explain that media users engaging in PSI often act in a similar manner as if they are involved in everyday two-sided (i.e., social) interaction. Therefore, PSI is often active rather than passive (Gleich, 1997; Kassing & Sanderson, 2010).

PSI research has been conducted on various media characters. Specifically, Palmgreen, Wenner, and Rayburn (1980) and Rubin, Perse, and Powell (1985) surveyed individuals regarding their feelings toward television newscasters. Rubin and McHugh (1987) later modified the approach taken by Palmgreen et al. (1980) and Rubin et al. (1985) in their examination of PSI development between media users and television performers. Following this initial surge of scholarly activity, PSI research was extended to include soap opera characters (Perse & Rubin, 1989; Rubin & Perse, 1987), television and radio talk show hosts (Rubin & Step, 2000; Rubin, Haridakis, & Eyal, 2003), television shopping hosts (Grant, Guthrie, & Ball-Rokeach, 1991), and characters within fictional- and reality-based television programming (Nabi, Stitt, Halford, & Finnerty, 2006). While the previously mentioned studies were quantitative in nature, qualitative research has also been conducted on traditional media characters. This line of research has consisted of in-depth interviews regarding attitudes toward television shopping programs (Gudelunas, 2006), a qualitative content analysis of audience letters to soap opera characters (Sood & Rogers, 2000), and focus groups regarding viewpoints of heroes and heroines within romance novels (Burnett & Beto, 2000).

Researchers have also utilized PSI in their examination of sport figures. Early sport-specific studies explored how identification impacted viewpoints toward particular athletes. These studies examined pertinent health and social issues such as viewpoints toward Magic Johnson and the risk of contracting AIDs (Brown & Basil, 1995), media coverage and public opinion regarding murder charges during the OJ Simpson trial (Brown, Duane, & Fraser, 1997) as well as viewpoints toward Mark McGwire and muscle enhancers (Brown, Basil, & Bocarnea, 2003). More recent analyses have examined PSI development among fans of National Association for Stock

Car Auto Racing (NASCAR) drivers (Spinda, Earnheardt, & Hugenberg, 2009) as well as correlations between PSI and fanship (Earnheardt & Haridakis 2009). The effect of various personality factors on PSI development have also been considered (Sun, 2010). All of the above mentioned studies utilized survey methodology.

In the area of sport communication, PSI has also been applied to Internet technologies and social media. The majority of this research has been qualitative. Utilizing constant comparative methodology, Sanderson (2008c) examined empathetic interaction on Mark Cuban's blog, *blogmaverick.com* during his time on *Dancing with the Stars*. The analysis revealed that fans were willing to display emotions toward Cuban (i.e., emotional intensity), vote for him repeatedly (i.e., devotion), and offer him advice (consultation). In his thematic analysis of Curt Schilling's blog *38pitches.com*, Sanderson (2008a) found that fans offered advice to Schilling. While the advice was often a positive response to Schilling's content, there were adversarial responses as well. In fact, various individuals took an opportunity to criticize Schilling's controversial religious and political beliefs. In their examination of Floyd Landis' website, Kassing and Sanderson (2009) found that fans discussed how Landis' performance affected their daily lives. They concluded that fans were engaging in social-like interaction by sharing these feelings as well as by providing Landis with career advice. Only one study to date has utilized PSI in an exploration of Twitter use. In their qualitative analysis of English-speaking rider tweets during the 2009 Giro de Italia, Kassing and Sanderson (2010) uncovered three themes including sharing commentary and opinions, fostering interactivity, and cultivating insider perspectives. The authors concluded that Twitter allows for a more social relationship between athletes and fans.

## Study Rationale and Research Questions

Wellman (1996) stated that synchronous communication within an Internet user group (i.e., chat room) transforms the group into a type of social network. However, Internet user groups are marked by reciprocity only until they reach a certain size (Haythornthwaite, Wellman, & Garton, 1998). Twitter is a large network, with no requirement for reciprocity (Marwick & Boyd, 2010). Due to its sheer size and unpredictable reciprocity, do professional athletes on Twitter predominately promote social relationships or traditional parasocial relationships? Quantitative research is yet to make a clear distinction.

