

# Why We Follow: An Examination of Parasocial Interaction and Fan Motivations for Following Athlete Archetypes on Twitter

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An Internet-based survey was posted on the Twitter feeds and Facebook pages of 1 predominantly social and 1 predominantly parasocial athlete to ascertain the similarities and differences between their follower sets in terms of parasocial interaction development and follower motivations. Analysis of the data revealed a sense of heightened interpersonal closeness based on the interaction style of the athlete. While followers of the social athlete were driven by interpersonal constructs, followers of the parasocial athlete relied more on media conventions in their interaction patterns. To understand follower motivations, exploratory factor analyses were conducted for both follower sets. For followers of the social athlete, most of the interactivity, information-gathering, personality, and entertainment items loaded together. Unlike followers of the social athlete, fanship and community items loaded alongside information-gathering items for followers of the parasocial athlete. The implications of these and other findings are discussed further.

**Keywords:** uses and gratifications, social media, interactivity

Social media have changed how individuals interact with one another (Wallace, Wilson, & Miloch, 2011), influencing the very nature of communication and expression (Sutton, 2012). According to Sanderson (2011), "Social media are inherently designed to facilitate human connections" (p. 494). That being said, the connections formed through social media have yet to be explored in their entirety. In fact, most sport-specific studies that have been conducted thus far have focused on how athletes (i.e., Hambrick, Simmons, Greenhalgh, & Greenwell, 2010; Kassing & Sanderson, 2010; Pegoraro, 2010) and organizations (i.e., Sanderson, 2011; Wallace et al., 2011) use social-media platforms. According to Clavio and Kian (2010), few sport-specific studies have analyzed social-media platforms from the audience perspective. That is troublesome, considering that scholars have a limited overall

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understanding of the social-media audience (Marwick & Boyd, 2010). Therefore, a deeper understanding of the use of social-media technologies from the audience (i.e., fan) perspective in the sport communication landscape is warranted.

In the realm of sport, social-media technologies are said to provide new ways for fans to interact with sport celebrities (Sanderson, 2010). One social-media technology that is currently affecting fan–athlete interaction is Twitter. According to Kassing and Sanderson (2010), Twitter allows fans and athletes to communicate more interpersonally, thereby enhancing the overall sport experience. Clavio and Kian (2010) extended these claims by analyzing how and why individuals followed a retired professional athlete on Twitter. Sanderson (2011) stated that Clavio and Kian’s findings demonstrated that fans use Twitter to express parasocial interaction (PSI) with athletes. While that may be true, Clavio and Kian analyzed the athlete’s followers solely from a uses-and-gratifications perspective. PSI, which can be used to understand how Internet technologies affect fan–athlete interaction (Kassing & Sanderson, 2009), has yet to be quantitatively examined in conjunction with uses and gratifications on Twitter from the fan perspective. Since uses and gratifications and PSI are closely related (Rubin & McHugh, 1987), this research is a necessary step.

Therefore, the purpose of this study was to use both PSI and uses and gratifications to explore the similarities and differences between followers of one predominantly social and one predominantly parasocial athlete on Twitter. This is in line with Pegoraro (2010), who proposed that the next step in Twitter research is to query fans that follow athletes. Specifically, this study sought to determine if common correlations found in decades of PSI research exist in a sport and social-media context. The study also sought to determine whether the significance of various interpersonal and media-use constructs differed among the followers of two athletes who promote distinct interaction styles. It is worthwhile to ascertain whether follower interaction patterns are affected by an athlete’s interaction style. Examining the followers of a predominantly social athlete and those of a predominantly parasocial athlete allows those rich comparisons to be made. In addition, this study explored user motivations for following these specific athlete archetypes, which is in line with one of the primary purposes of the uses-and-gratifications perspective (i.e., Ruggiero, 2000).

This was one of the first known attempts to modify and apply common PSI correlations to a sport and social-media context. This was accomplished through the use of various constructs that Rubin (2009) argued could be used “to understand the role and influence of media and newer technologies,” (p. 177). From a theoretical standpoint, this study attempted to fill a substantial hole in previous literature by providing an in-depth examination of fan–athlete interaction on Twitter from the fan perspective.

## Review of Literature

### PSI

PSI is both a psychological and a media phenomenon concerned with the relationships that media users form with various media personas (Horton & Wohl, 1956). According to Horton and Wohl’s definition of PSI, media users form bonds with media personalities over time that resemble social interaction. However, unlike

social interaction, PSI is one-sided and mediated. Though PSI is one-sided, media users will often engage actively rather than passively in their relationships with media personas (Gleich, 1997; Kassing & Sanderson, 2010). While media users may feel and act as if they are in a normal role relationship with a media persona, it is the media persona who controls the message (Cohen & Perse, 2003). Unless contact is made between the media user and the media persona, the relationship remains parasocial (Giles, 2002).

PSI between a media user and a media personality has been conceptualized as the formation of an interpersonal relationship (Turner, 1993) and as intimate and friendlike (Hall, Wilson, Wiesner, & Cho, 2007; Perse & Rubin, 1989; Rubin, Perse, & Powell, 1985; Rubin & McHugh, 1987). These relationships are often experienced as “seeking guidance from media personae, seeing media personalities as friends, imagining being part of a favorite program’s social world, and desiring to meet media performers” (Rubin et al., 1985, pp. 156–157).

PSI research over the last 3 decades has examined the relationships between audience members and newscasters (Palmgreen, Wenner, & Rayburn, 1980; Rubin et al., 1985), television performers (Rubin & McHugh, 1987), soap opera characters (Perse & Rubin, 1989; Rubin & Perse, 1987, Sood & Rogers, 2000), and television and radio talk-show hosts (Rubin, Haridakis, & Eyal, 2003; Rubin & Step, 2000). PSI research has also been conducted on television shopping hosts (Grant, Guthrie, & Ball-Rokeach, 1991; Gudelunas, 2006), reality-based television programming (Nabi, Stitt, Halford, & Finnerty, 2006), and print-media sources such as romance novels (Burnett & Beto, 2000).

