

Battle of the Sexes: Gender Analysis of Professional Athlete Tweets

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Abstract

This study employed a content analysis to determine the frames utilized by American professional athletes on Twitter, and if differences existed in the employment of frames across gender. The 100 most recent tweets from 18 professional athletes, nine male and nine female, participating in the 2012 London Olympics were analyzed to investigate frame utilization. Analysis revealed no statistical difference in frame utilization across gender, and the primary utilization of the frame of athlete as an everyday individual by both sets of athletes, which aligns with traditional feminine gender roles. These results both support and counter the framing of male and female athletes in traditional forms of media, and highlight the impact of social media on portrayals.

Introduction

Prior research has highlighted the coverage patterns devoted to male and female athletes at international, professional, and intercollegiate levels (e.g., Billings, 2007; Billings & Eastman, 2002; Cooper, Eagleman, & Laucella, 2009; Greer, Hardin, & Homan, 2009; Pratt, Grappendorf, Grundvig, & LeBlanc, 2008; Redmond, Ridinger, & Battenfield, 2009; Tuggle, Huffman, & Rosengard, 2002). Depictions and framing of male athletes in traditional sports media coverage has placed emphasis on their intelligence, power, strength, and aggressiveness in competition (Billings & Eastman, 2003). Conversely, female athletes were depicted as graceful and beautiful when competing, and received coverage that focused on their physical appearance and discussed their family or private lives (Billings & Angelini, 2007; Bissell & Duke, 2007; Hardin, Chance, Dodd, & Hardin, 2002; Jones, 2006).

Research into why differing coverage patterns of male and female athletes appeared in traditional media have posited that sports, being a microcosm of the society in which they are played (Delaney & Madigan, 2009; Eitzen, 2011), support traditional gender roles (Hardin & Greer, 2009; Koivula, 1995, 2001). Whereas masculine gender roles are linked with characteristics such as “assertiveness, confidence, self-promotion, control, and dominance” (Stuhlmacher & Poitras, 2010, p. 490), feminine gender roles are linked with the characteristics of “concern for others, friendliness, helpfulness, warmth, support, and selflessness” (Stuhlmacher & Poitras, 2010, p. 490), and as highlighted above, these characteristics are reflected in sport coverage. The results of analysis and the discovery of trends within coverage devoted to athletes in traditional forms of media were significant as these outlets were the primary source of information for sport audiences (Hardin & Greer, 2009). As such, the depictions and portrayals of athletes within traditional forms of media were the basis on which

audiences formed opinions regarding athletes. However, in today's media environment, athletes utilize in social media as a way to communicate directly with various audiences (Browning & Sanderson, 2012; Lebel & Danychuk, 2012; Pegoraro, 2010).

According to Weinburg (2009) individuals use social media to engage in "the sharing of information, experiences, and perspectives throughout community-oriented websites" (p. 1). One area where the utilization of social media has become prevalent is the sport industry (Clavio & Kian, 2010). Social media and the features that allows communication directly with fans enable athletes to bypass traditional media (Sanderson, 2010) and create an online identity of their choosing. Although there exists a body of literature devoted to the examination of the portrayals of athletes in traditional forms of media, investigation regarding the content produced by athletes on social media platforms such as Twitter is still an emerging area (Hambrick et al., 2010; Kassing & Sanderson, 2010; Pegoraro, 2010). Additionally, it is unknown if athletes use frames to portray themselves in a way that aligns with stereotypical portrayals and patterns of coverage previously illustrated in traditional media. As social media allows athletes the ability to act as "rulers of their own domain – free to interact on a much more direct level with their audience" (Lebel & Danychuk, 2012, p.461) it is necessary to investigate how athletes frame themselves in social media to establish if differences exists from traditional media portrayals.

Therefore, the purpose of this study was to examine the frames utilized by athletes on Twitter and to determine if differences existed across gender. Understanding the utilization of frames by athletes on Twitter will facilitate comparisons between the portrayals of athletes in traditional forms of media (Billings, 2007; Billings et al., 2008; Billings, Halone, & Denham, 2002; Billings & Eastman, 2002; Bissell & Duke, 2007; Christopherson, Janning, & McConnell, 2002; Eastman & Billings, 2000; Jones, 2006; King, 2007; Kinnick, 1998; Shugart, 2003; Tuggle et al., 2002; Tuggle & Owen, 1999) to portrayals in social media. In addition, investigation into this area will build upon previous research by determining if athletes' own frames on social media follow traditional masculine and feminine gender roles. This will aid in the understanding of the impact of traditional gender roles and the media proliferation of these roles.

Conceptual Framework

As the purpose of this study centered on examining the type of content produced by athletes, and if differences existed across gender in the content produced, framing theory was employed as the conceptual framework as it has been used in previous research that investigated the type of coverage devoted to male and female athletes (e.g., Billings, 2007; Billings & Angelini, 2007). Additionally, framing theory has illustrated how different types of coverage can be used to shape perceptions of reality (Goffman, 1974).

Framing theory is attributed to Goffman (1974), who defined frames as mental schemas that facilitate the processing of information. Within the field of communication, Entman (1993) defined framing as: "To frame is to select some aspects of perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described" (p. 52), and could originate from the communicator, text, receiver, or the culture in which they are produced. Through the selection, emphasis, and exclusion of information involved in the framing process (Entman, 1993), framing has been identified as the presentation of news in specific ways to shape perceptions (Sanderson & Hambrick, 2012).

Framing theory has been employed in sport communication research to examine the portrayals of athletes participating in specific events, such as the Olympic Games. Results from these studies revealed coverage supported the participation of female athletes in socially appropriate individual sports (e.g. Billings & Eastman, 2003; Tuggle et al., 2002). Additionally, this line of research revealed significant differences in regard to the attributions ascribed to the success or failure of male and female athletes (Angelini & Billings, 2010; Billings & Angelini, 2007; Zaharopoulos, 2007).

