

#WorldSeries: An Empirical Examination of a Twitter Hashtag During a Major Sporting Event

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Sport organizations, teams, and athletes are growing constituencies that use social-media platforms such as Facebook and Twitter to engage in dialogue with their respective audiences. The purpose of this study was to examine Twitter hashtag use during a major sporting event. Specifically, this study analyzed #WorldSeries during the 2011 World Series. The study employed a content-analysis methodology to determine who was using the hashtag and how it was being used. Using systematic sampling, 1,450 tweets were analyzed. The results demonstrated that #WorldSeries was being used predominantly by laypersons to express fanship, as well as interactivity. When individuals were being interactive with this hashtag, they were doing so mainly with MLB/league officials and other laypersons. Most of these interactive tweets were also expressions of fanship. The implications of these findings are discussed further.

Keywords: social media, tweet, interactivity

Social-media platforms have changed the nature of Web-based communication, transforming the Internet into a realm that is both participatory and conversational (Weinburg, 2009). Unlike traditional-media outlets, social-media platforms allow for connection, communication, and collaboration to take place between users on a grand scale (Bradley, 2010; Williams & Chinn, 2010). As such, these technologies

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are being embraced by various sport organizations that have begun to realize their impact on organizational communication and marketing (Coyle, 2010).

One social-media platform that has redefined communication among sport constituents (i.e., fans, athletes, teams, and organizations) is Twitter (Fisher, 2009). In fact, according to Clavio and Kian (2010), Twitter has become a permanent fixture in the sport communication landscape since its introduction in 2006. Awareness of Twitter grew from 5% in 2008 to 87% in 2010 (Webster, 2010). Twitter use also multiplied by over 1,400% between 2008 and 2009 (McGiboney, 2009). Recent reports claim that it should have roughly 250 million active users by the end of 2012 (Bennett, 2012). Like many new forms of media, sport has had a major impact on the growth of Twitter and its use. Of the top-10 most tweets per second recorded on Twitter, six of them are sport related, with the Champions League Final between Chelsea and Bayern Munich ($n = 32,097$) holding the number one spot (Larson, 2011).

As a microblogging platform (Java, Song, Finin, & Tseng, 2007) whose primary purpose is the quick dissemination of news, innovative ideas, and personal opinion (Clavio & Kian, 2010), Twitter has various user conventions that allow individuals to both broadcast their lives and communicate interactively. One such convention is the hashtag. According to Zarrella (2010), a hashtag "indicates that a certain tweet is about the same topic as every other tweet using the same tag" (p. 47). Hashtag use has continued to increase in recent years, with television shows, movies, and sport properties employing hashtags as a component of promoting their brand (Schneider, 2011). Serving as digital archives for single topics (Ovadia, 2009), hashtags have become somewhat of a phenomenon in the sport industry over the last few years as various fans, teams, and leagues have created and used these tools to encourage dialogue regarding games, races, and hallmark events (Favorito, 2011; Gallo, 2012; Hernandez, 2012; Louise, 2012; Schoenberg, 2012). A recent example includes #SB46, which was used by fans for navigation and parking purposes in the days leading up to Super Bowl XLVI ("#SB46 fans," 2012). Other popular hashtags that have been used in the last few months include #HRDerby during Major League Baseball's Home Run Derby contest and hashtags for intercollegiate spring football games (e.g., #GoBlue for the University of Michigan spring game). These hashtags are often mentioned during the broadcast of events on the various networks.

Further use of the hashtag in sport has included NASCAR (#NASCAR) and the 2012 European Championships (#Euro2012). These sport properties have actively engaged in partnerships with Twitter to create specific hashtag pages (Lawler, 2012; Panzarino, 2012). Twitter clearly sees the value in hashtag use and partnering with sport organizations, as they have created a new hashtag landing-page experience called Twitter Events, and the #NASCAR partnership also includes the first-ever television advertising campaign that Twitter has run (D'Orazio, 2012). Twitter has even become part of the sport video-game experience. In the career mode in the EA SPORTS Madden 13 video game, hypothetical tweets from actual sport media personalities are displayed onscreen as game players progress throughout a season in the game.