PSI research has also been extended into the realm of sport, analyzing the relationships between fans and sport celebrities/athletes. Studies have found that identification (commonly linked with PSI) affected media users’ viewpoint toward Magic Johnson and the risk of contracting AIDS (Brown & Basil, 1995), OJ Simpson and his innocence regarding murder charges (Brown, Duane, & Fraser, 1997), and Mark McGwire and interest in muscle-enhancement products (Brown, Basil, & Bocarnea, 2003). Recent analyses of athletes have also found correlations between PSI and levels of fandom (Earnhardt & Haridakis, 2009), correlations between PSI and audience activity with NASCAR drivers (Spinda, Earnhardt, & Hugenberg, 2009), and correlations between PSI, personality factors, and dispositional empathy (Sun, 2010).

Scholarly efforts in the area of PSI and sport have also applied this phenomenon to various new-media and social-media technologies such as blogs (Sanderson, 2008a, 2008b), Web sites (Kassing & Sanderson, 2009), and Twitter (Kassing & Sanderson, 2010). Sanderson (2008b) investigated PSI on Curt Schilling’s blog, 38pitches.com, and found that fans identified with Schilling, offered advice, and criticized his religious and political beliefs. Sanderson (2008a) examined empathetic interactions on Dallas Mavericks owner Mark Cuban’s blog, blogmaverick.com, during his tenure on *Dancing With the Stars* and found three empathetic interaction categories: emotional intensity, devotion, and consolation. The findings indicated that media users were counseling Cuban instead of seeking advice from him. Kassing and Sanderson (2009) examined PSI on Floyd Landis’s Web site and found that fans acted in a more social manner, discussing how Landis’s performance affected their daily lives. In that study, fans were also found to provide the athlete with career advice. In 2010, Kassing and Sanderson applied PSI to Twitter in a

qualitative analysis of athlete tweets during the 2009 Giro d'Italia. Three themes emerged: sharing commentary and opinions, fostering interactivity, and cultivating insider perspectives. The authors concluded that Twitter affords a more social than parasocial relationship between athletes and fans.

### Common Correlations in PSI Research

Over the last 30–40 years, various constructs have been found to correlate with PSI in traditional-media outlets. Some of the most commonly cited include uncertainty reduction (Perse & Rubin, 1989), social attraction (Rubin & McHugh, 1987), attitude homophily (Turner, 1993), perceived realism (Rubin et al., 1985; Rubin et al., 2003; Rubin & Perse, 1987) affinity (Rubin, 1979; Rubin et al., 1985; Rubin & Perse, 1987), amount of time spent with the medium (Grant et al., 1991), and instrumental media use (Kim & Rubin, 1997; Rubin et al., 1985). In most of the cited studies, these constructs were treated as antecedent conditions to PSI development.

Uncertainty reduction is concerned with interpersonal communication during initial interactions (Berger & Calabrese, 1975), with an increased focus on how relationship uncertainty is altered due to the amount of knowledge an individual has of another (Kellerman & Reynolds, 1990). Social attraction is concerned with a media persona's likability (McCroskey & McCain, 1974) and viewing the personality as a viable friend. Attitude homophily is related to a sense of shared likeness (Lazarsfeld & Merton, 1954) based on similar attitudes and beliefs. Perceived realism is defined as the authenticity of either the medium or the personality (Rubin, 1979), while affinity deals with how much the media user likes the medium or media personality (Giles, 2002). Finally, instrumental media use is defined as an active orientation toward media use, where an individual uses the media for both information gathering and companionship (Rubin, 2009).

All of the mentioned constructs and their correlational relationship to PSI have been established over 4 decades of PSI research (Perse & Rubin, 1989; Rubin et al., 1985; Turner, 1993, etc.). However, these constructs have not been applied to a social-media context. Specifically, these constructs have never been compared across different athletes' Twitter feeds. Even though Twitter is a "social" platform, a mediated barrier still exists. The media user cannot see, touch, or have a face-to-face conversation with these athletes. Therefore, traditional mediated interaction patterns may still manifest. To explore the nuances of those interaction patterns in more detail, the following research questions were developed in relation to PSI:

**RQ1:** What are the differences and similarities between followers of a predominantly parasocial athlete and followers of a predominantly social athlete with regard to the salience of PSI?

**RQ2:** What are the differences and similarities between followers of a predominantly parasocial athlete and followers of a predominantly social athlete with regard to common PSI correlations?

### Uses and Gratifications on the Internet

This research is also grounded in the uses-and-gratifications perspective (Katz, Blumler, & Gurevitch, 1974), which shifts from a direct-effects perspective to

assessing how users consume media to fulfill certain needs (Fisher, 1978). Ruggiero (2000) posited that the uses-and-gratifications perspective is a “cutting-edge theoretical approach” that can be used in the early stages of new communication media (p. 27). Scholars have been quick to adopt this philosophy, as the uses-and-gratifications approach has been continually applied to the consumption of specific Internet platforms such as message boards (Clavio, 2008) and blogs (Armstrong & McAdams, 2011; Hollenbaugh, 2011; Kaye, 2010; Kim, 2011; Sweetser & Kaid, 2008; Sweetser, Porter, Chung, & Kim, 2008; Trammell, 2005). Blog-specific research has revealed several user motivations including interactivity and information sharing (Armstrong & McAdams, 2011; Kaye, 2010; Kim, 2011; Sweetser & Kaid, 2008), self-expression (Trammell, 2005), noninteraction or surveillance (Sweetser et al., 2008), and helping/informing, social connection, to pass time, exhibitionism, professionalism, archiving/organizing, and to obtain feedback (Hollenbaugh, 2011).

Recently, research analyzing uses and gratifications on the Internet has been extended to include other social-media sites such as Facebook, MySpace, and Twitter (i.e., Chen, 2011; Hanson, Haridakis, Cunningham, Sharma, & Ponder, 2010; Johnson & Yang, 2009; Park, Kee, & Valenzuela, 2009; Raacke & Bonds-Raacke, 2008; Urista, Dong, & Day, 2009). Raacke and Bonds-Raacke found that a primary usage factor for MySpace and Facebook included social interactivity such as keeping in touch with friends, making new friends, and reconnecting with old friends. Similarly, Urista et al. found that college students used Facebook to attain a form of mediated interpersonal communication. Research has also explored how the use of social media (i.e., Facebook) affects civic action offline (Park et al., 2009) and political cynicism during presidential campaigns (Hanson et al., 2010). Twitter-specific research has found that individuals use this outlet to satisfy both information-sharing and interactivity motivations (Johnson & Yang, 2009). Research has also suggested that Twitter acts as a forum for developing bonds of informal camaraderie (Chen, 2011).