Previous studies in sport literature have also employed framing theory to examine the coverage of various issues within sports. Laucella (2009) used framing theory to examine how newspapers portrayed retired tennis star Arthur Ashe following the announcement of his AIDS diagnosis in *USA Today*. The results indicated that Ashe was portrayed as a victim, pioneer, role model, and hero. Framing theory was also employed by Laucella (2010) to examine newspaper coverage of Michael Vick regarding federal dogfighting charges. It was found that Vick was portrayed through the frames of scapegoat, victim, trickster, hero (or fallen hero), and other world (Laucella, 2010). Eagleman (2011) employed framing theory to examine coverage of Major League Baseball (MLB) players in *Sports Illustrated* and *ESPN The Magazine* from 2000 to 2007. Results indicated that differences existed in the portrayals of athletes across race and nationality, which contributed to the stereotypical portrayals of these athletes.

Literature Review

The primary focus of this literature review was placed on the examination of differences in coverage devoted to male and female athletes in traditional forms of media as well as individuals in online media. This research documents the patterns of coverage produced in traditional media, thus outlining the basis for comparison, and through an examination of online media, illustrates how technological features associated with the medium may enable a shift in framing.

Gender and portrayals of athletes in sports media

From a sociological perspective, it has been stated that sports represent a microcosm of the society in which they are played (Coakley, 2011; Delaney & Madigan, 2009; Eitzen, 2011; Eitzen & Sage, 2009). This includes a reproduction of the sociological norms of the society within sport; as such, the gender schemas associated with masculinity and femininity are applied to sport participation based on their perceived appropriateness (Koivula, 2001). As labor roles associated with masculinity include tasks involving speed, strength, and power (Stuhlmacher & Poitras, 2010), team sports were perceived to be masculine, while individual sports were perceived to be more feminine (Koivula, 1999, 2001). Resulting from this was the classification of sports into masculine, feminine, or gender-neutral categories (Koivula, 1995). The perception of sports as masculine, feminine, or gender-neutral has been perpetuated by the media through the inclusions of masculine (i.e., aggressiveness, self-assurance, promotion) and feminine (i.e., compassion, kindness, warmth) gender characteristics within sports coverage (Koivula, 1999; Stuhlmacher & Poitras, 2010).

One sporting event that has been examined to highlight the differences in coverage devoted to male and female athletes is the Olympic Games. Beginning with the 1996 Summer Games, Tuggle and Owen (1999) examined newspaper and broadcast coverage received by athletes, and found the type of coverage supported participation in gender-appropriate sports for female

athletes. Analysis of the 2000, 2002, 2004, 2006, 2008, and 2010 Olympic Games found male athletes were framed as being successful due to athletic consonance, composure, intelligence, determination and dedication, while their failures were attributed to a lack of commitment (Angelini & Billings, 2010; Angelini, MacArthur, & Billings, 2012; Billings & Angelini, 2007; Billings et al., 2008). Alternatively, female athletes were framed as being successful due to concentration, experience, and perceived courage, while their failures were due to a lack of athletic strength (Angelini & Billings, 2010; Billings et al., 2008). Additionally, female athletes were framed in stereotypically feminine ways, with focus being placed on their appearance, grace during competition, and private lives (Billings & Eastman, 2002; Bissell & Duke, 2007; Christopherson, Janning & McConnell, 2002; Hardin et al., 2002; Jones, 2006). Further, analysis of the camera shots, angles, and commentary of the 2004 Olympic Games indicated gender biases in the coverage of female athletes competing in the specific sports of beach volleyball, track and field, and gymnastics (Bissell & Duke, 2007; Greer et al., 2009; Billings, 2007).

Investigation regarding the type of coverage provided to male and female athletes outside of the Olympic Games has revealed similar biases in the type of coverage. Specifically, male athletes were more likely to be framed by broadcasters as physical and athletic (Billings, Halone, & Denham, 2002). Female athletes were framed in terms of their personality, appearance, and background, were more likely to have their age mentioned, and received comments relating to their dating lives or family situations (Billings et al., 2002; Eastman & Billings, 2000).

As the Internet began to increase in popularity in the early 2000s, researchers began examining sport coverage in an online environment, often revealing inconsistent results. Research into the coverage of collegiate team websites found more in-depth information (e.g., coaches and player biographies, photographs, advertisements, articles, and multimedia) was provided to male teams (Cooper, 2008; Sagas, Cunningham, Wigley & Ashley, 2000). However, when investigating website coverage of the 2006 and 2007 NCAA Men's and Women's Basketball tournaments, it was found that male athletes received significantly more descriptors relating to physical appearance and family/personal relationships, while female athletes received more descriptors relating to skill level, accomplishments, and emotional strength (Kian, Mondello, & Vincent, 2009). In their examination of sexually suggestive images of athletes on sports blogs, Clavio and Eagleman (2010) found that when females were the focus of the photograph they were more like to be framed as sexually suggestive.

Portrayals of individuals and athletes in online media

With the increased utilization of technologies such as message boards and blogs, researchers began exploring the portrayals of individuals on these platforms (e.g., Dominick, 1999; Hancock, & Toma, 2009; Mehdizadeh, 2010) as they could control their identities unlike mediated representations in traditional media. Early studies investigating individual portrayals in an online environment indicated gender differences in presentation strategies, with females more likely to discuss their personal lives (Dominick, 1999, Jones 1990).