While PSI research has often examined media users' responses to media personalities, it is worthwhile to explore whether media personalities (i.e., professional athletes) utilize Twitter, a "social" media platform, to either reinforce traditional mediated interaction or to encourage more interpersonal forms of interaction. Therefore, the following research questions were employed:

**Research Question 1:** What type of relationship do professional athletes predominately promote on Twitter?

**Research Question 2:** Is there a correlation between the number of followers and the number of social tweets sent by professional athletes?

**Research Question 3:** With whom do professional athletes typically engage in social interaction?

**Research Question 4:** What type of exchange (i.e., topic) do professional athletes promote on Twitter?

## Methodology

A content analysis was employed in order to explore the interactions promoted by professional athletes on Twitter. According to Krippendorff (2004), content analysis allows researchers to make replicable and valid inferences from texts (or other meaningful matter). This methodology also allows for systematic and objective analysis of preexisting content (Wimmer & Dominick, 2006). Additionally, this methodology has been previously utilized in sports research to examine various forms of content (Andrew, Pedersen, & McEvoy, 2011). For this particular content analysis, the unit of analysis was individual tweets produced by each athlete. Retweets, occurring when an individual posts content from other Twitter users to their followers, were also included as part of the data set.

Unlike traditional forms of media such as print and broadcast, online media and its content are rarely static. With online mediums, data can be continually updated, removed, or inserted which presents a methodological issue related to coding (Riffe, Lacy, & Fico, 2008). A single, static data set is necessary to establish intercoder reliability. To account for this issue, the researchers incorporated the use of an online software called DiscoverText, which is designed to allow individuals to search and import data from various sources such as Facebook and Twitter (DiscoverText, 2012). DiscoverText allows its users to enter in search parameters including the athlete's user name and the amount of tweets the researcher wants to collect. Incorporating DiscoverText ensured that all coders were analyzing a single, static data set.

## Athlete Selection

To determine the athletes that would comprise this sample, the website [sportsin140.com](http://sportsin140.com) was utilized. [Sportsin140.com](http://sportsin140.com) contains a directory of validated Twitter accounts for professional athletes. This site has been utilized in previous research concerning athletes' Twitter usage (i.e., Hambrick et al., 2010). On [sportsin140.com](http://sportsin140.com), validated athlete Twitter accounts are categorized by sport. The sport categories include: Major League Baseball (MLB), the NBA, the Women's National Basketball Association (WNBA), the National Football League (NFL), the National Hockey League (NHL), Major League Soccer (MLS), Women's Professional Soccer (WPS), golf, auto racing, college sports, Olympics, and other sports (i.e., rugby, boxing, cycling, extreme sports, volleyball, and gymnastics). Athletes were randomly selected from the NFL, NBA, MLB, and NHL, which are commonly referred to as the Big Four (Wenner, 1998). The

Big Four provided a logical starting point for interaction-specific research due to a high volume of their athletes on Twitter and the utilization of these particular sports in previous sport communication research (i.e., Ciletti, Lanasa, Ramos, Luchs, & Lou, 2010). Furthermore, athlete accounts were selected from the Big Four in order to avoid researcher bias and to eliminate confounding factors such as gender and differences between mainstream and niche sports. A total of 48 athletes (12 from each sport) were randomly selected by using a random number generator. The size of this sample matched up with the sample size utilized by Pegoraro (2010).

The frequency with which athletes tweet varies significantly. In order to avoid discrepancies between athletes who tweet often and those who do not, the 25 most recent tweets of each athlete were analyzed. The amount of tweets being analyzed matched up with Hambrick et al. (2010) study that analyzed 20 tweets per athlete.

### Coding

The total number of tweets analyzed in this study was 1,200, which is consistent with previous research (i.e., Hambrick et al., 2010; Pegoraro, 2010). Six variables were used to code all individual tweet content. The six variables identified the athlete, the sport, or league they participate in, the date of the tweet, the type of the tweet (i.e., social, parasocial, parasocial retweet, and social retweet), whether the tweet was interactive, and the tweet topic (i.e., general, personal life, sport life, pop culture, and combo).

