

Uses and Gratifications of a Retired Female Athlete's Twitter Followers

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An Internet-based survey was posted on the Twitter feed of a retired female athlete to ascertain the demographics, uses, and gratifications of her feed's followers. Analysis of the data revealed that followers were predominantly White, affluent, educated, and older than prior research into online audiences has shown. The perception of the athlete as being an expert at her sport was the most salient reason reported to follow the Twitter feed, followed by affinity for the athlete's writing style. Analysis of variance uncovered 5 significant differences in item salience between male and female followers, with women more likely to use this Twitter feed because of affinity for the athlete and men more likely to use it because of perception of the athlete as physically attractive. Factor analysis uncovered 3 dimensions of gratification: an organic fandom factor, a functional fandom factor, and an interactivity factor.

Keywords: Internet, socialization, new media, social networking, microblogging

The social-networking phenomenon of Twitter has made considerable inroads into the sport communication landscape since its introduction in 2006. One of the fastest growing Web 2.0 applications in the new-media marketplace, Twitter combines several unique aspects of communication, which make it attractive to both sports fans and sport organizations.

Twitter is an asynchronous form of social communication that has been compared to an online version of cell-phone text messaging (Angwin, 2009). Users gain access through free registration of an account, after which they can "follow" other users on the service to receive those users' messages. In most cases, following is as simple as locating another user's Twitter name, then clicking a button. The user may then be followed by other users, and there is no requirement that a user being followed by another must reciprocate. All users are limited to 140-character messages, although they may send as many messages as they want. Furthermore, users may use Web 2.0 features such as link shorteners and picture galleries to share Web pages and multimedia with their followers.

Based on its characteristics, Twitter is often referred to as a microblogging service (Java, Song, Finin, & Tseng, 2007). Microblogging can best be described as a derivative of blogging, which involves the transfer of news, personal opinion, and ideas in an online setting. Whereas blogging typically involves a dedicated Web site with a main-page focus on expansive content produced by an individual or small group, Twitter uses a much less media-rich interface, where the primary focus is on short bursts of content from a large number of users.

Within that structure of many users, however, are smaller communities of users that coalesce around popular figures. Whereas 74% of all Twitter users have fewer than 10 followers (Barracuda Laboratories, 2009), a very small percentage of users has a great many followers. Lardinois (2009) noted that 0.29% of Twitter users have more than 2,000 followers, and although many of those with thousands of followers self-identify as Internet entrepreneurs (Lardinois, 2009), many of the accounts with multiple followers belong to celebrities including sports figures.

Following the feeds of sports figures, organizations, and media has become a popular pastime for many Twitter users. Coyle Media's (n.d.) Sports Fan Graph, which tracks the social-media followers of leagues and teams across multiple sports, illustrates this quite well. For instance, as of June 2010, the NBA had accrued over 1.93 million followers on Twitter, with the NFL (1.63 million), the Los Angeles Lakers (1.56 million), and the Orlando Magic (1.01 million) also reaching seven figures in Twitter followers. Individual sport figures are also quite popular on Twitter, with athletes such as Lance Armstrong having 2.5 million followers and many other athletes, coaches, and front-office members maintaining active feeds with numerous followers (Sportsin140.com, n.d.).

The number of followers of sports figures and organizations on Twitter would seem to call for increased levels of scholarly inquiry into a whole range of topics including produced content, audience awareness, audience gratification, athlete gratification, and public relations impact. However, because of the nascence of Twitter as a legitimate communication and social-networking medium, the literature is sparse, inside and outside of sport, that deals with Twitter and its impact on the communication landscape. In fact, new media in sport communication is itself a relatively unstudied area. This is not surprising, because many scholars are not familiar enough with various forms of new media to feel comfortable analyzing the phenomena present in new-media sport communication methods (Dart, 2009). Regardless, steady progress has been made in this area, and several scholars have recently taken up the task of examining new media and their impact on the changing sport communication landscape (e.g., Butler & Sagas, 2008; Clavio, 2008a, 2008b; Dart, 2009; Dittmore, Stoldt, & Greenwell, 2008; Kassing & Sanderson, 2010; Kian & Hardin, 2009; Plymire, 2008; Sanderson, 2008a, 2008b; Schultz & Sheffer, 2007, 2010). This study aims to add to that body of knowledge, both by building on the existing new-media sport communication literature and by scientifically exploring new areas of inquiry in social networking.