Sport communication scholars have also begun to apply the uses-and-gratifications perspective to a sport and social-media context. Specifically, this perspective has been employed to explore Twitter use among both professional athletes and fans. In their study of a female athlete’s Twitter followers, Clavio and Kian (2010) applied uses and gratifications to obtain follower motivations. They found that the most important motivating factor for following the athlete’s Twitter feed was the perception of the athlete as an expert in her sport. The athlete’s writing style was also found to be a contributing factor. Finally, the authors found three factors to explain follower motivations: organic fandom, functional fandom, and interaction. In a study by Hambrick et al. (2010), professional athletes’ Twitter use was examined. Through a content analysis, the authors determined six uses for the athletes’ Twitter feeds: interactivity, diversion, information sharing, content sharing, promotional, and fanship. They found that most athlete tweets were either in the interactivity or diversion category.

Uses-and-gratifications research has revealed various motives for using Internet technologies and social media. It becomes worthwhile to examine how motivations differ between followers of athletes who promote specific interaction styles on Twitter, as interactivity has commonly been identified as an important motivation for social-media use (i.e., Clavio & Kian, 2010; Hambrick et al., 2010; Raacke &

Bonds-Raacke, 2008). Therefore, the following research question related to the uses-and-gratifications approach was developed:

**RQ3:** What are the differences and similarities between followers of a predominantly parasocial athlete and followers of a predominantly social athlete with regard to trends and motivations of Twitter use?

## Methodology

### Sample and Procedure

Participants for this study were acquired primarily through purposive sampling. A link to an Internet-based survey was posted on the Twitter feeds and Facebook pages of the two athletes chosen for this study. The survey link was also posted on Twitter by prominent sport-media members in the athletes' geographic area. The sample ( $N = 336$ ) consisted of followers of one predominantly parasocial ( $n = 123$ ) and one predominantly social athlete ( $n = 213$ ). These athletes were chosen based on the results of a content analysis of athlete tweets that was conducted before this study (i.e., Frederick, Lim, Clavio, Pedersen, & Burch, in press). In that content analysis, athletes were randomly selected from the "big four" sports. The 25 most recent tweets of each athlete were analyzed to determine the interaction style that was being promoted. Any tweet that contained an @ symbol at the beginning of the tweet or a retweet that contained dialogue before or after the information being retweeted was coded as social. Any tweet that did not contain an @ symbol or any traditional retweet was coded as parasocial. Once the content analysis was complete, one athlete that was a heavy social user and one that was a heavy parasocial user were randomly selected from either end of the interaction continuum for inclusion in the current study. The social athlete used in this study was social in over 75% of his tweets, while the parasocial athlete was parasocial in 100% of his tweets. Both athletes had been on Twitter for 2 or more years, were 24–30 years old, and had 350,000–450,000 followers.

The current study used survey methodology. An Internet-based survey was created using the popular Web tool SurveyMonkey.com, which provides users with the ability to use various question formats and graphics. This Web tool also allowed for easy data tracking and collection. Each participant was given a unique IP-address identifier, which protected against followers completing the survey multiple times. Skip-logic questions were used to ensure that individuals followed the particular athlete and that they were 18 or older. For example, if a person answered no to the question "Do you follow this athlete on Twitter," they were automatically taken to the end of the survey.

### Measures

The survey instrument was broken down into 11 sections. The goal of this instrument was to determine if common correlations found in PSI research could be applied to a Twitter-specific context and whether these variables differed between followers of a predominantly parasocial and those of a predominantly social athlete. In addition, this measure was used to gain an understanding of the motivations for following certain athletes on Twitter.

**Amount of Time Spent With the Medium.** For the section of the survey on amount of time spent with the medium, various questions were both created and adopted from a previously verified measure of media consumption (Hampton, Goulet, Rainie, & Purcell, 2011). Items included questions such as “How much time would you estimate that you spend reading tweets on Twitter in an average day,” “How much time would you estimate that you spend tweeting in an average day,” and “How long have you had a Twitter account?” The items in this section of the survey had dissimilar Likert-type scales. Therefore, no cumulative reliability was calculated for the three individual items.

**Affinity.** The affinity-for-TV scale was originally used by Rubin in 1979, 1981, and 1983 and Rubin et al. (1985). In the Rubin et al. study, affinity was found to be a reliable measure ( $\alpha = .82$ ). This scale consists of five 5-point Likert items (1 = *strongly disagree*, 5 = *strongly agree*). This scale was modified so that *television* was replaced by *Twitter*. In other words, “Watching television is very important in my life” was modified to “Using Twitter is very important in my life.”

**Instrumental Media Use.** Items on instrumental media use were originally revealed in a factor analysis in the study conducted by Rubin et al. (1985). The original measure contained four items (three information and one social) with a Cronbach’s alpha value of .78. One item was added to this measure for the purpose of the current study. Five Likert-type items were modified to gauge followers’ orientation toward Twitter usage. Each item was preempted with “I use Twitter . . .” and followed by statements such as “because it helps me learn things about myself and others.”

**Perceived Realism.** The perceived-realism scale was first used by Rubin (1979, 1981, 1983). Perceived realism was found to have an acceptable level of reliability ( $\alpha = .71$ ) in the study conducted by Rubin et al. (1985). This measure contains five 5-point Likert items and was used to measure the authenticity of Twitter. The original items were modified to be Twitter-specific. An original item stated, “Television presents things as they really are in life.” This item was modified to say, “Twitter presents things as they really are in life.”

**Athlete Information.** The athlete-information portion of the survey consisted of five questions that asked participants for specific details regarding the athlete they were following. These questions included “How long have you been following this athlete on Twitter,” “Have you ever sent a tweet directly to this athlete,” “Has this athlete ever sent a tweet directly (i.e. replied) to you,” “Have you ever retweeted this athlete,” and “Has this athlete ever retweeted you?”