Similar to the analysis of sports coverage in an online environment, further investigation of the portrayals of individual in online media have also highlighted inconsistent results. When examining blogs, Bortree (2005) found that females employed certain strategies to appear likable, less aggressive, and display intelligence. A study by Sanderson (2008) examined the presentation of a male athlete on his personal sports blog, and found the athlete engaged in

strategies appear aggressive, dedicated, and responsible. Ellison, Heino, and Gibbs (2006) found no gender differences in on online dating sites, however, Hancock and Toma (2009) found that women placed increased emphasis on physical attractiveness in their photographs. In their investigation of Facebook, Hum et al. (2011) found no significant differences between the amount, activity levels, and candidness of the photos between males and females.

Specifically relating to athlete utilization of social media platforms, such as Twitter, early investigations have focused primarily on how athletes employ the medium, or examined the content produced by athletes collectively. Kassing and Sanderson (2010) found that athletes were using Twitter to provide commentary, foster interactivity, and provide insider information. Pegoraro (2010) investigated athlete tweets over a seven-day time period and found athletes were discussing their personal lives and responding to fan questions on Twitter. Hambrick et al. (2010) examined professional athletes' use of Twitter, and found athletes primarily utilized the medium for interactive or diversion purposes. Most recently, one study has focused on the differences in content produced by athletes on social media. Lebel and Danylchuk (2012) utilized frames to analyze professional tennis players' Twitter content, and found 10 frames utilized by athletes including the conversationalist, the sport insider, the behind-the-scenes reporter, the super fan, the informer, the analyst, the publicist, the superintendent, the fan aficionado, and the brand manager, with no difference in utilization between genders.

The control over one's identity afforded to individuals on online platforms could not only impact previous mediated representations of athletes, but subsequently influence concepts such as brand equity and brand personality through social media promotion. Brand equity, as defined by Keller (1993), is related to consumer brand knowledge and individual responses to marketing efforts, and consists of brand awareness and brand image. Recent research has found that social media is a useful tool to influence brand image (Bruhn, Schoenmuller, & Schafer, 2012). Traditionally, brands were defined through the characteristics individuals aligned with goods and services (Keller, 1993), however, the concept of brand personality (Aaker, 1997) extends this application to individuals, thus creating a person brand, which is a feature of the sports industry (Parmentier & Fisher, 2012). As such, the investigation of athlete content on Twitter carries implications from a practical standpoint, in addition to the previously discussed theoretical perspective.

Significance, Purpose and Research Questions

Athletes and sport personalities are two categories of Twitter users that possess devoted followings on Twitter, which can extend into the millions (Schultz & Sheffer, 2009). Twitter allows athletes and individuals to communicate directly with each other and bypass traditional media, effectively creating a newsfeed of information (Ovadia, 2009). However, limited research has been conducted regarding what athletes are saying on Twitter (Hambrick et al., 2010; Kassing & Sanderson, 2010; Pegoraro, 2010), and only initial research regarding gender differences in content produced by athletes has been conducted (Lebel & Danylchuk, 2012). Although research in traditional forms of media have documented gender differences in the framing of athletes (e.g., Billings & Eastman, 2003; Eagleman, Pedersen, & Wharton, 2009; Pratt et al., 2008) it is unknown if athletes are using frames on social media in a way that aligns with stereotypical portrayals and patterns of coverage previously illustrated in traditional media. As such, the purpose of this study was to examine how athletes frame themselves on Twitter, as it is one popular method used by athletes to communicate directly to fans (Browning & Sanderson, 2012). Furthermore, this study was intended to determine if differences in content

exist in a different sub-set of athletes across gender, building from the study by Lebel & Danylchuk (2012). This study provided a comparison to previous research examining the framing of athletes participating in masculine, feminine, and gender neutral sports (e.g., Bissell & Duke, 2007; Billings, 2007; Billings, Halone, & Denham, 2002; Christopherson et al., 2002; Greer et al. 2009), and expanded upon this body of literature by examining how athletes frame themselves on social media. This study also facilitated an exploration of the “power in the direct communication that Twitter affords-it allows athletes to exert more control over their identity and public presentation” (Lebel & Danylchuk, 2012, p. 462).

This line of research is significant as understanding the framing of athletes on Twitter will provide a foundation for future research on the role traditional media portrayals of athletes play in the type of content produced by athletes on social media. According to Hardin and Greer (2009), the media plays a large role in the gendering of activities, perhaps more so than actual participation. As such, athletes may continue to perpetuate traditional gender roles in their content on Twitter, even when they are presented with an opportunity to construct an identity of their choosing. To determine if athletes are following stereotypical depictions of themselves in social media due to the proliferation of biased media coverage, it is necessary to first determine how athletes are framing themselves to fans through new social media technologies such as Twitter. Due to the limited amount of research regarding athlete content on social media, the following research questions were developed to guide the study:

RQ1: Are there significant differences in frame utilization on Twitter by male and female athletes?

RQ2: Are there significant differences in frame utilization on Twitter by male and female athletes participating in a masculine sport?

RQ3: Are there significant differences in frame utilization on Twitter by male and female athletes participating in a feminine sport?

RQ4: Are there significant differences in frame utilization on Twitter by male and female athletes participating in a gender-neutral sport?