Review of Literature

Whereas there have been several scholarly inquiries into social networking and new media that focused on content and media producers, very few have examined new media from the perspective of audiences and content receivers. This study will

focus on that hole in the literature by using the theoretical framework of uses and gratifications. Furthermore, we examine the possible effects of a retired female athlete as the focus of content generated in a Twitter feed.

Uses and Gratifications

This study aims to examine the Twitter phenomenon through the theoretical lens of uses and gratifications theory (Katz, Blumler, & Gurevitch, 1974). This theory posits that media use is goal driven, with consumers of media using specific, selected channels to satisfy needs and achieve gratifications. Uses and gratifications research relies on direct inquiry of media users regarding both their use of media and their reasons for it (Katz et al., 1974).

Uses and gratifications theory has been adopted by many communication researchers as a lens through which to examine audiences on the Internet because of the active nature of Internet audiences. Ruggiero (2000) noted that uses and gratifications theory could be used to examine several content attributes not present in traditional media, including elements of interactivity, or level of control on the communication process, and asynchronicity, or the concept of messages being accessible at a time after they are sent. The very nature of Twitter is both interactive and asynchronous and would seem to fit well with the uses and gratifications approach.

Uses and gratifications theory has been recently applied to Internet-based social networking, with scholars attempting to ascertain the nature of the participants and audiences therein. Raacke and Bonds-Raacke (2008) used a uses and gratifications approach to examine both participants and nonparticipants in the social networks MySpace and Facebook. A survey of college students revealed that the most salient uses for these social networks were to stay in touch with both old and current friends, to post or view pictures, and to make new acquaintances. Among other findings, the study discovered that female users of social-networking sites were more likely than males to have their site information set to private. In a similar vein, Park, Kee, and Valenzuela (2009) employed uses and gratifications to examine membership in Facebook groups as part of a study highlighting the predictive nature of online participation factors in civic involvement. The authors' survey of over 1,400 college students uncovered four primary dimensions of gratification: a socializing factor, an entertainment factor, a self-status-seeking factor, and an information-seeking factor. The highest degree of variance was explained by the socializing factor, which included items relating to reception of peer support, meeting interesting people, belonging to a community, and staying in touch with people.

One example of the application of uses and gratifications to new media and sport is a study by Clavio (2008b) that used the paradigm to examine collegiate-sport message-board users and their reasons for taking part in the online community environment. Through an online survey, the study explored user responses for dimensions of gratification. Using exploratory factor analysis, the study found four primary areas of use and gratification for these message-board users: interactivity, information gathering, diversion, and argumentation. These dimensions, which explained over 60% of the variance among users, pointed toward an online experience that valued a back-and-forth relationship between users, rather than a purely consumption-based experience.

Twitter and Social Media

Schultz and Sheffer (2010) used McLuhan's concept of technological determinism to examine Twitter, specifically its use by sports journalists and its impact on the present and future of sports journalism. Using a purposive-sample survey of U.S. sports journalists, they found that 96% of the 146 respondents worked at a media outlet that had integrated a Twitter feed into its news-distribution operation. Results indicated that the journalists found breaking news, promoting content, and connecting to fans to be the most important reasons for using Twitter, whereas the expression of personal opinion was considered least important. These journalists did not feel that Twitter was causing much change in the way that they did their jobs, although qualitative findings did indicate a difference in the mindset of print journalists, who saw Twitter as simply a point-back mechanism to full print stories, versus broadcast journalists, who saw Twitter as a media tool in its own right.

Elements relating to Twitter and sports were also examined by Kassing and Sanderson (2010) in their investigation of Twitter feeds of selected English-speaking cycling teams and riders during the 2009 Tour of Italy. That case study indicated that cyclists using Twitter fell into three groups: those who tweeted infrequently, those who tweeted moderately, and one cyclist (Lance Armstrong) who tweeted so frequently as to produce more than half the total number of tweets generated by all the cyclists. The study also found that the cyclists' use of Twitter served as an augmentation device for fans' experience of the race, primarily through the functions of opinion sharing, interactivity, and insider perspective cultivation. These findings are important because of the celebrity-fan relationship inherent in these feeds and as a possible indicator of the utility of Twitter feeds for sports figures.