**PSI.** The original 20-item PSI scale was created by Rubin et al. (1985). This 20-item scale was meant to measure PSI between media users and television newscasters. This scale was found to have a good level of reliability ( $\alpha = .93$ ) by Rubin et al. (1985). This measure was later modified into a 10-item scale and applied to television performers (Rubin & McHugh, 1987) and soap opera characters (Perse & Rubin, 1989). The 10-item scale was also found to have an acceptable level of reliability ( $\alpha = .85$ ). For the purposes of this study, the 20-item scale was modified into a 14-item version. Each question was worded to be Twitter-specific, with 5-point Likert-type response options. Sample items included statements such as “I see this athlete as a natural, down-to-earth person” and “I like to compare my ideas with what this athlete says.”

**Uses and Gratifications.** The uses-and-gratifications portion of the survey was a user-motivation scale that was adopted and modified from multiple studies (i.e., Clavio, 2008; Clavio & Kian, 2010). In their study that analyzed followers of a retired female athlete, Clavio and Kian created a 15-item measure that revealed three factors: organic fandom, functional fandom, and interaction. Each factor had a Cronbach's alpha value of .70 or higher. For the purposes of this study, three items were added to this 15-item measure to deeply explore both information-gathering and interactivity motivations among users. The three additional items were previously verified in research conducted by Clavio in 2008. Finally, two items were created specifically for this study, resulting in a 20-item uses-and-gratifications (i.e., user-motivation) measure.

**Uncertainty Reduction.** The attributional confidence and uncertainty scale was first introduced by Clatterbuck (1979). This scale consisted of seven items. However, Perse and Rubin (1989) found that the scale's internal consistency increased when two items were removed, resulting in a .85 Cronbach's alpha value. Kellerman and Reynolds (1990) confirmed that these two items do indeed detract from the measure. Therefore, this study adopted the five-item version of this measure. A 5-point semantic differential scoring method was used (1 = *not at all*, 5 = *very*). Once again, these items were slightly modified to be Twitter-specific. For example, an unmodified item asked "How confident are you in your general ability to predict how he/she will behave?" The modified item asked "How confident are in your general ability to predict how this athlete will behave?"

**Social Attraction.** The social-attraction scale was originally part of a larger attraction scale created by McCroskey and McCain (1974). The original scale included items related to social attraction, task attraction, and physical attraction. The social-attraction items were found to have an acceptable level of reliability ( $\alpha = .84$ ) in the study conducted by McCroskey and McCain. Only social attraction was used for the current study, since previous research found these items to be the most highly correlated with PSI development (Rubin & McHugh, 1987). In addition, the original scale was a 7-point Likert scale ranging from *strongly disagree* to *strongly agree*. For the purpose of scale consistency, responses were converted into 5-point Likert items. Five items were used for the current study. The original items were stated as "I think he (she) could be a friend of mine" or "I would like to have a friendly chat with him (her)." For this study, these items were converted to be athlete-specific. For example, "I think this athlete could be a friend of mine" and "I would like to have a friendly chat with this athlete."

**Attitude Homophily.** Introduced by McCroskey, Richmond, and Daly in 1975, the perceived-homophily scale was meant to measure attitude, value, appearance, and background homophily. For the purposes of the current study, only the four items pertaining to attitude homophily were used. The attitude-homophily scale was found to be a reliable measure in previous research (Turner, 1993), with a .92 Cronbach's alpha value. These items were originally 7-point semantic differential items. For the current study, they were converted to 5-point items to maintain scale consistency. All four items were introduced by the phrase "This athlete . . ." and followed by items such as "doesn't think like me/thinks like me," "is different from me/is similar to me."

## Reliability Testing

All scales were tested for reliability for each follower set, and all had acceptable levels of reliability. These scales included affinity ( $\alpha = .85$ ,  $\alpha = .88$ ), instrumental media use ( $\alpha = .78$ ,  $\alpha = .80$ ), perceived realism ( $\alpha = .73$ ,  $\alpha = .73$ ), PSI ( $\alpha = .86$ ,  $\alpha = .83$ ), uses and gratifications ( $\alpha = .89$ ,  $\alpha = .89$ ), uncertainty reduction ( $\alpha = .92$ ,  $\alpha = .89$ ), attitude homophily ( $\alpha = .91$ ,  $\alpha = .90$ ), and social attraction ( $\alpha = .69$ ,  $\alpha = .77$ ).

## Data Analysis

To examine this study's research questions, various statistical analyses were conducted including descriptive statistics, multivariate analysis of variance (MANOVA), independent-samples *t* tests, chi-square tests, Pearson's correlations, and exploratory factor analysis (EFA). All statistics were calculated using SPSS 19.0.

## Results

RQ1 was designed to explore the differences and similarities between the two follower sets with regard to the salience of PSI. To examine this research question, an independent-samples *t* test was conducted. A significant difference was found between the two follower sets for PSI,  $t(324) = 7.05$ ,  $p < .05$ . The mean for the social athlete was significantly higher ( $M = 48.24$ ,  $SD = 7.85$ ) than the mean for the parasocial athlete ( $M = 41.89$ ,  $SD = 7.85$ ).

RQ2 was employed to examine differences and similarities with regard to common PSI correlations. To accomplish this task, Pearson's correlations were calculated for each follower set. For the followers of the social athlete, three moderate Pearson's correlations were found, between instrumental media use and PSI ( $r = .40$ ,  $p < .05$ ), uncertainty reduction and PSI ( $r = .53$ ,  $p < .05$ ), and attitude homophily and PSI ( $r = .53$ ,  $p < .05$ ). For followers of the social athlete, all correlations were significant at the .05 level, except for items related to the amount of time spent with the medium, which had no significant correlations with PSI.

For the followers of the parasocial athlete, four moderate Pearson's correlations were found, between instrumental media use and PSI ( $r = .41$ ,  $p < .05$ ), perceived realism and PSI ( $r = .40$ ,  $p < .05$ ), uncertainty reduction and PSI ( $r = .51$ ,  $p < .05$ ), and attitude homophily and PSI ( $r = .43$ ,  $p < .05$ ). Once again, all correlations were significant at the .05 level. In terms of the items related to the amount of time spent with the medium, a low significant correlation was found between "How much time would you estimate that you spend reading tweets on Twitter in the average day" and PSI ( $r = .27$ ,  $p < .05$ ).