Methodology

Similar to the design employed by Lebel and Danylchuk (2012), as the focus of this study was on professional male and female athletes, an event of analysis was selected that included male and female athletic participation in similar sporting events. Thus, the event of analysis utilized in this study was the 2012 London Olympics, and all tweets were downloaded one month (i.e., June 26, 2012) prior to the competition dates (i.e., July 27, 2012 – August 12, 2012) as participating athletes were subject to International Olympic Committee (IOC) regulations regarding Twitter use during the Games (Schroeder, 2011). This event was selected for the following reasons. The Olympics Games remains one of the most widely covered, global sporting events, with the 2010 Vancouver Winter Olympics attracting a global audience of more than 1.8 billion (Angelini, MacArthur, & Billings, 2012). The Olympic Games also provides an unique opportunity for researchers to examine gender differences as it includes male and female athletic competitions in an overarching sport event (Billings & Angelini, 2007) that features sports previously classified as masculine, feminine, and gender neutral (Hardin & Greer, 2009). Due to the size of the athlete contingent, which included approximately 10,500 athletes, with roughly 60% to 40% male-to-female representation (Chappell, 2012), the Olympic Games provided a large potential sample for selection of male and female athletes with verified Twitter accounts participating in masculine, feminine, and gender-neutral sports. This event also

ensured participation in athletic competition by all athletes selected, thus reducing potential biases from athletes that were either in- or out-of-season. Lastly, selection of the Olympic Games facilitated comparison of portrayals of athletes in traditional forms of media that have focused on the Olympic Games (e.g., Angelini & Billings, 2010, Billings & Angelini, 2007; Billings et al., 2008; Tuggle, et al., 2002). As these previous studies focused on American-based media outlets, the athletes selected for analysis in this study were American, again, facilitating comparison between previous research, while also reducing potential cultural differences in the framing processes.

A quantitative content analysis was performed to determine frame utilization and answer the research questions. A content analysis methodology was selected as it allows for systematic and replicable analysis of previously existing content (Riffe et al., 2008). Content analyses have also been previously utilized to examine traditional media content in sport research (e.g., Billings & Eastman, 2003; Pedersen, 2002). One methodological concern when analyzing online content is the frequency with which online content can be updated or changed. Taking this methodological issue into consideration, the utilization of the online software DiscoverText was incorporated into the study's design. DiscoverText is a text-based analytics software that enables users to search and download online data from sources such as Twitter and Facebook (DiscoverText, 2012). Users can enter an athlete's username and number of most recent tweets, and DiscoverText links to the athlete's Twitter feed and downloads the specified tweets into an online database. This online database could then be used to comprise fixed dataset for analysis.

Selection of athletes for analysis

The websites Sportsin140.com and TweetingAthletes.com were used to identify and select athletes for analysis. Previous studies (Hambrick et al., 2010; Lebel & Danylchuk, 2012) have utilized these websites to provide lists of validated athlete accounts on Twitter. Utilizing Harding and Greer's (2009) classifications of masculine, feminine, and gender-neutral sports, one masculine (e.g., basketball), one gender-neutral (e.g., soccer), and one feminine (e.g., gymnastics) sport was randomly selected for analysis, and the list of potential athletes for selection from each sport was cross-referenced with athletes participating in the London 2012 Olympics. From this list, three male and female athletes from each sport category were randomly selected for analysis. In total, the Twitter feeds of 18 professional athletes, nine male and nine female, were analyzed. This sample was selected, as it enabled analyses across gender, captured potential differences across sport type (i.e., masculine, feminine, gender-neutral), while also producing a dataset that was consistent in size with previous research (Pegoraro, 2010). As previously mentioned, all tweets were captured by DiscoverText simultaneously on June 26, 2012.

Specific to the medium of Twitter, individuals can post tweets at different rates, thus, the sample utilized in this study was a purposive sample (Riffe et al., 2008), consisting of the 100 most recent tweets of each athlete, producing a dataset of 1,800 (N = 1,800) tweets. This sampling procedure was selected as it reduced potential bias in data analysis from one athlete that produced tweets at a greater frequency when compared to other athletes in a specific timespan. The unit of analysis for this study was each tweet produced by the athlete. Included for analysis in the data set were "re-tweets," which are tweets produced by another individual whom the athlete re-tweets to his or her followers. Although re-tweets were not constructed by the

athletes, they were included in the data as they were messages the athletes chose to distribute to their followers, thus contributing to their framing.

Coding

A coding protocol and codebook were developed to provide guidelines specifically related to the purpose of this study. The codebook contained nine variables, which were based on Billings & Angelini's (2007) methodology for the identification of frames within broadcast content, and variables specific to the purpose of the study. The nine variables utilized in this study included coder identification, date of tweet, length of tweet, athlete name, athlete gender (i.e., male or female), athlete sport (i.e., basketball, soccer, or gymnastics), perceived gender categorization based upon classification by Hardin and Greer (2009) (i.e., masculine, gender-neutral, or feminine), tweet accompanied by a link (i.e., yes or no), and frames present in tweet (i.e., athlete as an everyday individual, athlete as a humble and gracious individual, athlete as a competitor, athlete as a promotional figure, no frame present, and combination).

The variable analyzing frames present in tweet content was developed through a textual content analysis of 900 tweets (Burch, 2012). This type of analysis has been utilized to establish how words create meaning or to discover underlying meaning in content (Fairclough, 2003; Sanderson, 2010). Goffman's (1974) definition of frames as mental schemas that facilitate the processing of information served as the operational definition of framing. Employing a process of data reduction outlined by Creswell (2003), raw tweet content was reduced first into keywords and descriptors, and then into themes and frames. The four framing categories utilized in this variable are outlined below.

- *Athlete as an everyday individual* was defined as when athletes framed themselves as a normal individual and not an elite athlete. This frame included the discussion of aspects regarding the athlete's daily life, personal life, and personal outlook. Keywords or descriptors in this frame included weather, traveling, plans, food, general comments and statements, family, friends, fun, fashion, pop culture, celebration, fan or cheering, behaviors, health, philosophy, and observations. Examples included: "Back in Cali...Day 1 of grind..." (i.e., travel), and "Real integrity is doing the right thing, knowing that nobody's going to know whether you did it or not" (i.e., philosophy).
- *Athlete as a thankful and grateful individual* was defined as when the athlete framed themselves as humble, thoughtful of others, and appreciative for the opportunities they have received. This frame included the sending of well-wishes to others, and discussions of gratitude and religion/faith. Keywords or descriptors included in tweet content were holiday well wishes, greetings, congratulations, charity (children events), thanks, God, Mass, Service, Chapel, and prayers. Tweets in this frame included: "@jozyaltidore congrats on the goals bud! #doingwork" (i.e., congratulations), and "Tonight I was filled with life. Thanks to my pretty freaking cool teammates and the young and reckless kids I got to meet." (i.e., charity (children)).
- *Athlete as a competitor* was defined as when the athletes framed themselves as individuals who placed a great amount of effort, time, and devotion to the training and perfection of their chosen sport. This frame included the discussion of performance and training aspects of the athlete's life. Keywords and descriptors derived from tweet content to form this frame included winning, competition, games, statistics, running, weights, gym, hard work, and effort. Examples of tweets contained in this frame were:

“Game set match... #officiallylondonbound @USA_Volleyball congrats guys!” (i.e., competition), and “Word hard. Get results” (i.e., hard word/effort).