A *social tweet* was defined as a tweet in direct response to another user (i.e., a tweet containing an “@” symbol at the beginning). A *parasocial tweet* was defined as a message not appearing to be in direct response to any user (i.e., a broadcast or statement of events without an “@” symbol at the beginning). A *parasocial retweet* was defined as any message containing the RT symbol without user commentary prior to or following the material being retweeted. Finally, a *social retweet* was defined as a RT with user commentary prior to or following the material being retweeted. A separate variable was created for interactivity. A tweet was coded as interactive if it was a social tweet, social retweet, or a parasocial tweet in which the athlete posed a general question to his followers (i.e., “Hello everyone. So, who do you think will win the game tonight?”). In other words, a tweet could be both parasocial and interactive.

In terms of tweet topic, *general* was defined as whenever an athlete makes a brief statement that does not fit within the other coding categories (i.e., Hello world). *Personal life* was defined as any tweet that describes happenings within an athlete’s daily life. These tweets were also not sport specific (i.e., “Picking my wife up from the airport today. Very excited!”). *Sport life* was defined as any tweet describing sport-specific information (i.e., “I just completed my workout. Looking forward to next season.”) *Pop culture* was defined as any tweet that references a musician, actor, TV show (i.e., “I love Family Guy!”) politician, and so on. Finally, the category of *combo* was defined as whenever the tweet was a combination of any of the previously mentioned categories. These categories were adopted and modified based upon the research conducted by Pegoraro (2010).

Additionally, athlete identification contained subvariables, which identified the number of followers each athlete had at the time of data collection, the number of individuals the athlete was following at the time of data collection, and the total number of tweets sent by the athlete at the time of data collection. Subvariables related to the type of tweet, specifically social tweets and social retweets, provided additional data regarding the number of followers belonging to the recipient of a social tweet or social retweet and the affiliation of that recipient (i.e., athlete, coach, league personnel, media/celebrity, company/product, or lay person). An *athlete* was defined as a professional or college athlete or a former professional or college athlete. A *coach* was defined as a current coach, even if they were a former athlete. *League personnel* was defined as any individual who was front office staff, even if they were a former athlete. A *media/celebrity* was pretty self-explanatory (i.e., an actor, musician, or famous author). A *company/product* was defined as someone who identified themselves as a high-ranking official within a company (i.e., chief executive officer [CEO]). Finally, *lay person* was defined as anyone who did not fit within the above categorizations. Affiliations were determined by analyzing the user's Twitter bio.

Three coders were selected to code all tweet content for this study. Coders participated in a collective training session where the coding protocol and code sheet were outlined and discussed. This was done in order to ensure that the majority of issues regarding the variables and coding protocol were resolved before intercoder reliability was attempted. Intercoder reliability was established prior to coding the full data set to test that all coders were interpreting the variables and coding the data set similarly and to ensure that agreement between coders did not occur as a result of chance. A 15% subsample of the data set, which included 175 tweets, were randomly selected and provided to each coder to establish intercoder reliability. According to Riffe, Lacy, and Fico (2008), an overlap of data between 10% and 20% is acceptable for the purposes of testing intercoder reliability. Fleiss' kappa coefficients were above .75 (i.e., .78–1.0) for all variables except topic of tweet, which had a kappa value of .70. These values were deemed highly acceptable based on previous research standards (i.e., Fleiss, 1981; Landis & Koch, 1977; Wimmer & Dominick, 2006). Due to the exploratory nature of this study, percentage agreement was calculated as well. The percentage values were above 85% for all variables (89–100%).

## Results

Social tweets accounted for 45.2% of the sample, while parasocial tweets accounted for 54.8% of the sample. Specifically, 408 tweets (34%) were social and 134 (11.2%) were social retweets. Of the parasocial tweets, 634 (52.8%) were parasocial and 24 (2%) were parasocial retweets. It is also important to note that along with social tweets, parasocial tweets were coded as interactive if the athlete posed a general question to his followers (i.e., "Hey everyone. Who do you think will win the game tonight?"). In terms of interactivity, 574 tweets (47.8%) were interactive and 626



tweets (52.2%) were non-interactive. As for the time span of athlete tweets, the mean value was 35 days per 25 tweets.