Although not exactly the same as Twitter and blogs, online message boards and fan communities represent an important element of social media, with aspects and features that parallel Twitter and blogs in function, form, and audience. Clavio's (2008a) examination of collegiate-sport message-board user demographics offers a starting point for identifying the characteristics of online and new-media sports fans. Survey data from that study indicated that the vast majority of users were male, White, highly educated, and making over \$80,000 per year in household income. Furthermore, the study noted that the most salient use of message boards for users was to get information that they cannot get elsewhere, with other highly salient reasons including rapid access to information, depth of information compared with traditional media, and talk about recruiting. These audience aspects can be compared with survey data gathered in the examination of Twitter audiences to determine whether new-media social-networking audiences in sports are likely to be homogeneous in nature.

Research has also been carried out on the nature of blogs and how both sport-focused and non-sport-focused blogs interact with publics. Kelleher and Miller (2006) noted that blogs maintained by businesses were more likely than traditional corporate Web sites to be identified by users as conversational and humanized. They concluded that the candid conversation style inherent in blogging helped develop and nurture relationships between author and user. In a similar vein, Pedersen and Macafee (2007) found that female bloggers focused their writing primarily on social elements, as opposed to male bloggers' preference for information-focused blogging. Whereas the female bloggers in Pedersen and Macafee's study were hypothesized to suffer a lower blogosphere profile because of their emphasis on

social aspects, that effect might be different in a social-networking environment such as Twitter.

Gender and Sport Media

In addition to the virtual nonexistence of academic research on sport-related Twitter sites, only limited research has been done on the broader area of Internet sport-media coverage, in large part because of the relative nascence of the Web as a form of mass communication (Real, 2006). However, a multitude of studies over more than 3 decades have consistently shown that men's sports and male athletes generally receive more media coverage than women's sport and female athletes regardless of the medium (e.g., Duncan, Messner, & Williams, 1990, 1991; Eastman & Billings, 2000; Pedersen, Miloch, Fielding, & Clavio, 2007). The lone exception to men dominating the quantity of sport-media content is that female athletes often receive more or equal amounts of coverage in what are commonly construed as "gender appropriate" sports for women, such as figure skating, gymnastics, and tennis (Vincent, Imwold, Masemann, & Johnson, 2002). In contrast, female athletes usually receive little to no coverage in sports construed as more masculine or "gender inappropriate" for women, like rugby, softball, and competitive weightlifting (Fink & Kensicki, 2002). Generally, the only female athletes from "gender-inappropriate" sports who are highly publicized by sport media are believed to offer mainstream, heterosexual sex appeal, such as softball pitcher Jennie Finch and golfer Natalie Gulbis (Duncan, 2006).

Furthermore, when sport media actually do cover female athletes, they often frame them as inferior by describing their physical appearances and attire, delving into their personal lives and relationships, trivializing their accomplishments and athleticism, and focusing on perceived psychological weaknesses (e.g., Billings, Halone, & Denham, 2002; Eagleman, Pedersen, & Wharton, 2009; Hardin, Simpson, Garris, & Whiteside, 2007). *Framing* is a term used by communication scholars to describe how journalists portray news events and newsworthy individuals to media consumers by selecting and omitting specific facts and details in media content (Bronstein, 2005; Kuypers, 2002). Framing by journalists helps media audiences interpret and define issues, and those attitudes become difficult to change once they are initially formulated (Gerbner, 1970; Oppliger, 2007).

These quantitative and qualitative content trends in sport-media coverage of female athletes have mostly held true in the few published studies examining gender and Internet sport media (e.g., Butler & Sagas, 2008; Cooper, 2008). However, the gendering of the Internet remains contested terrain; some scholars contended that the asynchronous and interactive nature of the Web is more accommodating to women than other forms of mass communication (Royal, 2008; Turkle, 1995). Moreover, at least one exploratory study on Internet sport-media content found that Web sites framed female athletes more favorably than traditional media (Kian, Mondello, & Vincent, 2009).