- *Athlete as a promotional figure* was defined as when the athletes framed themselves as a tool that could be utilized by various companies or organizations to increase interest or awareness in products or the athlete as a brand. This frame included the discussion of promotional efforts, product endorsements, and media appearances. Keywords and descriptors found in this frame were appearances, charity (events), personal charities, giveaways, Nike, adidas, shoes, workout and performance apparel, free products, ESPN, interviews, social media, Facebook, and Twitter. Examples of tweet content from this frame were: “@Nikesoccer the new US national team kits are fresh” (i.e., Nike), “Just finished my interview with @hannahstormespn for #nbafacetoface” (i.e., interviews), and “just wrapped up an incredible day of social media events at #mediasummit” (i.e., social media).

To facilitate the coding process, three coders were selected to code all content from tweets used in data analysis. The coders were selected due to their familiarity with Twitter, and their previous experience with content analysis. Prior to establishing intercoder reliability, one training session was conducted to review the coding protocol and its application to athlete Twitter feeds.

Intercoder reliability was tested prior to coding of the entire dataset to ensure all coders were interpreting and applying the protocol to the dataset in a consistent manner. This determined that any agreement between coders did not occur simply by chance. To establish intercoder reliability, a 20% sub-sample from the data set was randomly selected, as outlined by Wimmer and Dominick (2006), and tested to determine chance agreement. As the total samples consisted of 1,800 tweets, each coder analyzed a 20% sub-sample of 360 tweets to establish intercoder reliability and each coder analyzed the data independently. Wimmer and Dominick (2006) stated that a *kappa* coefficient of .75 or higher on any variable satisfies intercoder reliability and confirms the coders are correctly applying the protocol and variables when examining the dataset. Due to three coders being utilized in this study, *Fleiss’ kappa* was used to determine chance agreement, as it can be used when employing a fixed amount of coders (Fleiss, 1971). All nine variables reached kappa levels above the .75 threshold indicated by Wimmer and Domnick, and kappa levels ranged from 0.81 to 1.00. Table 1 contains each variable and its corresponding kappa value.

Variable	Fleiss Kappa Value
v2. Date of tweet	1.00
v3. Length of tweet	1.00
v4. Athlete name	1.00
v5. Athlete gender	1.00
v6. Athlete sport	1.00
v7. Perceived gender categorization	1.00
v8. Tweet accompanied by link	1.00
v9a. Frames present in tweet	0.82
v9b. Combination of frames	0.89
v9c. Combination of frames	0.81

Once intercoder reliability was established, the entire data set was analyzed by dividing the remaining tweets between the three coders. The remaining tweets were then combined with the tweets used to establish intercoder reliability, and statistical analysis was performed on the data.

Data analysis

To determine frame utilization of athletes on Twitter, statistical analysis was conducted on the coded data, and the software program PASW Statistics 18.0 was used in data analysis. Initial data analysis performed included descriptive statistics, specifically, frequencies and crosstabs. Frequency statistics and crosstabulations were performed on the data to illustrate the number of times each athlete used a particular frame. Advanced statistical analyses consisting of *t*-tests were conducted to examine if statistically significant differences existed in the number of frame utilizations between male and female athletes. This analysis was conducted to answer RQ1, RQ2, RQ3, and RQ4.

Results

Initial data analysis included descriptive statistics performed on the entire dataset. Frequency statistics revealed the average length of tweet was 78.34 characters ($M = 78.34$) and the majority of tweets did not contain links to information, with 1,348 (74.9%) tweets not containing links and 452 (25.1%) tweets containing links. Per the directions in the coding protocol, coders identified the frames that were contained in combination of frame tweets. Although 1,800 tweets were analyzed in this study, due to the presence of multiple frames, or no frame within a tweet, the total number of frames found in this study was 1,972 ($n = 1,972$). The most predominately-utilized frame was athlete as an everyday individual ($n = 1,104$, 56.0%). The second-most utilized frame was athlete as a thankful and grateful individual ($n = 378$, 19.2%). Table two provides the complete utilization of frames according to frequency and percent.

Table 2
Frame Utilization by All Athletes

Frame	Frequency	%
Athlete as everyday individual	1104	56.0
Athlete as thankful and grateful individual	378	19.2
Athlete as competitor	262	13.3
Athlete as promotional figure	228	11.6

Data analysis revealed similar frame utilization between male and female athletes. Both male ($n = 580$, 59.3%) and female ($n = 524$, 52.7%) athletes predominately utilized the frame of athlete as an everyday individual. The second most utilized frame by male ($n = 172$, 17.6%) and female ($n = 206$, 20.7%) athletes was athlete as a thankful and grateful individual. Table three provides the use of frames according to frequency and percent by male and female athletes.