Independent-samples *t* tests were also conducted on each construct to see if there were significant mean differences between the two follower sets. Before conducting individual *t* tests, a MANOVA was used to determine whether the composite across all the media-use and interpersonal constructs was significant. Statistical significance was found between the follower sets,  $F(6, 235) = 11.37$ ,  $p = .000$ , Wilks's  $\Lambda = .75$ ,  $\epsilon^2 = .25$ . In addition, before the individual *t* tests were conducted, a Bonferroni adjustment was made to the *p* value to account for possible inflations in Type I error. The *p* value was adjusted to .007. Based on that adjustment, significant differences were found between the two conditions for

affinity,  $t(228.29) = -3.13, p < .007$ ; perceived realism,  $t(331) = 2.86, p < .007$ ; uncertainty reduction,  $t(286) = 3.53, p < .007$ ; social attraction,  $t(173.05) = 4.36, p < .007$ ; and attitude homophily,  $t(261) = 5.67, p < .007$ . The means of the social athlete were significantly higher for perceived realism ( $M = 15.96, SD = 3.18$ ), uncertainty reduction ( $M = 14.09, SD = 5.05$ ), social attraction ( $M = 16.06, SD = 2.59$ ), and attitude homophily ( $M = 12.98, SD = 3.46$ ) than the means of the parasocial athlete for perceived realism ( $M = 14.91, SD = 3.28$ ), uncertainty reduction ( $M = 11.96, SD = 4.87$ ), social attraction ( $M = 14.36, SD = 3.44$ ), and attitude homophily ( $M = 10.42, SD = 3.69$ ). The mean for affinity was significantly higher for the parasocial athlete ( $M = 12.98, SD = 5.27$ ) than for the social athlete ( $M = 11.19, SD = 4.58$ ). No significant mean differences were found for instrumental media use between the social athlete ( $M = 17.83, SD = 3.85$ ) and the parasocial athlete ( $M = 17.65, SD = 4.07$ ).

The means for items that focused on the amount of time spent with the medium were compared individually, as they contained varying Likert-type scales. In terms of the amount of time spent with the medium, the  $t$  test revealed a significant mean difference,  $t(230.95) = -3.27, p < .007$ , for time spent reading tweets in an average weekday. In this instance, the mean of the parasocial athlete ( $M = 3.27, SD = 1.68$ ) was significantly higher than that of the social athlete ( $M = 2.68, SD = 1.49$ ). No significant differences were found between the two follower sets for time spent tweeting or length of time having a Twitter account.

Finally, RQ3 was designed to examine similarities and differences in terms of usage trends and follower motivations. Frequency statistics were conducted on each follower set regarding the length of time having a Twitter account, time spent reading tweets in an average day, and time spent tweeting in an average day. Most of the social athlete's followers had had a Twitter account for more than 2 years (33.8%), read tweets for 15–30 minutes a day (28.8%), and tweeted less than 15 minutes a day (51.2%). Most of the parasocial athlete's followers also had had a Twitter account more than 2 years (34.1%), read tweets 15–30 minutes a day (21.1%), and tweeted less than 15 minutes a day (59.8%). The frequency data are displayed in Table 1.

To further investigate RQ3, we conducted two EFAs with varimax rotation (i.e., one for each follower set). An EFA was chosen to see if the uses-and-gratifications items coalesced into identifiable factors. This analysis was also used to determine whether individual items loaded differently based on the interaction style being promoted by each athlete. Both EFAs had a subject-to-item ratio of 5:1–10:1, which is consistent with most EFA studies conducted in social-science research (Costello & Osborne, 2005).

For the social athlete in this study, the EFA revealed four factors that served as the dimensions of gratifications for his followers. These factors were consumption (18.72%), with an eigenvalue of 3.74; admiration (12.35%), with an eigenvalue of 2.47; promotion (11.37%), with an eigenvalue of 2.27; and community (10.98%), with an eigenvalue of 2.20. These factors explained 53% of the total variance. All four factors had Cronbach's alpha values of .70 or higher, which is considered acceptable in social-science research (i.e., Garson, 2008).

Consumption (Factor 1) contained items related to the entertainment (e.g., "I think this athlete is entertaining") and news (e.g., "I get information on what this athlete is doing that I can't get elsewhere") functions of Twitter. Admiration

**Table 1** General Usage Information

Category	Social	Parasocial
How long have you had a Twitter account?		
under 6 months	15%	20.3%
6 months–1 year	21.1%	17.9%
over 1 year–under 2 years	30%	27.6%
more than 2 years	33.8%	34.1%
How much time do you spend reading tweets?		
less than 15 min	26.4%	18.7%
15–30 min	28.8%	21.1%
31–45 min	16.5%	14.6%
46 min–1 hr	12.7%	19.5%
over 1 hr–under 2 hr	10.8%	12.2%
more than 2 hr	4.7%	13.8%
How much time do you spend tweeting?		
less than 15 min	51.2%	59.8%
15–30 min	23.9%	15.6%
31–45 min	5.6%	5.7%
46 min–1 hr	3.8%	3.3%
over 1 hr–under 2 hr	4.7%	4.9%
more than 2 hr	0.5%	3.3%
I don't tweet	10.3%	7.4%

(Factor 2) contained items related to the social status (e.g., “This athlete is a celebrity”) and societal role (e.g., “I think this athlete is a role model”) of the athlete. Promotion (Factor 3) included items related to the business side of sport (e.g., “I buy the products that this athlete endorses”). Finally, community (Factor 4) had items related to fanship and belonging (e.g., “I feel like I’m part of a larger community of fans”). The item “I think this athlete is physically attractive” loaded by itself, creating its own factor. Because a factor should include at least three loaded items, the physical attraction “factor” was discarded. The complete list of factors is displayed in Table 2.