Research Question 1 asked what type of relationship do professional athletes predominately promote on Twitter? In order to answer that research question, a frequency distribution was conducted on individual athlete tweets. Once that analysis was completed, the researcher determined what type of relationship was promoted by each athlete. This determination was made by a split of 60/40 or greater. If the split between social and parasocial tweets was 60/40 or greater, the athlete was placed in either the social or parasocial category. Athletes that fell close to the 50/50 range were marked with an = sign. The percentage breakdowns of the type of tweet for each athlete are displayed in Table 1. The athletes are listed by sport. The first 12 athletes are from the NFL, followed by the NBA, MLB, and the NHL.

Further groupings were made within both the social and parasocial categories. A split between 60% and 70% (15–17 tweets) was labeled low (L), 71% and 84% (18–21 tweets) was labeled medium (M), and 85% and 100% (22–25 tweets) was labeled high (H). For these groupings, no independent standard or previous literature existed. These groups were created based upon the decision of the researchers and other sport communication experts to conceptualize Twitter usage among professional athletes on a continuum ranging from completely parasocial to completely social. In this analysis, 20 athletes promoted social relationships (6 NFL, 4 NBA, 4 MLB, and 6 NHL), 20 promoted parasocial relationships (4 NFL, 6 NBA, 4 MLB, and 6 NHL), and eight promoted relatively equal relationships (2 NFL, 2 NBA, 4 MLB, 0 NHL). In terms of social categorization, 12 were low social, six were medium social, and two were high social. In terms of parasocial categorization, three were low parasocial, eight were medium parasocial, and nine were high parasocial.

RQ2 asked, is there a correlation between the number of followers and the number of social tweets sent by professional athletes? All athlete tweets were collected on October 23, 2011. At the time of collection, general information regarding the athletes (i.e., the # of followers, the # following, and the # of total tweets) was also recorded. The data are displayed in Table 2.

Follower levels ranged from 3,006 to 2,001,824. For the # of social tweets sent, only the 25 tweets collected from each athlete were utilized in the statistical analysis. To answer Research Question 2, a Pearson correlation was conducted between the two variables of interest (i.e., the # of followers and the # of social tweets). The correlation was not found to be significant ( $r = -.26, p > .05$ ). This correlation remained non-significant even when an extreme outlier in terms of followers was excluded from the analysis.

In order to further explore the data, correlations were conducted on the # of followers, the # following, the # of social tweets, the # of parasocial tweets, and the # of total tweets. Three correlations were found to be significant. There was a moderate, positive correlation found between the # of total tweets and the # following ( $r = .48, p < .05$ ). There was also a moderate, positive correlation found between the # of social tweets and the # following ( $r = .41, p < .05$ ). That being said, a

**Table 1.** Individual Athlete Tweets.

	Social %	Parasocial %	Athlete Type
Michael Bush	68%	32%	Low social
Keith Bulluck	64%	36%	Low social
Reggie Bush	12%	88%	High parasocial
EJ Biggers	64%	36%	Low social
Braylon Edwards	48%	52%	=
Pierre Thomas	12%	88%	High parasocial
Josh Cribbs	68%	32%	Low social
Craig Terrill	52%	48%	=
Matt Hasselbeck	64%	36%	Low social
Nate Clements	8%	92%	High parasocial
Chris Canty	0%	100%	High parasocial
Antonio Smith	60%	40%	Low social
Eric Maynor	72%	28%	Medium social
Mark Madsen	28%	72%	Medium parasocial
Adonal Foyle	0%	100%	High Parasocial
Mike James	68%	32%	Low social
Nazr Mohammed	40%	60%	Low parasocial
Carlos Boozer	16%	84%	Medium parasocial
Charlie Bell	72%	28%	Medium social
Stephen Curry	76%	24%	Medium social
Austin Daye	52%	48%	=
Chris Douglas-Robert	24%	76%	Medium parasocial
Derek Fisher	12%	88%	High parasocial
Lamaricus Aldridge	52%	48%	=
Brian Wilson	0%	100%	High parasocial
John Lannan	56%	44%	=
Sam LeCure	28%	72%	Medium parasocial
JP Arencibia	64%	36%	Low social
Vernon Wells	40%	60%	Low parasocial
John Baker	48%	52%	=
Brett Wallace	76%	24%	Medium social
Trevor Bell	48%	52%	=
Bryan Petersen	56%	44%	=
Reid Brignac	88%	12%	High social
Eric Young Jr.	96%	4%	High social
Chris Johnson	24%	76%	Medium parasocial
Michael Del Zotto	68%	32%	Low social
Bobby Ryan	84%	16%	Medium social
Joffrey Lupul	16%	84%	Medium parasocial
James van Riemsdyk	72%	28%	Medium social
Mike Green	32%	68%	Low parasocial
Mike Rupp	20%	80%	Medium parasocial
Matt Beleskey	20%	80%	Medium parasocial
Mike Commodore	60%	40%	Low social
Cam Janssen	8%	92%	High parasocial
Frazer McLaren	60%	40%	Low social
Bill Sweatt	64%	36%	Low social
Jordin Tootoo	8%	92%	High parasocial