While research has begun to explore how athletes (Hambrick & Mahoney, 2011; Hambrick, Simmons, Greenhalgh, & Greenwell, 2010; Kassing & Sanderson, 2010; Pegoraro, 2010), fans (Clavio & Kian, 2010), and sport organizations (Sanderson, 2011) use Twitter, little empirical attention has been paid to hashtag

use, despite the recent proliferation of use by various sport entities. In addition, there is an overall lack of understanding regarding sport-related hashtags and their impact on communication patterns during sporting events. As mentioned, sport organizations are using hashtags at an increasing rate to disseminate information, promote their products and brand, provide better customer service, and interact with their fan base. As this trend continues, in the future it is important that sport organizations understand who is using the hashtag to determine the benefit of hashtag use and how they can use hashtags. Therefore, the purpose of the current study was to examine hashtag use during a major sporting event. Specifically, this study analyzed how #WorldSeries was used throughout the 2011 World Series. The study adopts the uses-and-gratifications perspective, which is traditionally thought of as a valuable lens through which to examine Internet communication (Morris & Ogan, 1996; Newhagen & Rafaeli, 1996).

Literature Review

The Internet has evolved into a primary source to gather and share new information (Eighmey & McCord, 1998). Research has suggested that sport organizations and sporting-event organizers need to determine consumer needs and motivations and use this information to shape their Internet marketing communication (Beech, Chadwick, & Tapp, 2000; Filo & Funk, 2005). One challenge for sporting-event planners is to organize relevant event information. Analytical tools such as user tracking, Web site traffic, and search-engine terms are employed to measure overall effectiveness of driving traffic to a Web site (Filo, Funk, & Hornby, 2009). With event consumers turning to the Internet, specifically to social media, it is important for the content to be comprehensive in nature, as the rise of interactivity in the form of social media gives consumers a platform to gain access to and be more involved in relevant content (Clavio & Kian, 2010).

Social media have changed the way athletes and teams interact with their fans and media (Hambrick et al., 2010). Teams are now able to engage in two-way communication with their consumers through either Facebook or Twitter, as opposed to previously used one-way forms of communication offered on team Web sites (Pegoraro, 2010). From a marketing perspective, hashtags can be used by teams and events for cross-promotional purposes through the previously mentioned hashtag page. This was most recently notable during the London 2012 Olympic Games by NBC and Twitter. Twitter content containing #Olympics was featured on the hashtag page promoted by NBC, thus increasing visibility of marketers with content related to the Olympics ("Twitter, NBC Partner," 2012). This use of hashtags could have implications regarding the product branding. Branding is an important platform to develop a relationship between consumers and a sport organization (Ross, 2006). While hashtags have yet to be studied in regard to being a brand, the Internet has been examined as a way to promote products. Understanding the who and how of hashtag use is the first step in developing a brand and promotional strategy.

Uses and gratifications is a scholarly approach to the study of communication that is primarily focused on assessing how individuals use the media to fulfill certain needs (Fisher, 1978). Originally proposed by Katz, Blumler, and Gurevitch (1974), this perspective approaches media study from an audience-centric perspective, as opposed to the more content- or sender-centric methods provided by other

theories such as agenda-setting theory and framing theory. Within this perspective, media behavior is conceptualized as both purposive and goal-directed in nature (Rubin, 2009).

According to Ruggiero (2000), it is wise to employ uses and gratifications when a medium is still new and misunderstood. That being said, this perspective has been consistently applied to various Internet platforms and social-media technologies such as message boards (Clavio, 2008), blogs (Armstrong & McAdams, 2011; Frederick, Clavio, Burch, & Zimmerman, 2012; Hollenbaugh, 2011; Kaye, 2010; Kim, 2011; Sweetser & Kaid, 2008; Sweetser, Porter, Chung, & Kim, 2008), Facebook (Hanson, Haridakis, Cunningham, Sharma, & Ponder, 2010; Park, Kee, & Valenzuela, 2009; Raacke & Bonds-Raacke, 2008; Urista, Dong, & Day, 2009), and Twitter (Chen, 2011; Clavio & Kian, 2010; Hambrick et al., 2010).

While uses-and-gratifications research has been extended into the realm of Internet technologies, very few studies have applied this perspective to a sport-specific context. Studies examining message boards and blogs through uses and gratifications found motivations and gratifications for use that included entertainment, diversion, learning what others think, reading content, learning opinions of others, surveillance, and interactivity (Clavio, 2008; Frederick et al., 2012). Clavio (2008) examined the demographics and usage patterns of college-sport message-board users. The motivation statements with the highest means were concerned with the quickness of information access, the depth of information compared with traditional-media sources, the ability to read analysis from fellow fans, the ability to talk about recruiting efforts, and finding out the latest gossip about the user's team. Information gathering was found to be of heightened importance among message-board users. In a somewhat similar study, Frederick et al. (2012) examined user motivations associated with a mixed-martial-arts blog. In their case study, the most highly rated motivation statements were related to the speed of information access, the depth of information and coverage, and the availability of information not typically found through traditional-media outlets. Once again, information gathering was of particular importance to users of a sport-related Internet platform.