For the parasocial athlete in this study, the EFA revealed four factors that served as the dimensions of gratifications for his followers. These factors were newsgroup (16.87%), with an eigenvalue of 3.37; modeling (11.82%), with an eigenvalue of 2.36; engaged interest (11.13%), with an eigenvalue of 2.23; and

**Table 2 Exploratory Factor Analysis, Social**

"I use Twitter to follow this athlete because . . ."	Loading	M
<b>Factor 1: Consumption</b>		
I get information on what this athlete is doing that I can't get elsewhere.	.71	3.86
this athlete appears engaging and interactive on Twitter.	.71	3.86
it offers more in-depth coverage of this athlete than traditional media.	.58	3.98
this athlete tweets pictures and/or video links of what is going on in his life.	.58	3.80
I enjoy reading what this athlete writes.	.54	3.98
I think this athlete is entertaining.	.53	4.13
I keep up with nonathletic news about this athlete	.52	3.40
Twitter is my primary source of news and opinions regarding this athlete.	.47	3.23
<b>Factor 2: Admiration</b>		
I have always followed this athlete's career.	.53	3.82
this athlete is a celebrity.	.52	3.81
I think this athlete is a role model.	.52	4.22
I get to read links to stories that are of interest to this athlete.	.52	3.60
I feel like this athlete and I share the same interests.	.57	3.40
<b>Factor 3: Promotion</b>		
I keep up with what this athlete is doing for my own business purpose.	.79	2.34
I buy the products that this athlete endorses.	.70	2.54
I can respond to what this athlete has to say.	.59	3.48
<b>Factor 4: Community</b>		
it makes me feel like more of a fan.	.81	3.84
I feel like I'm part of a larger community of fans.	.78	3.76
I find out information about this athlete faster than other people do.	.62	3.43

*Note.* Factor 1 had an eigenvalue of 3.74, Factor 2 had an eigenvalue of 2.47, Factor 3 had an eigenvalue of 2.27, and Factor 4 had an eigenvalue of 2.20.

media use (10.34%), with an eigenvalue of 2.07. These factors explained 50% of the total variance. All four factors had Cronbach's alpha values of .70 or higher. It is very important to note that two of the most salient items ("I enjoy reading what this athlete writes" and "I think this athlete is entertaining") loaded as a two-item factor that explained another 8% of the variance. However, this factor was not included because its reliability level was too low (.64). Another factor loaded with two items that explained another 8% of the variance. However, its reliability level was not close to acceptable, so it was not included.

Newsgroup (Factor 1) contained items related to information gathering (e.g., “It offers more in-depth coverage of this athlete than traditional media”) and fan communities (e.g., “I feel like I’m part of a larger community of fans”). Modeling (Factor 2) contained items related to the business aspect (e.g., “I keep up with what this athlete is doing for my own business purpose”) and role (e.g., “I think this athlete is a role model”) of the athlete. Engaged interest (Factor 3) included items related to interactivity and shared interests (e.g., “I feel like this athlete and I share the same interests”). Finally, media use (Factor 4) had items related to the specific use of Twitter (e.g., “This athlete tweets pictures and/or videos of what is going on in his life”). Although the two items in the media-use factor loaded together, they had lower ratings than the other uses-and-gratifications items. The complete list of factors is displayed in Table 3.

In addition, chi-square tests were conducted to see if the follower sets differed in their intentions to engage with these athletes in a social manner through either @ replies or retweets. For the item “Have you ever sent a tweet directly to this athlete” the chi-square test was significant,  $\chi^2(1) = 7.75, p < .01$ . For the item “Have you ever retweeted this athlete” the chi-square test was also significant,  $\chi^2(1) = 9.07, p < .01$ . Specifically, 39.3% of the followers of the social athlete had sent an @ reply, as opposed to 24.4% of the followers of the parasocial athlete. In addition, 56.8% of the followers of the social athlete had retweeted the social athlete’s content, as opposed to 39.7% of the followers of the parasocial athlete. Chi-square tests were not significant for “Has this athlete ever sent a tweet directly to you” and “Has this athlete ever retweeted you.”

## Discussion

The purpose of this study was to analyze whether PSI existed in a sport and social-media context. To accomplish this task, the followers of both a predominantly social and a predominantly parasocial athlete were examined. In general terms, PSI and the traditional interpersonal and media-use constructs associated with it were found to manifest in both follower sets. Various follower motivations were also identified, giving a more nuanced picture of fan–athlete interaction on Twitter from the fan perspective.

RQ1 was concerned with the differences and similarities between the follower sets with regard to the salience of PSI. The development of PSI was significantly higher among followers of the social athlete. This finding is logical, considering that attributes of PSI are similar to those of social interaction (Giles, 2002) and that individuals often behave in ways that closely resemble actual social relationships when they are involved in PSI (Gleich, 1997; Kassing & Sanderson, 2010). In other words, the more social an athlete is on Twitter the more media users may feel as if they are engaged in a normal social relationship with that athlete, which could lead to stronger PSI development (i.e., wanting to meet the individual in person and seeing them as a down-to-earth individual). This may happen even if the athlete is not being social with that particular user.

With RQ2, we explored the differences and similarities between the follower sets with regard to common PSI correlations. All the correlations (except for time spent with the medium) were found to be significant for both follower sets. This is consistent with decades of PSI research that found that affinity (Rubin, 1979, 1981), instrumental media use (Kim & Rubin, 1997; Rubin et al., 1985), perceived

**Table 3 Exploratory Factor Analysis, Parasocial**

"I use Twitter to follow This athlete because . . ."	Loading	M
<b>Factor 1: Newsgroup</b>		
it offers more in-depth coverage of this athlete than traditional media.	.75	3.45
Twitter is my primary source of news and opinions regarding this athlete.	.71	2.68
I get information on what this athlete is doing that I can't get elsewhere.	.70	3.39
I feel like I'm part of a larger community of fans.	.61	3.53
I keep up with nonathletic news about this athlete.	.55	3.06
I find out information faster about this athlete faster than other people do.	.53	3.04
it makes me feel like more of a fan.	.50	3.43
<b>Factor 2: Modeling</b>		
I keep up with what this athlete is doing for my own business purpose.	.80	2.11
I buy the products that this athlete endorses.	.74	2.33
I think this athlete is a role model.	.69	3.27
<b>Factor 3: Engaged interest</b>		
this athlete is a celebrity.	.80	3.88
I can respond to what this athlete has to say.	.61	3.16
I feel like this athlete and I share the same interests.	.52	2.88
I get to read links to stories that are of interest to this athlete.	.38	3.02
<b>Factor 4: Media use</b>		
this athlete tweets pictures and/or videos of what is going on in his life.	.82	2.89
this athlete appears engaging and interactive on Twitter.	.82	2.94