**Table 2.** General Athlete Data.

As of October 23, 2011	# Followers	# Following	# Tweets
Michael Bush	21,283	101	5,310
Keith Bulluck	23,842	51	3,453
Reggie Bush	2,001,824	172	2,333
EJ Biggers	3,751	141	1,438
Braylon Edwards	122,948	178	4,509
Pierre Thomas	60,659	118	1,188
Josh Cribbs	92,358	203	5,374
Craig Terrill	5,844	133	621
Matt Hasselbeck	94,511	435	3,416
Nate Clements	17,394	69	562
Chris Canty	10,090	68	117
Antonio Smith	8,151	82	619
Eric Maynor	54,756	1,071	12,896
Mark Madsen	12,917	117	357
Adonal Foyle	7,235	42	255
Mike James	9,944	524	4,051
Nazr Mohammed	27,361	306	6,575
Carlos Boozer	69,483	233	350
Charlie Bell	18,854	423	8,624
Stephen Curry	207,474	243	2,269
Austin Daye	25,043	407	3,329
Chris Douglas-Robert	29,859	2	17,653
Derek Fisher	762,327	195	822
Lamarqus Aldridge	34,217	36	1,026
Brian Wilson	364,162	18	96
John Lannan	7,614	84	245
Sam LeCure	11,855	38	3,407
JP Arencibia	50,189	126	2,209
Vernon Wells	26,633	51	584
John Baker	5,376	144	2,636
Brett Wallace	4,771	23	120
Trevor Bell	3,006	95	167
Bryan Petersen	6,868	79	2,461
Reid Brignac	17,046	180	964
Eric Young Jr.	11,788	347	2,426
Chris Johnson	4,468	69	154
Michael Del Zotto	22,713	143	326
Bobby Ryan	64,664	150	2,013
Joffrey Lupul	66,903	36	743
James van Riemsdyk	50,573	381	1,298
Mike Green	56,347	140	215
Mike Rupp	32,055	28	437
Matt Beleskey	7,446	50	407
Mike Commodore	32,661	230	3,117
Cam Janssen	19,932	92	205
Frazer McLaren	5,164	30	101
Bill Sweatt	5,427	131	1,103
Jordin Tootoo	26,632	48	394

moderate negative correlation was found between the # of parasocial tweets and the # following ( $r = -.41, p < .05$ ). Overall, athletes followed a relatively small number of individuals (mean [ $M$ ] = 167.98, standard deviation [ $SD$ ] = 182.25). The median value for the # following was 122.

A one-way analysis of variance (ANOVA) with a Bonferroni post hoc test was also conducted between the # following and the athlete groupings (i.e., low social, medium social, high social, low PSI, medium PSI, and high PSI) in order to see whether there were significant between-group differences. This analysis was shown to be significant,  $F(6, 41) = 2.57, p < .05$ . The post hoc analysis revealed significant differences between medium social ( $M = 381.83, SD = 368.36$ ) and medium PSI ( $M = 71.63, SD = 73.41$ ) athletes, as well as between medium social and high PSI ( $M = 91.33, SD = 59.89$ ) athletes. ANOVA testing was not found to be significant between athlete type and the # of followers and athlete type and the # of total tweets.

Research Question 3 asked, with whom do professional athletes typically engage in social interaction? To answer this research question, a frequency distribution was conducted. There were 590 instances where social interaction was coded, either in a social tweet or in a social retweet. Some of these tweets had multiple recipients. It was found that athletes communicate socially predominately with lay people ( $n = 349, 59.1\%$ ) and other professional and college athletes ( $n = 144, 24.4\%$ ). Occasionally, communication was observed between athletes and the media/celebrity ( $n = 59, 10\%$ ) and product/company categories ( $n = 30, 5.1\%$ ). Very rarely did they communicate with coaches ( $n = 1, 0.2\%$ ) and league personnel ( $n = 7, 1.2\%$ ). In terms of the amount of followers of social tweet recipients, there was a wide range (i.e., 1 to over 2,000,000). The median value for recipient followers was 345, which makes sense considering that athletes with large amounts of followers often would offset lay people with lower amounts of followers.