Twitter, however, differs from other forms of sport media and even most predominant online sport-media outlets because consumers choose to follow one specific athlete, team, or organization. Most research on sport-media audiences and the effects of gender-related framing has focused on television (Bryant & Raney, 2000; Johnson & Schiappa, 2010). For the most part, television has helped cultivate attitudes that reinforce men's sports as the norm and sexualize female athletes

through images and coverage (Messner, Dunbar, & Hunt, 2000). The Internet, and specifically Twitter, however, could allow media consumers to follow sports and athletes that do not receive much attention from mainstream- and traditional-media outlets.

Purpose of the Study

The articles cited in the review of literature illustrate the scholarly examination of new-media communication and marketing efforts in the sport industry and the foci of the various studies to date regarding message and audience analysis. This study examines the demographics, uses, and gratifications of the followers of a retired female athlete's Twitter feed, primarily to ascertain the parameters of microblogging as a communication tool in the sport industry.

There have been published sport-related studies devoted to social networking and online communities that have laid some groundwork for examination of audiences. However, it is our judgment that the current study is both important and exploratory for a number of reasons. First, it is uncertain whether demographic and other personal aspects of Internet users are consistent across platforms or whether they differ based on the software used. Second, the manner in which individuals use social networking and new media may change from venue to venue. Finally, the gender-based effects of a female athlete's maintaining an online fan community through asynchronous communication have not been examined. Therefore, because of the exploratory nature of this research, research questions were employed rather than hypotheses for this study.

RQ1: What are the demographic characteristics of the athlete's Twitter-feed followers?

RQ2: Which items are most salient to the followers of the athlete's Twitter feed?

RQ3: Does exploratory factor analysis yield any identifiable dimensions of uses and gratification among respondent followers?

RQ4: Does the gender of respondents affect their reasons for following a female athlete on Twitter?

Method

This study used survey methodology to investigate the uses and gratifications of a convenience sample of a retired athlete's Twitter followers. Survey methodology is broadly accepted as an appropriate method of measuring uses and gratifications (Wimmer & Dominick, 2003) and has been used by numerous studies in past examinations of Internet-based uses and gratifications. In return for the retired athlete's assistance, we agreed to keep her identity anonymous. However, we can reveal that she is a former member of the Ladies Professional Golf Association (LPGA).

A truly random sample could not be achieved because of uncertainty regarding the actual number of active followers on Twitter, as well as our inability to guarantee that all active followers were informed of the survey link. An online-only survey was constructed, using Internet uses and gratifications concepts gleaned from scholarly publications (Clavio, 2008a, 2008b), popular press articles focusing on the uses of Twitter, and categorical analysis of 6 months' worth of Twitter messages

generated by the athlete, her fans, and other sports figures. The instrument was then programmed into SurveyMonkey.com, an online survey-software site that allows for digital distribution and collection of surveys.

Before the implementation of the survey, we asked for and obtained permission in writing to use the athlete's Twitter feed to publicize the survey. A shortened link to the survey was placed in the Twitter feed by the athlete, along with a short message asking the feed followers to take the survey. The survey link was kept active for approximately 3 days, during which time the athlete made one additional request for followers to take the survey. After the closing of the survey, the data were cleaned and analyzed using statistical software PASW 17.0. Frequencies, descriptive statistics, and ANOVA were used, along with factor analysis and other statistical measures.

Results

The survey instrument yielded 216 usable responses. Whereas this number is considerably smaller than the approximately 8,300 followers that were listed on the athlete's list of twitter followers, the actual response rate is likely much higher than it appears. According to analyses of Twitter feeds by Internet-monitoring firms, as of mid-2009 only 21% of Twitter users fit the definition of an "active" user, which can be defined as one who has at least 10 followers, follows at least 10 people, and has tweeted at least 10 times (Barracuda Laboratories, 2009). By the end of 2009, the number of active users had dropped to 17% ("New Data," 2010). The survey was administered during December 2009, so the estimated number of active followers was 1,411, meaning that the survey was taken by approximately 15% of the active follower population if that estimate is correct.