Table 3
Frame Utilization by Gender

Frame	Male	%	Female	%
Athlete as everyday individual	580	53.9	524	52.7
Athlete as thankful and grateful individual	172	17.6	206	20.7
Athlete as competitor	114	11.7	148	14.9
Athlete as promotional figure	112	11.5	116	11.7

RQ1 asked are there significant differences in frame utilization on Twitter by male and female athletes? In order to determine if differences existed, a *t*-test was performed to calculate the difference between means of each frame used by male and female athletes. Analyses revealed no significant difference in utilization of each frame by male and female athletes overall. Table

four lists differences in frame utilization by male and female athletes overall, comparing means and standard deviation.

Table 4
Differences in Frame Utilization by Gender

Frame	Male		Female		t(16)	p
	M	SD	M	SD		
Athlete as everyday individual	64.40	11.2	58.20	11.1	1.82	0.25
Athlete as thankful and grateful individual	19.11	5.9	22.90	8.0	-1.14	0.27
Athlete as competitor	12.67	12.1	16.44	8.1	-0.78	0.49
Athlete as promotional figure	12.44	9.8	12.98	7.8	-0.11	0.92

The next three research questions analyzed frame utilization by athletes based upon the perceived gender categorization of the sport they played (i.e., masculine, feminine, or gender neutral). Data analysis revealed both male and female athletes who participated in a masculine sport primarily utilized the frames of athlete as an everyday individual and athlete as a thankful and grateful individual. There was, however, a difference in utilization of the third and fourth frames of athlete as a competitor and athlete as a promotional figure between male and female athletes. Specifically, female athletes utilized the frame athletes as a promotional figure ($n = 43$, 12.8%) the third most often, while male athletes employed the frame of athlete as a competitor ($n = 34$, 10.7%). Table five provides the complete utilization of frames according to frequency and percent by male and female athletes in a masculine sport.

Table 5
Frame Utilization by Gender in a Masculine Sport

Frame	Male	%	Female	%
Athlete as everyday individual	195	61.1	164	48.8
Athlete as thankful and grateful individual	58	18.2	88	26.2
Athlete as competitor	34	10.7	41	12.2
Athlete as promotional figure	32	10.0	43	12.8

RQ2 asked whether there are significant differences in frame utilization on Twitter by male and female athletes participating in a masculine sport. Again, to answer this question, a *t*-test was performed on each frame to calculate the difference between mean utilization by male and female athletes who participated in a masculine sport, and no significant differences existed across the four frames. Table six provides the mean differences and standard deviation for male and female athletes participating in a masculine sport.

Table 6
Differences in Frame Utilization by Gender in a Masculine Sport

Frame	Male		Female		t(4)	p
	M	SD	M	SD		
Athlete as everyday individual	65.0	2.7	54.7	19.9	1.05	0.35
Athlete as thankful and grateful individual	19.3	2.1	29.3	10.5	-1.62	0.19
Athlete as competitor	11.3	2.5	13.7	8.6	-0.45	0.68
Athlete as promotional figure	10.7	8.2	14.3	9.5	-0.51	0.64

Male ($n = 164$, 42.8%) and female ($n = 164$, 58.5%) athletes participating in a feminine sport shared similarities in regard to the primary utilization of the frame of athlete as an everyday individual. The second most frequently utilized frame by both male ($n = 67$, 19.7%) and female ($n = 88$, 18.0%) athletes was athlete as a thankful and grateful individual. For male athletes athlete as a promotional figure was the third most utilized frame ($n = 60$, 17.6%), while for

female athletes it was athlete as a competitor ($n = 53$, 16.2%). Table seven provides the complete utilization of frames according to frequency and percent by male and female athletes in a masculine sport.

Table 7

Frame Utilization by Gender in a Feminine Sport

Frame	Male	%	Female	%
Athlete as everyday individual	164	42.8	164	58.5
Athlete as thankful and grateful individual	67	19.7	88	18.0
Athlete as competitor	49	14.4	53	16.2
Athlete as promotional figure	60	17.6	24	7.3

RQ3 asked are there significant differences in frame utilization on Twitter by male and female athletes participating in a feminine sport? Consistent with previous analysis, no significant difference existed in the utilization of each frame by male and female athletes participating in a feminine sport. Table eight highlights the differences in frame utilization for male and female athletes participating in a feminine sport.

Table 8

Differences in Frame Utilization by Gender in a Feminine Sport

Frame	Male		Female		t(4)	p
	M	SD	M	SD		
Athlete as everyday individual	54.7	10.7	63.7	11.6	-0.99	0.38
Athlete as thankful and grateful individual	22.3	8.3	19.3	5.5	0.52	0.63
Athlete as competitor	16.3	21.4	17.7	5.0	-0.11	0.92
Athlete as promotional figure	20.0	12.5	7.3	6.4	1.56	0.19

Male and female athletes in a gender-neutral sport were identical in the rank order of utilization of the four frames with athlete as an everyday individual employed most frequently, followed by athlete as a thankful and grateful individual, athlete as a competitor, and athlete as a promotional figure. Table nine provides the frequencies and percentages of utilization by male and female athletes participating in a gender-neutral sport. .

Table 9

Frame Utilization by Gender in a Gender-Neutral Sport

Frame	Male	%	Female	%
Athlete as everyday individual	221	69.3	169	50.6
Athlete as thankful and grateful individual	47	14.7	60	18.0
Athlete as competitor	31	9.7	54	16.2
Athlete as promotional figure	20	6.3	51	15.3

RQ4 asked are there significant differences in frame utilization on Twitter by male and female athletes participating in a gender-neutral sport? No significant difference existed in frame utilization between male and female athletes participating in a gender-neutral sport for the remaining three frames. Table 10 contains the differences in frame utilization by gender for athletes participating in a gender-neutral sport.