Finally, Research Question 4 asked, what type of exchange (i.e., topic) do professional athletes promote on Twitter? Once again, to answer this research question, a frequency distribution was conducted on the topic of athlete tweets. Athletes communicated more about their personal lives ( $n = 448, 37.3\%$ ) as opposed to their sport lives ( $n = 288, 24\%$ ). Additionally, athletes made general statements (i.e., Hello world) quite frequently ( $n = 316, 26.3\%$ ), while rarely mentioning pop culture ( $n = 70, 5.8\%$ ). In terms of combo, 59 (76%) of the 78 tweets were combinations of the athletes' personal lives and sport lives.

## Discussion

The purpose of this content analysis was to explore how professional athletes utilize Twitter incorporating the theoretical framework of PSI (i.e., Horton & Wohl, 1956). In particular, this study was developed in order to shed light on the types of fan-athlete relationships promoted by professional athletes on Twitter. Therefore, the intent of this study was to examine the nuances of fan-athlete interaction (i.e., social vs.

parasocial, interactive vs. non-interactive, affiliation of recipient, and topic of tweet) from the athlete perspective.

In approaching this analysis, four exploratory research questions were created. Research Question 1 was concerned with the types of relationships promoted by professional athletes on Twitter. It was found that athletes promote both social and parasocial relationships relatively equally. In fact, when looking at tweets as a whole, parasocial tweets outnumbered social tweets. Examining each athlete individually revealed that very few athletes were heavy social users of Twitter. In fact, most social athletes fell near the low end of the continuum. However, when athletes chose to be parasocial, most were either medium or heavy parasocial users. While it is true that "Twitter provides athletes and fans with the opportunity to interact in a more social rather than a parasocial way" (Kassing & Sanderson, 2010, p. 124), that opportunity must be seized by both the athlete and the fan. Without an athlete's reciprocation of a fan's social advances, the traditional mediated (i.e., parasocial) status quo would remain intact. That being said, the results of the current study indicated that athletes promote social and parasocial relationships relatively equally with parasocial relationships being championed to a greater degree when one considers these relationships along a continuum. Furthermore, a larger amount of tweets were noninteractive as opposed to interactive, which is contrary to the findings of Hambrick et al. (2010) in which interactivity was the most prevalent use of Twitter among professional athletes. These findings demonstrate that Twitter usage among professional athletes exists on a continuum where various degrees of interaction are possible.

Research Question 2 explored whether there was a connection between the # of followers and the # of social tweets sent by professional athletes. No correlation was found between these two variables, which runs counter to the findings of Hambrick et al. (2010). However, there were two positive correlations between the # following and the # of social tweets and the # following and the # of total tweets and one negative correlation between the # of parasocial tweets and the # following. An ANOVA also revealed that medium social athletes were following a significantly larger amount of individuals as compared to medium PSI and high PSI athletes. That being said, highly social athletes followed fewer individuals than medium social athletes. High PSI athletes followed more individuals than medium PSI athletes, while low PSI athletes followed more individuals than both medium and high PSI athletes. Approaching this finding with some caution, it could be argued that professional athletes feel somewhat more inclined to communicate socially when they follow a larger number of individuals because they are communicating predominately with those individuals as opposed to people that follow the athlete but are not followed by the athlete in return. This appears to support Wellman (1996) in the sense that individuals can form social networks online. However, when it comes to professional athletes and Twitter, these networks contain a smaller and select group of individuals. That is not to say that athletes do not communicate socially with individuals that they do not follow. However, it was found that professional athletes follow a relatively small amount of other Twitter users, while several thousand (or

more) follow individual athletes. Therefore, it appears that professional athletes may use more discretion when they choose with whom they communicate in a social manner. Perhaps their follower amounts have grown so high that complete reciprocity is no longer possible (i.e., Haythornthwaite et al., 1998). In other words, it would be unreasonable to assume that professional athletes communicate socially with all of their followers.