Demographics and Use

Respondents were asked their age. The largest group of respondents identified themselves as being 40–49 years old (29.2%), followed by those self-identifying as 50–59 (27.8%), 30–39 (15.3%), 60 or older (13%), and 18–29 (9.3%). Respondents were also asked their gender; 56.1% of those who answered the question identified themselves as male, and 43.9% identified themselves as female. In terms of race and ethnicity, most respondents (93.7%) identified themselves as White, and 3.4% identified themselves as Asian or Asian-American. No other race or ethnicity was identified by more than 1% of the sample.

Respondents were also asked to provide their approximate household income. Only 17.3% of respondents reported a household income under \$60,000, and 56% of respondents had a household income of \$80,000 or more. In terms of education, 69.9% reported having at least a bachelor's degree, and 32.9% had a master's or terminal degree.

Respondents were also asked how often they check Twitter and on what types of devices. Unsurprisingly, 82.8% of respondents indicated that they check Twitter at least once a day, with 39.1% indicating that they check it either several times a day or constantly throughout the day. Most (63.4%) used a personal computer to check Twitter. Smaller numbers of respondents indicated that they checked Twitter on a business or work computer (23.6%), a personal cell phone or PDA (36.1%), or a business or work cell phone or PDA (9.7%).

Respondents were asked a series of 18 questions regarding their use of the athlete's Twitter feed, using a 1–5 Likert-type scale. These questions dealt with a range of different elements of Twitter use, from affinity for the medium to perceptions of the athlete's interests, specializations, and entertainment value. The highest rated response was "Because I think the athlete is an expert at her sport" ($M = 4.32$, $SD = 1.09$), and the lowest-rated response was "Because I want to keep up with what the athlete is doing for my own business purpose" ($M = 2.47$, $SD = 1.23$). A list of the questions with the highest mean responses can be found in Table 1.

A one-way ANOVA was conducted on the responses to ascertain whether there were significant differences in means based on gender. Of the 18 motivation statements included in the survey instrument, five yielded significant differences. First, the statement "Because I find the athlete to be physically attractive" yielded significant difference, $F(1, 168) = 26.19$, $p = .000$, with men ($M = 3.21$, $SD = 1.08$) more likely than women ($M = 2.37$, $SD = 1.02$) to identify the athlete's attractiveness as a reason for using the Twitter feed. Second, the statement "Because I buy the athlete's products" had a significant difference, $F(1, 166) = 10.08$, $p = .002$, with women ($M = 2.88$, $SD = 1.25$) more likely than men ($M = 2.31$, $SD = 1.08$) to identify this as a reason for use. Third, the statement "I get information on what the athlete is doing that I can't get elsewhere" was significantly different, $F(1, 169) = 5.42$, $p = .021$. Women ($M = 4.28$, $SD = .994$) were more apt to rate uniqueness of information higher than were men ($M = 3.93$, $SD = .976$). Fourth, the statement "Because I enjoy reading what the athlete writes" yielded significant difference, $F(1, 170) = 4.93$, $p = .028$. Women ($M = 4.33$, $SD = .89$) were more likely to rate enjoyment of reading the athlete's writing than were men ($M = 4.04$, $SD = .828$). Finally, the statement "Because I have always followed the athlete's career" was significantly different, $F(1, 169) = 4.57$, $p = .034$. Women were more likely to rate this statement highly ($M = 4.28$, $SD = 1.1$) than men were ($M = 3.91$, $SD = 1.16$).

Factor Analysis and Dimensions of Usage

To ascertain whether the motivation statements coalesced into identifiable factors of usage, a factor analysis with varimax rotation was conducted on the responses. This analysis yielded three identifiable factors that combined to explain 46.9% of the observed variance. Each of the three factors had a Cronbach's alpha score of at least .70, which is considered within the acceptable range for social-science inquiry (Garson, 2008).