*Note.* Factor 1 had an eigenvalue of 3.37, Factor 2 had an eigenvalue of 2.36, Factor 3 had an eigenvalue of 2.23, and Factor 4 had an eigenvalue of 2.07.

realism (Rubin & Perse, 1987; Rubin et al., 2003; Rubin et al., 1985), uncertainty reduction (Perse & Rubin, 1989), social attraction (Rubin & McHugh, 1987), and attitude homophily (Turner, 1993) correlated with PSI. Though most PSI correlations were significant, three were found to be of moderate strength for followers of the social athlete (i.e., uncertainty reduction, attitude homophily, and instrumental media use) and four were found to be of moderate strength for the followers of the parasocial athlete (i.e., uncertainty reduction, attitude homophily, instrumental media use, and perceived realism). PSI correlated with instrumental media use for both follower sets, indicating an active orientation toward the media where information sharing and companionship are important (Rubin, 2009). Overall, these findings demonstrate that PSI development was more strongly correlated

with similar media use and interpersonal constructs among followers of both the social and the parasocial athlete.

To truly understand the subtle differences between these follower sets, independent-sample *t* tests were conducted on all the individual constructs explored in this research. The means for uncertainty reduction, social attraction, and attitude homophily were all significantly higher for followers of the social athlete, indicating a sense of interpersonal closeness based on the social athlete's interactive use of Twitter. With uncertainty reduction, perhaps the social athlete was able to break down the uncertainties often associated with relationships between media personas and media users (i.e., feelings, beliefs, and attitudes). In other words, because the social athlete used Twitter in a more interactive fashion, his followers were able to feel as if they had gotten to know him better in comparison with the followers of the parasocial athlete. The same can be said for social attraction. Because the social athlete appeared more social and approachable, many of his followers may have viewed him as someone they could have a relationship with and as someone who could actually fit within their everyday circle of friends. Based on the findings regarding uncertainty reduction, it makes sense that followers of the social athlete felt a greater sense of attitude homophily with the social athlete due to an active display of his thoughts, feelings, and behaviors on Twitter. These findings validate the claim made by Rubin (2009) that interpersonal constructs (i.e., uncertainty reduction, attitude homophily, and social attraction) could be used "to understand the role and influence of media and newer technologies" (p. 177).

In terms of medium-specific constructs, the mean for perceived realism was found to be significantly higher among followers of the social athlete. Perhaps they viewed Twitter as a more "realistic" medium due to the social athlete's interactive use of Twitter, which made his tweets come across as more genuine, revealing, and "realistic." The only construct mean that was found to be significantly higher among followers of the parasocial athlete was affinity. One logical rationale for this finding is that the followers of the parasocial athlete relied more heavily on the medium to develop a relationship with the athlete due to his overall lack of social engagement. This rationale is somewhat validated by the finding that followers of the parasocial athlete spent significantly more time reading tweets on Twitter than followers of the social athlete. Therefore, it appears as if the medium served a more important role for followers of the parasocial athlete, while interpersonal constructs served a more important role for followers of the social athlete.

Finally, RQ3 was concerned with the differences and similarities between the follower sets with regard to Twitter usage trends and motivations. As stated previously, followers of the parasocial athlete read tweets for a significantly longer period of time than followers of the social athlete. As for other comparisons, followers of the social athlete were more likely to send an @ reply to their athlete. They were also more likely to retweet their athlete's content. These tendencies indicate that followers of the social athlete were more willing to engage in some sort of dialogue or interaction than followers of the parasocial athlete. One could surmise that this willingness stemmed from the athlete's interactive use of the medium. These interactive tendencies existed, even though the social athlete was not interacting with many of the followers who took the survey. In fact, very few survey participants reported that the social athlete either sent an @ reply to them or retweeted their content. Therefore, the social athlete was engaging in dialogue

with other users, which made him appear interactive. This finding lends support to the notion that individuals are actively engaged in their relationships with media personas (i.e., Gleich, 1997) even though the nature of those relationships may be controlled predominantly by the media personas (i.e., Cohen & Perse, 2003).

EFA was also employed in this study to see if user motivations coalesced into identifiable factors. For followers of the social athlete, most of the highly rated items loaded on the consumption factor. These followers appeared to enjoy the news and information-gathering capabilities of Twitter as it related to this particular athlete. This finding is similar to the research of Johnson and Yang (2009) in which information-related motives were highly salient among Twitter users. In this scenario, Twitter was providing followers of the social athlete with news and other pertinent information that they could not acquire through other media. This athlete also used Twitter in an interactive fashion, tweeting out personal information, photos, video links, and promotions. This could explain why the item "This athlete appears engaging and interactive on Twitter" was one of the more highly rated items among his followers. This finding demonstrates that interactivity is an important motivation for social-media users, which is in line with the work of Raacke and Bonds-Raacke (2008). While this conclusion is logical, most of the interactivity, information-gathering, personality, and entertainment items loaded together. This is different from the findings of Park et al. (2009), where information seeking, socializing, and entertainment were separate dimensions of gratification for Facebook user groups. However, by using Twitter in an interactive manner, followers of the social athlete were also able to gain insight into his personality. Therefore, it makes sense that entertainment, information gathering, personality, and interactivity coalesced into a general usage (i.e., consumption) factor.