As a follow-up to the previous question, Research Question 3 was concerned with whom professional athletes engage in social interaction on Twitter. Similar to the findings of Pegoraro (2010), professional athletes communicated most frequently with lay persons. They also communicated somewhat frequently with college and professional athletes. This demonstrates that when athletes choose to communicate socially on Twitter, they are willing to break down traditional barriers that once existed between themselves and the everyday fan. In doing so, athletes are providing fans with unprecedented access to their lives, which supports the claims made by Kassing and Sanderson (2009) and Sanderson (2008b) regarding the impact of Internet technologies within the sport communication landscape. That being said, this finding should also be approached with some caution. As stated previously, the athlete has to choose to communicate socially and the results of this study demonstrated that not all professional athletes are socially interactive on Twitter. In fact, it was an even split between athletes that communicated socially and athletes that communicated parasocially. Therefore, even though Twitter is a media platform where social interaction is possible, it appears as though the media persona (i.e., the athlete) still controls the nature of the interaction and the message being delivered, which lends some support to the claims made by Cohen and Perse (2003).

Finally, Research Question 4 examined the type of exchange (i.e., topic) being utilized most frequently by professional athletes on Twitter. This study revealed that professional athletes are more willing to discuss their personal lives as opposed to their sport lives, which supports the findings of Pegoraro (2010). This finding also supports the claims made by Gregory (2009) in which the author stated that Twitter allows athletes to showcase their personalities. By revealing aspects of their personal lives (e.g., family life, religious beliefs) along with their sport lives on Twitter, athletes appear to be using this medium as tool through which they can share their personalities with fans. These personality layers were also showcased through general statements (i.e., "Good morning tweeps!"), which were used quite frequently.

### *Theoretical and Practical Implications*

Until recently, PSI research focused on traditional media outlets such as television (Grant et al., 1991; Gudelunas, 2006; Nabi et al., 2006; Perse & Rubin, 1989; Rubin et al., 1985; Rubin et al., 2003; Rubin & McHugh, 1987; Rubin & Perse, 1987), radio (Rubin & Step, 2000), and print (Burnett & Beto, 2000). In all of these instances, the mediated barrier between the media persona and the media user was much more static and immovable in comparison to the blurred lines of potential interaction that

exist with Internet technologies and social media. With traditional media outlets, the chances of making direct contact are quite limited. With Twitter, however, the odds of making direct contact rise dramatically. That being said, our understanding of how PSI promotion and manifestation affect media persona—media user interaction and relationship formation on Internet technologies is still in its infancy. Sport-specific studies have begun to examine PSI on websites (Kassing & Sanderson, 2009), blogs (Sanderson, 2008a, 2008c), and social media outlets like Twitter (Kassing & Sanderson, 2010). However, this study was one of the first known attempts to quantify the frequency with which parasocial and social interaction were being utilized by professional athletes on Twitter. This study was a necessary first step toward understanding the true nature of fan–athlete interaction on Twitter. Now that an understanding of how the media persona (i.e., the athlete) utilizes the medium has been established, scholarly efforts can be dedicated to understanding how fans respond to athletes' interaction styles (i.e., social or parasocial).

From a theoretical standpoint, this study is significant in that it extends previous research that explored how athletes utilize Twitter (i.e., Hambrick et al., 2010; Pegoraro, 2010) by focusing primarily on the interaction style being promoted by each athlete. Also, instead of simply looking at whether interactivity was taking place, this study defined interactivity based upon the specific user conventions of Twitter (i.e., @ replies and social retweets). This study also took a deeper look at the recipients of social interaction in order to gain a better understanding of who professional athletes communicate with on Twitter. In other words, the fan–athlete recipient dichotomy was expanded upon to include celebrities, coaches, products and companies, league personnel, and media members. This study also resolved some of the methodological limitations encountered in the above mentioned studies in terms of the time frame of analysis and the athlete selection process. This research is also theoretically significant because it demonstrated that professional athletes utilize Twitter along a continuum from parasocial to social with neither relationship type being truly championed.