Table 1 High Scores of Motivation-Statement Responses for Twitter Users

"I use Twitter to follow this athlete because . . ."	<i>M</i>	<i>SD</i>
I think the athlete is an expert at her sport.	4.320	1.090
I enjoy reading what the athlete writes.	4.170	0.860
I get information on what the athlete is doing that I can't get elsewhere.	4.100	0.987
I have always followed the athlete's career.	4.080	1.130
I think the athlete is a role model.	4.020	1.100

The first factor was labeled organic fandom, and it explained 21.9% of the variance. This factor contained six items from the original 18 questions (Cronbach's $\alpha = .85$), focusing primarily on elements of personally oriented fandom, such as perceived entertainment value of the athlete, viewing the athlete as a role model, and having followed the athlete's career. The second factor was labeled functional fandom; it accounted for 12.6% of the variance and contained six items from the original 18 questions (Cronbach's $\alpha = .70$). This factor's items dealt primarily with impersonal elements of fandom, such as purchasing the athlete's products, finding the athlete physically attractive, and business-related purposes. The third factor was labeled interaction; it contained four items from the original 18 questions (Cronbach's $\alpha = .70$) and accounted for 12.5% of the observed variance. These items dealt primarily with the elements of fandom provided by the Twitter experience, including interacting with the athlete and enjoying camaraderie with other fans. Two items from the original list of questions were not included; these items dealt with affinity for phones and mobile devices and affinity for Twitter. Although these two items loaded onto a potential fourth factor, it was the researcher's estimation that the items were measuring the same basic concept and were therefore not worthy of consideration as independent factors. A list of the loadings for each of the three factors is available in Table 2.

Table 2 Factor Scores for Dimensions of Twitter Use

"I use Twitter to follow this athlete because ..."	1	2	3
Factor 1: organic fandom			
I have always followed the athlete's career.	.79		
I enjoy reading what the athlete writes.	.79		
I think the athlete is a role model.	.70		
I think the athlete is an expert at her sport.	.70		
I think the athlete is entertaining.	.68		
I get information on what the athlete is doing that I can't get elsewhere.	.66		
Factor 2: functional fandom			
to keep up with what the athlete is doing for my own business purpose.		.68	
I buy the athlete's products.		.66	
I find the athlete to be physically attractive.		.52	
I feel like the athlete and I share the same interests.		.49	
the athlete is a celebrity.		.39	
I get to read links to stories that are of interest to the athlete.		.38	
Factor 3: interaction			
I can respond to what the athlete has to say.			.75
I find out information about the athlete faster than other people do.			.71
it makes me feel like more of a fan.			.60
I feel like I'm part of a larger community of fans.			.48

Note. Factor 1 had an eigenvalue of 9.37; Factor 2 had an eigenvalue of 2.26; Factor 3 had an eigenvalue of 2.25.

Discussion

The results of the data analysis provide a variety of characteristics of this Twitter feed's users and allow scholarly attention to be directed toward a group of social-media adherents. Demographic and usage data highlight the unique nature of a Twitter audience, whereas the factor analysis provided a look into the usage focus of various users.

RQ1 asked what the demographic characteristics of this Twitter feed's followers were. As has been the case in previous online sport-audience research (e.g., Clavio, 2008a), the audience self-reported as overwhelmingly White (93.7%), affluent, and educated. The Twitter-feed audience respondents were older than might be expected in light of previous research, with 70% of respondents in this study indicating they are 40 years of age or older. A major difference between the aforementioned previous research's demographic findings and this study's is the proportion of female respondents. The 43.9% female response rate is considerably higher than Clavio's (2008a) finding of a 12.2% female response rate. It is uncertain whether this difference is an artifact of the medium of Twitter, a direct result of the Twitter feed belonging to a retired female athlete, or a result of some other factor.

RQ2 asked what the most salient uses of the Twitter feed were for the feed's followers. For the entire group of followers, the most salient uses appeared to focus on elements of personal fandom and affiliation toward the athlete. Of the five items with a mean response above 4.00, all indicated a use of the athlete's Twitter feed because of either an affinity for an aspect of the athlete's persona (i.e., being a role model, having followed her career, thinking she's an expert at her sport) or an affinity for content relating to the athlete (i.e., enjoying what the athlete writes, getting information that cannot be found elsewhere). In terms of salience between gender groups, women were significantly more likely to have increased interest in following the feed as a result of having followed the athlete's career, having an affinity for the athlete's writing, and for receiving unique information.