Table 10
Differences in Frame Utilization by Gender in a Gender-Neutral Sport

Frame	Male		Female		t(4)	p
	M	SD	M	SD		
Athlete as everyday individual	73.7	10.4	56.3	2.9	*2.78	0.05
Athlete as thankful and grateful individual	15.7	5.7	20.0	4.4	-1.05	0.40
Athlete as competitor	10.3	9.5	18.0	12.1	-0.86	0.40
Athlete as promotional figure	6.67	4.7	17.0	6.1	-2.32	0.08

*p<.05

Discussion

Results from this study indicated that athletes were predominately utilizing the frame of athlete as an everyday individual, followed by athlete as a thankful and grateful individual, athlete as a competitor, and athlete as a promotional figure. One significant finding from this study relating to RQ1, RQ2, RQ3, and RQ4 was the predominant utilization of the frame of athlete as an everyday individual, and the secondary utilization of the frame of athlete as a thankful and grateful individual by male and female athletes both cumulatively, and when grouped by perceived gender categorization of sport (i.e., masculine, feminine, or gender-neutral).

These results not only illustrates a one-sided portrayal by athletes in their own tweets, but that both male and female athletes provided one-sided portrayals that were more feminine, or communal, in nature. The results of RQ1, RQ2, RQ3, and RQ4, indicated few significant differences in the utilization of the four frames across gender and perceived gender categorization of the sport. Overall male and female athletes primarily utilized the frames of athlete as an everyday individual and athlete as a thankful and grateful individual, which included discussion of their daily lives, private lives, and presented them as warm and considerate of others (Burch, 2012), aligning with feminine gender characteristics outlined by Stuhlmacher and Poitras (2010). The results from this study align with previous research that found no differences in frame utilization by athletes across gender (Lebel & Danlychuk, 2012), and included the predominate discussion by all athletes of aspects of their daily or personal lives (Habrick et al., 2010; Pegoraro, 2010). Cumulatively, these results illustrate a trend that athlete content on Twitter does not strictly align with gender roles as both male and female athletes utilized frames that align with feminine gender roles.

The identification of this trend in athlete-produced content on Twitter is interesting, as according to Hardin and Greer (2009), the impact of biased media portrayals can affect the gendering of sports as masculine, feminine, or gender-neutral. Due to this, Hardin and Greer concluded that athletes may continue to present themselves according to traditional gender roles, even when the ability to create an identity of their choosing is feasible as a result of exposure to the documented biased coverage in traditional forms of media. Thus, according to Hardin and Greer, male athletes would continue presentation to align with masculine gender roles, while female athletes would emphasize feminine gender roles in their portrayals.

The results of this study, in addition to the results of previous research regarding athlete-produced content on Twitter, when compared to previous studies examining portrayals of athletes in traditional forms of media illustrates a continuation of feminine portrayals for female athletes (e.g., Bissell & Duke, 2007; Greer et al., 2009; Hardin et al., 2002; Tuggle & Owen, 1999), and a shift from masculine to feminine portrayals for male athletes (e.g., Billings & Angelini, 2007; Billings & Eastman, 2000), which simultaneously both supports (i.e., female

athletes' utilization of feminine frames) and contradicts (i.e., male athletes' utilization of feminine frames) the statement by Hardin and Greer (2009). A closer investigation of the potential explanations for the overarching utilization of frames that align with feminine gender characteristics, along with the shift to feminine frames by male athletes, highlights the impact of the technological features associated Twitter, which may enable athletes to express a more comprehensive representation of a sociological construct known as the person schema.

Major and Coleman (2008) highlighted the importance of the person schema, which contains organized, psychological constructs of information regarding the aspects of individuals. Previous literature regarding the portrayals of athletes in traditional forms of media have documented coverage provided to male athletes in which portrayals focused predominately on their identities as athletes, with emphasis placed on commitment, courage, and skill during athletic performance (Billings & Angelini, 2007; Billings & Eastman, 2000) whereas female athletes received coverage that focused on aspects outside of their identities as athletes, including descriptions of their attractiveness, personality, and personal and family lives (Billings et al., 2002; Bissell & Duke, 2007; Christopherson et al., 2002; Greer et al., 2009; Hardin et al., 2002; Tuggle & Owen, 1999). However, as the larger person schema includes qualities that describe individuals, Twitter could allow for individual expressions among athletes that may go beyond their identities as athletes, and provide a more complete, personal depiction of the athlete. Thus, through the utilization of specific frames in content on Twitter, athletes may not be choosing to counter previous portrayals as more masculine or feminine, but are instead expanding upon their identities as an athletes and expressing other aspects of a more expansive person schema (i.e., daily lives and personal lives), which happens to align with sociological views of feminine gender roles.

The larger implications from this study can be related to the perceived importance of the issue of gender and gender portrayals. One of the main effects of framing within communication research is that framing has the ability to impact opinions, attitudes, and perceptions regarding issues with the public (e.g., Druckman, 2001 Jones, Peske, Raymond, & Vig, 2002). Gender equality has been examined previously as a social issue through the lens of framing in sport communication (e.g., Billings & Eastman, 200; Tuggle et al., 2002; Zaharopoulos, 2007). Following the increased levels of sport participation by females after the enactment of Title IX (Pratt et al., 2008), the need for gender equality in terms of the amount and type of coverage became increasingly important, as documented by the large body of sport literature highlighting the patterns of biased and unequal coverage (e.g., Billings 2002; Bissell & Duke, 2007; Cooper et al., 2009; Greer et al., 2009; Hardin et al., 2002). However, the results of this study, due to the similar utilization of feminine frames by male and female athletes in a larger context, could unintentionally imply a decreased emphasis by female athletes on the perceived importance of gender equality.

The purpose of documenting patterns of biased or unequal amounts of coverage devoted to female athletes was to highlight the portrayals of a female athlete as a female who happened to be an athlete, not solely as an athlete, which supported traditional gender roles. Based upon the media effects of framing outlined above, providing the same type of coverage to male and female athletes could influence public opinion regarding the issue of gender equality. Even if the utilization of these frames was similar between male and female athletes, and these frames were being used to provide a more expansive depiction of a female athlete outside of an identity as an athlete, these frames still align with traditional feminine gender roles. This is significant, as the primary utilization of these frames could affect the perceived importance of gender equality

in the eyes of these athletes' Twitter followers, suggesting that the issue of gender equality is not as relevant with today's female athletes.