From a practical standpoint, the findings of this study have important implications for both sport management and sport marketing. The findings of this study would be useful to any sport management professional who has to deal with athletes. Having a general understanding of how professional athletes utilize Twitter to communicate with fans would be beneficial from a management and a relationship development perspective. This knowledge would also be useful from a crisis prevention/management standpoint. In other words, a general manager or a public relations director who is well versed in how professional athletes use Twitter would be better prepared to deal with a situation where a mistake (i.e., sharing controversial political beliefs, breaking news too early, and making sexist/racist comments) is made.

From a sport marketing perspective, companies would be wise to examine the type of relationship (i.e., parasocial or social) being utilized by a professional athlete before choosing them to represent their brand image in various promotions. If a company wants an athlete to be interactive with fans regarding a certain product, it would be a smart business move to hire an athlete that already uses social media in a social fashion.

However, if the company wants an athlete who simply broadcasts upcoming promotions, then choosing a parasocial athlete would suffice. Furthermore, from the athlete's perspective, forging more interactive relationships with fans via social media could lead to an increase in sales of the products that they represent and an improved brand image.

## Limitations and Future Research

Like any research endeavor, this study was not without limitations. First, only 48 athletes were examined. A content analysis that examines all of the athletes on Twitter would simply not be feasible. However, while this study only analyzed 48 athletes, the use of random sampling ensured that the results would be generalizable to professional athletes on Twitter. Second, this study examined the 25 most recent tweets (1,200 total) of each athlete. While this technique resolved limitations of a previous content analysis (i.e., Pegoraro, 2010), it still limits generalizations that can be made regarding athlete Twitter usage. In effect, this analysis provided a snapshot of time. Future research should examine a larger amount of tweets per athlete in order to gain a more nuanced picture of Twitter usage. Third, only the Big Four sports were examined. Therefore, the results from this study are not necessarily generalizable to niche sport athletes (MMA, Pro Volleyball, X Games, etc.). Future research should compare the Twitter usage patterns of athletes within mainstream and niche sports. Fourth, only male athletes were examined. This was done in order to control for gender in the analysis. Future research should compare relationship promotion on Twitter along lines of gender. A fifth limitation of this study has to do with the time of data collection. When the tweets were collected on October 23rd, the NBA was in the midst of its lockout due to issues involving the collective bargaining agreement (CBA). This could have colored the commentary that NBA athletes were sharing through Twitter. Also, during this period of analysis, MLB was wrapping up the World Series. Only two teams (i.e., the Texas Rangers and St. Louis Cardinals) were in season. Finally, at the time of analysis, the NHL was in the early portion of its season, while the NFL was in the middle of their season. Sport communication researchers would be wise to compare tweeting patterns among professional athletes depending upon the sport being in-season versus off-season as well as regular season versus playoffs. Finally, the types of interactions promoted by athletes could have varied depending upon the athlete's comfort level with the medium. Due to the difficulties that the coders would have encountered with something as subjective as comfort level, it was not coded in this content analysis.

## Conclusions

This study supports the claims made by Clavio and Kian (2010) in which the authors stated that Twitter offers "a broad spectrum of information sharing and interactivity that may be decided by the content generator (i.e., the athlete, coach, or organization)" (p. 497). In this study, athletes were the content generators, deciding not only what to discuss but how to discuss it and with whom to discuss it. As the content generators,



professional athletes appear to be utilizing Twitter as a means for both interaction (i.e., social interaction) and broadcasting (i.e., PSI). These usage trends do not exist in a bubble, nor are they defined by clear-cut groupings. At any time, the use of this medium may shift as the natural ebb-and-flow of an athlete's personality and life change. In reality, the use of Twitter among professional athletes runs along a continuum with no static points. Therefore, as a "social" media platform, Twitter provides athletes with the option to engage in either parasocial and/or social interaction.

In terms of its potential to provide unprecedented access and to break down traditional communication barriers between fans and athletes, Twitter seems to be hitting the mark. That being said, it is important to remember that the athlete must choose to connect socially with their fans. The athlete must choose to take down that wall, effectively transforming the everyday fan from voyeur to digital acquaintance. Therefore, it appears that the potential for relationship formation still lies predominately with the media persona (i.e., the athlete). Like any social media platform, without an active effort by the media persona to reciprocate the media user's interaction, Twitter would remain a one-sided (i.e., parasocial) media platform championing the illusion of interactivity.

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