Only four items came back with a mean response below 3.00: the item relating to keeping up with the Twitter feed for one's own business purpose ($M = 2.47$, $SD = 1.23$), the item relating to purchasing the athlete's products ($M = 2.57$, $SD = 1.2$), the item relating to affinity for one's phone or mobile device ($M = 2.63$, $SD = 1.22$), and the item relating to finding the athlete physically attractive ($M = 2.86$, $SD = 1.14$). These items appear to stand in contrast to the highest-rated mean responses, in that none of these low-rated items deal directly with the athlete's personality.

These findings have some interesting implications, particularly in relation to existing literature. As noted in the literature review, Pedersen and Macafee (2007) found that female bloggers focused on social elements rather than informational ones, and this led to their blogs being less popular than those of their male counterparts. Similarly, Schultz and Sheffer (2010) found that journalists were more likely to use Twitter for breaking news and information dissemination than to express personal information. Here, however, the elements relating to social and personal elements were rated more highly than the purely informational elements.

Another interesting element of item salience lies in relation to the study conducted by Kassing and Sanderson (2010), who noted that cyclists were using Twitter feeds for the purposes of opinion sharing, interactivity, and insider perspective

cultivation. The high level of salience in the current study's items relating to affinity for the athlete's writing, personality, or opinion would appear to coincide with the opinion-sharing and insider-perspective elements in the Kassing and Sanderson study; however, respondents in this study did not rate the ability to interact with the athlete particularly highly ($M = 3.18$, $SD = 1.17$). This may be in part because of the athlete's general policy to not respond to follower Tweets, which does set her apart from some other Twitter users in the sport realm.

RQ3 asked whether exploratory factor analysis would yield any identifiable dimensions of uses or gratification among respondent followers. The factor analysis did indeed yield three distinct factors. However, the three factors isolated in the results are by no means a manifest explanation for Twitter-feed use, even in this sample. The relatively low amount of variance explained indicates that there are as-yet unidentified elements of Twitter use that need to be uncovered. That said, the factors identified by this study do warrant further examination and could help isolate important elements for consideration by social-media marketers and communicators.

The first factor, labeled organic fandom, explained the greatest amount of variance and enjoyed the highest group salience. The presence of this factor seemed to indicate that a plurality of followers of the athlete's Twitter feed were participating because of their affinity for the athlete rather than for elements such as technological affinity. The second factor, labeled functional fandom, also contained individuals who were participating because of fandom for the athlete, but whereas the elements in the organic fandom factor appeared to be personal in nature, the elements in functional fandom were more focused on business, commercial, and nonpersonal items. In other words, the Twitter-feed participants who fell under the organic fandom factor appeared to be participating out of an affinity for the athlete herself, whereas the participants who fell under the functional fandom factor appeared to be participating because of the athlete's celebrity or perceived importance. This distinction bears some resemblance to prior uses and gratifications research. For instance, Clavio's (2008b) dimensions of gratification for message-board users found that there was a distinction between users participating purely for information-gathering purposes and those participating to interact with fellow message-board users. The findings of Park et al. (2009) also point toward socializing aspects, such as those found in the organic fandom factor, being more salient than status or information-seeking motives.

The third factor, interaction, dealt with the elements relating to technological interactivity, both in terms of interacting with the athlete via Twitter and in terms of participants feeling like part of a larger fan community. There are parallels between this factor and the interactivity factor in one of Clavio's studies (2008b), which found that users had an affinity for interacting with each other in the online sphere, albeit with a higher level of importance than found in the followers of the Twitter feed in the current study. There are also connections between this factor and the aforementioned study by Kassing and Sanderson (2010), who noted that cyclists were emphasizing interaction between themselves and their Twitter followers. The relatively low salience of this factor contrasts with the findings of Raacke and Bonds-Raacke (2008), which pointed toward interactive and content creation-based items being the most important to users of certain social-networking venues. This could be because of a fundamental difference between those venues and Twitter

and may be important for business users of Twitter to consider. This difference could also be a result of the expectations of Twitter followers, who may view the Twitter feed less as a functional method of interaction with athletes or other fans and more as a way to get unique information directly from the athlete.