It is important to note that the issue of gender equality may differ on a sport-by-sport basis and is influenced by sport specific situations. Of the three sports analyzed in this study, it was the gender-neutral sport (i.e., soccer) that contained significant differences in frame utilization. Specifically, male athletes had a significantly higher utilization of the frame athlete as an everyday individual than female athletes, which aligned with feminine gender roles as defined by Stuhlmacher and Poitras (2010). Also, the frame of athlete as a promotional figure was utilized more by female athletes than male athletes in this sport, which aligned with the definition of masculine gender characteristics such as self-promotion (Stuhlmacher & Poitras, 2010). Although, no significant difference existed in frame utilization of athlete as a promotional figure between male and female athletes, this result approached significance. It is possible that the issue of gender equality in this sport is of more importance to female athletes than male athletes, as although the United States women are the more successful national team, attempts to form an independent U.S.-based professional women's soccer leagues have failed on two separate occasions. The lack of opportunities for female soccer players may heighten the importance of gender equality among these players, and thus influenced the amount of tweets with promotional frames, which could have been a tactic that was utilized in order to be perceived equal to their male counterparts. This may also explain why athletes who participated in a masculine sport (i.e., basketball), and a feminine sport (i.e., gymnastics) did not vary in their frame utilization. In these sports, opportunities in terms of leagues or national tournaments may be more readily present. For athletes who participate in a masculine or feminine sport, the perception of gender equality may not carry a high level of importance.

Practical implications

Whereas the theoretical implications that are highlighted from this study relate to the perceived importance of gender equality, the practical implications that arise from this study relate to the utilization of the four frames on Twitter as a self-marketing tool (Lebel & Danlychuck, 2012). Twitter provides athletes with the potential to bypass the media (Sanderson, 2010), and thus build their brands from a positive perspective (Sanderson, 2011). As Twitter's credibility as a news source increases, the need to manage the athlete's brand through this medium will increase in order to engage promotional efforts for the athlete and their organization (Sanderson & Kassing, 2011).

This aligns to the concept of brand personality and the person brand (Aaker, 1997;) Framing activates previously held beliefs in individuals (Nelson & Oxley, 1999). Thus, athletes could engage in strategic framing on Twitter, and develop a personal brand through the utilization of frames to activate specific brand personality characteristics in fans. This type of strategic framing would capitalize on similarities between human characteristics describing the brand (i.e., the athlete) and characteristic describing an individual's actual self (i.e., fan), which would result in higher brand preference (Aaker, 1997). By choosing to provide a more personal, and expansive depiction of oneself through the utilization of the frame of athlete as an everyday individual, athletes could align the everyday characteristics of a fan's actual self with the human characteristics describing the brand, or athlete. As such, this could subsequently increase brand image, and potentially overall brand equity as defined by Keller (1993) due to the influence of social media on brand image (Bruhn, Schoenmueller, & Schafer, 2012).

As highlighted by Lebel and Danylchuk (2012), the promotional capabilities provided by Twitter are not new concepts, and have been discussed in previous research (i.e., Hambrick et al., 2012; Pegoraro, 2010). However, as the opportunity for financial gains arise, athletes may be best served by engaging in strategic forms of framing to maximize earning potential, through the alignment of frames with fan characteristics, rather than utilizing frames to counteract traditional gender roles.

Conclusions, Limitations, and Future Research

Although this study was based upon previous research, it is not without limitations. One potential limitation of the study was that it examined perceived gender categorization across three levels of sport (i.e., masculine, feminine, and gender neutral). Future studies could replicate this methodology and focus on only one perceived categorization of sport to examine sport-specific differences based upon gender categorization. This analysis would be especially beneficial to the results relating to athletes who participated in gender-neutral sports. One possible avenue for future research could be to replicate the methodology of this study on another perceived gender-neutral sport to determine if similar outcomes occur.

Another limitation of this study was that although 18 athletes, including nine male and female athletes in three different sports were included for analysis, the purposive sampling strategy utilized does not support the generalization of results to a population, and thus these athletes may not be representative of the frames produced by all athletes on Twitter. Replication of this study's methodology with a different selection of athletes would serve a number of purposes. First, replication of this methodology could provide additional clarity regarding the presence and utilization of additional frames, as highlighted by Lebel and Danylchuck (2012). Along similar lines, replication of this methodology within different sporting events featuring male and female athletes would increase the generalizability of the results, while also further exploring the impact or perceived importance of gender equality. Lastly, replication of this methodology, but utilizing a sample of athletes from a different nationality would highlight potential cultural differences associated with framing and gender.

Research opportunities also exist, and carry implications, for the marketing potential associated with Twitter. As previously highlighted, the greater the alignment between the human characteristics associated with the brand, and the characteristics outlining the individual's actual self, the greater the preference for the brand (Aaker, 1997). One avenue for future research could explore the relationship between brand personality and framing of athlete content on Twitter by implementing an experimental design. In such a design, a data set of tweet content is manipulated to reflect a higher frame utilization across the four frames found in this study, and test to determine if higher utilization of specific frames increases or decreases brand preference for the athlete.

Overall, this study found that both male and female athletes are engaging in the framing of content that describes them in more relatable ways. The lack of significant differences in frame utilization by male and female athletes suggests Twitter allows for additional components of a person schema to emerge. Ultimately, the results of this study highlight the need for continued research regarding athlete framing on Twitter to determine if these trends continue, and their potential implications, both from a gender research and branding perspective.

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