With the admiration factor, it was clear that followers looked up to this athlete due to his status as both a role model and a celebrity. This factor also alluded to fan loyalty with the item "I have always followed this athlete's career." It makes sense that items related to fan loyalty and admiration loaded together. Perhaps the more one admires another individual due to their status in society, the more loyal they may become over time as that individual begins to reveal layers of their personality that were never available before through traditional-media outlets. This finding lends itself well to the original definition of PSI, where continued viewing over time leads to a bond of intimacy and loyalty formation toward the media persona (Horton & Wohl, 1956). The other items in this factor were related to sharing similar interests with the athlete. This finding is in line with Rubin et al. (1985), who indicated that individuals often like to feel as if they are part of a favorite program's social world. In other words, the realization that one shares the same interests and likes the same things as an idolized professional athlete could certainly heighten one's feelings of being involved in the athlete's life. Therefore, with Twitter, the "social world" is heightened because the potential for one-on-one interaction between the media persona (i.e., the athlete) and the media user (i.e., the fan) is a distinct possibility.

The other factors that were revealed for the social athlete included promotion and community. With promotion, the loaded items included "I keep up with what this athlete is doing for my own business purpose," "I buy the products that this athlete endorses," and "I can respond to what this athlete has to say." On the surface, the last item does not seem to fit with the others. However, this athlete would often

tweet out promotions in which he encouraged fans to upload videos and share their thoughts regarding winners, losers, rules, or the promotion in general. Therefore, this loading makes sense based on this athlete's distinct Twitter usage patterns. Finally, the items that loaded on the community factor included heightened fanship, being part of a fan community, and finding athlete information faster than others. This factor is very similar to one of the factors revealed in the study conducted by Clavio and Kian (2010). In the current study, followers may have equated finding information faster than others as a criterion for fanship. The community factor also alluded to the informal bonds that users can form with one another on Twitter, which supports the findings of Chen (2011).

Similar to the social athlete, most news and information-gathering items loaded on one factor for followers of the parasocial athlete. In this instance, these items were referred to as the newsgroup factor. Unlike the social athlete, fanship and community items loaded alongside information-gathering items. This finding demonstrates that followers of the parasocial athlete viewed information gathering and news consumption as specific aspects of fanship. In other words, fanship was being further validated through information search behaviors as followers acquired new knowledge about this specific athlete.

The engaged interest factor contained items related to shared interests ("I feel like this athlete and I share similar interests"), responding to the athlete ("I can respond to what this athlete has to say"), and celebrity status ("The athlete is a celebrity"). Once again, perhaps it was enlightening for fans to realize that they shared interests with someone they viewed as a celebrity. This fits quite well with the concept of attitude homophily, which is when an individual perceives a shared likeness between him- or herself and another (Lazarsfeld & Merton 1954; Turner, 1993). In this particular situation, perhaps shared likeness along with a sense of veneration sufficed in the absence of social dialogue between the parasocial athlete and his followers.

The other factors that were revealed in the analysis of the parasocial athlete included modeling and media use. For media use, two items ("This athlete tweets pictures and/or videos of what is going on in his life" and "This athlete appears engaging and interactive on Twitter") loaded together, although they were not very highly rated among his followers. As a parasocial athlete, he was not very interactive with his followers. He may have appeared "engaging" through his humorous tweets, but not interactive. Finally, modeling contained the item "I think this athlete is a role model" along with promotional items such "I buy the products this athlete endorses" and "I keep up with what this athlete is doing for my own business purpose." In this scenario, perhaps his followers viewed him as a role model, which made them more willing to buy his products and keep up with his career from a business perspective.

## **Theoretical and Practical Implications**

This study answers the call placed by Pegoraro (2010), who proposed that the next step in sport-specific Twitter research is to query fans who follow professional athletes. From a theoretical standpoint, this study extends previous PSI and uses-and-gratifications research into a sport and social-media context. Specifically, this study demonstrates that commonly used PSI correlations can be applied to the

followers of professional athletes who use Twitter. More important, this research demonstrates that PSI can be tested quantitatively in the realm of sport and social media from the fan perspective. In addition, unlike recent PSI and sport research that used survey methodology (i.e., Earnhardt & Haridakis, 2009; Rubin et al., 2003; Spinda et al., 2009; Sun, 2010), this study went beyond the use of convenience sampling.

Along with its theoretical implications, the results of this study provide sport management and sport communication practitioners with worthwhile practical implications. By gaining an understanding of how fans interact with professional athletes on Twitter, sport management and sport communication professionals who represent professional athletes would be better able to serve them and give them valuable advice on how to properly use social media to engage their fan base. The findings of this study can also be applied to the sport-marketing industry. Companies that use the services of professional athletes for product promotions and brand recognition would be wise to understand how fans are interacting with those athletes on social media. At the end of the day, these companies want to sell a product, and the athlete acts as a vehicle through which those sales and positive associations can be made. So encouraging athletes to forge deeper relationships with their fan base on social media could, in theory, have an indirect impact on sales of the products those athletes represent.

### **Limitations and Future Research**

This study was not without limitations. First, followers of two athletes (one social and one parasocial) were surveyed. The intention of this study was to provide a starting point for future research by establishing that there are relationships between an athlete's interaction style and followers' motivations, media-usage trends, interpersonal interaction tendencies, and PSI development. Although it would be difficult and time-consuming, future research should consider surveying the followers of multiple parasocial and social athletes to gain a more nuanced picture of how fans interact with professional athletes on Twitter. Second, followers were asked questions relating to the particular athlete they follow, not about athletes in general. In other words, their responses regarding most PSI and uses-and-gratifications items were related to the specific athlete they were following. Future research could benefit by including more general athlete questions in their surveys to gain a more detailed picture of how and why individuals follow professional athletes on Twitter. Finally, it was assumed that all individuals who completed the survey were actual followers of the athletes chosen for this study. The questions used in this study attempted to address this issue. However, this could not be completely ensured, because tweets are publically viewable and there is no way to guarantee that participants answered all skip-logic questions honestly (i.e., "Do you follow this athlete on Twitter?").

### **Conclusions**

There are many anecdotal claims regarding the power of social media and their ability to affect fan-athlete interaction. Most of these claims are based on subjective observations and limited investigation regarding the potential for social media

to break down barriers that once existed between everyday fans and professional athletes. While research has begun to make valuable findings regarding how athletes and organizations use social media, the picture is still incomplete. As stated by Clavio and Kian (2010), very few sport communication studies have examined social media from the perspective of the audience and content receivers. Therefore, it is worthwhile for scholars to continue to examine what happens to fans when professional athletes make connections via social interaction or when they simply broadcast their lives through social-media platforms.

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