RQ4 focused on whether survey respondents' gender affected their reasons for following this retired female golfer via Twitter. Approximately 5 of the 18 motivation statements in the survey instrument resulted in statistically significant differences based on gender. Most interesting was that the only motivation of the five that men were more likely to cite as a reason for following this retired golfer on Twitter was "Because I find the athlete to be physically attractive." This was ironic, because professional golf has historically been construed as a sport for men, with female golfers receiving significantly less media coverage than female athletes in "gender-appropriate" sports like tennis, who are deemed to collectively offer more heterosexual sex appeal (Crosset, 1995; Dixon, 2002; Vincent et al., 2002). More than likely, this result means that this particular retired athlete has more sex appeal to heterosexual men than most LPGA golfers.

In contrast, female respondents were significantly more likely to be motivated to buy the athlete's products, obtain news and updates on the retired athlete, enjoy reading her writing, and to have long followed the athlete's career. The LPGA has a large and loyal female fan base (Crosset, 1995). However, 56% of the survey respondents who followed this retire female athlete's Twitter site were men, many of whom were significantly motivated by her attractiveness. This indicates that female athletes offering sex appeal are more likely to have male Twitter followers even if they play a "gender-inappropriate" sport. It is also clear that gender did affect various motivations individuals had for following this particular retired female athlete via Twitter.

This discussion section analyzed results from the survey of a retired female athlete's Twitter-feed followers. The demographic information from the survey was found to share characteristics with demographic information from prior online sports-audience research, yet there were also differences, namely in the areas of gender and age. The most salient uses of the Twitter feed for respondents dealt primarily with personal affinity for the athlete, whereas the least salient items dealt with functional, nonpersonal items. There were some significant differences in the salience of certain items between male and female respondents. The factor analysis performed identified three distinct factors of Twitter-feed use: personal affinity, functional affinity, and interactivity. The salience of personal affinity and the relative lack of salience of interactivity both point toward a realization of Twitter as a unique venue for information distribution, where audience expectations are perhaps more in line with traditional sender-receiver media roles than with more interactive new-media venues such as blogs, Facebook, and message boards.

Conclusions

This study's results indicate that this particular Twitter-feed audience is most interested in being fans and intellectual and emotional consumers of the athlete they are following, rather than using the feed to satisfy business or interactive needs. These Twitter followers do appear to be goal directed in their use of the medium as it relates to this athlete's feed, and those goals appear to be varied between at

least three identifiable groups. The findings from this study appear to fit within the framework of prior studies of new-media audiences (e.g., Clavio, 2008b; Kassing & Sanderson, 2010; Pedersen & Macafee, 2007; Schultz & Sheffer, 2010).

This study did have some limitations. First, the effectiveness of the survey instrument relies on the capacity of subjects to accurately answer the questions. Second, the nature of both the Twitter-feed technology and the cooperation of an individual such as the athlete, who worked with the investigators to post the survey, means that the study was limited to a convenience sample and thus cannot be generalized beyond this specific sample. Third, the survey link could only be posted for 3 days, which may have artificially lowered the response rate. Fourth, because of the still-developing nature of audience analysis in new media, the definition of active users and the calculation therein could affect generalizability. Finally, as mentioned earlier, results from a retired female athlete's Twitter feed might be different than those from an active athlete.

Future studies should focus on the followers of different types of Twitter feeds, such as those devoted to a specific team or to a coach, to compare their demographic information, usage data, and dimensions of use to the findings in this study. More inquiry is needed into the aspects of use that individuals find most appealing, so that communicators and marketers can better tailor Twitter messages to the wants and needs of the audience. Continued examination of the content, focus, and direction of Twitter messages is needed, so that the information being passed along by Twitter-content originators can be effectively quantified and measured against audience data. Twitter represents a unique aspect of online social networking, wherein there are possibilities for a broad spectrum of information sharing and interactivity that may be decided by the content generator (i.e., the athlete, coach, or organization). As Twitter continues to grow in popularity, its relative ease of use, low resource requirements, and informational brevity will aid in keeping the medium at the forefront of sport-consumer interaction, and understanding the nature of that interaction will become more crucial for sport communicators, sport marketers, and sport fans.

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