Similar to message boards and blogs, communication researchers have just begun to explore how the uses-and-gratifications perspective can be tied to social-media usage patterns. Investigation into the motivations and gratifications of Facebook use revealed gratifications including convenient information seeking, entertaining arousal, gainful companionship, self-expression, socialization, self-status, staying in touch with friends, making new acquaintances, convenient communication curiosity about others, and relationship formation (Hanson et al., 2010; Park et al., 2009; Raacke & Bonds-Raacke, 2008; Urista et al., 2009). In a content analysis, Hambrick et al. (2010) examined Twitter usage trends from the perspective of professional athletes. In their analysis, they adopted coding categories that were first introduced in the Web site study conducted by Seo and Green (2008) and the message-board study conducted by Clavio (2008). These categories included interactivity, diversion, information sharing, content, fanship, and promotional. Hambrick et al. (2010) found that athletes use Twitter primarily for interaction and expressions of diversion. Information sharing and content-related tweets were moderately used, while promotional and fanship tweets were used infrequently.

While Hambrick et al. (2010) analyzed uses and gratifications on Twitter from the athlete perspective, Clavio and Kian (2010) examined this theoretical approach from the fan perspective. Specifically, they examined the motivations for following a retired female athlete. The perception of the athlete as being an expert in her given sport was the highest rated motivation for following her Twitter feed. This was followed by an affinity for the athlete's writing style. Male followers were found to be more drawn to the athlete's physical appearance, while female followers were more drawn by a general sense of affinity for her. Clavio and Kian also conducted an exploratory factor analysis, which revealed three factors including organic fandom, functional fandom, and interactivity. While social media has been described as providing a platform for self- presentation (Kassing & Sanderson, 2010), the studies that examined the social-media platforms mentioned previously would indicate that primary gratifications include information seeking and interactivity.

Study Rationale and Research Questions

The real-time conversation being created on Twitter between hashtag users of #WorldSeries is a crucial avenue that has been underexplored. While some empirical sport communication research has been conducted on Twitter use, little attention has been paid to hashtags, which are a popular user convention worthy of exploration. In particular, it is important to understand who is using the hashtags of major sporting events and how the hashtags are being used, due to their growing implementation by both leagues and sport organizations (professional and collegiate) to promote events. Leagues and organizations are generating hashtags to promote their on-field product, in addition to creating dialogue with fans. Understanding this information will add to the growing body of literature on social-media use in sport organizations. In addition, this will be one of the first studies to provide more information to these organizations about whom they can target through social-media hashtag use and the best ways to communicate with them. As such, this study is one of the first known attempts to examine hashtag use during a major sporting event.

To examine the use of hashtags, Major League Baseball's World Series hashtag, #WorldSeries, was selected. #WorldSeries was chosen because it was one of the first hallmark events to have a hashtag campaign. For example, #WorldSeries was present on the outfield walls of both stadiums throughout the World Series. While other hallmark events such as the Super Bowl are popular, a seven-game sample was deemed a more appropriate first step in hashtag research. The World Series was played over 10 days, providing a large population size, which helps reduce potential biases in the data set related to tweets regarding key moments in one game. Due to a general lack of knowledge regarding hashtag use in the sport industry, research questions were deemed appropriate. Specifically, the following exploratory research questions were developed:

RQ1: Who is using #WorldSeries?

RQ2: How is #WorldSeries being used?

RQ3: When interactivity takes place, who is being interactive?

Methodology

A content analysis was employed to explore usage patterns involving #WorldSeries. According to Krippendorf (2004), content analysis allows researchers to make replicable and valid inferences from texts (or other meaningful matter). This methodology also allows for systematic and objective analysis of preexisting content (Wimmer & Dominick, 2006). In addition, content analysis has been previously employed in sports research to examine various forms of content (Andrew, Pedersen, & McEvoy, 2011).

This was an exploratory study designed to investigate who was using #WorldSeries and how they were using it. The unit of analysis was each individual tweet. With online news publications, as well as Facebook and Twitter feeds, data can be continually updated, removed, or inserted, which presents a methodological issue related to coding (Riffe, Lacy, & Fico, 2008). A single, static data set is necessary to establish intercoder reliability and analyze content. To account for this methodological problem, the researchers incorporated the use of a social-media data-collection tool known as DiscoverText (<http://discovertext.com>), which allows individuals to search and import data from various sources and formats. This includes online formats such as social-media platforms like Facebook and Twitter. DiscoverText allows its users to enter search parameters, including a specific hashtag, and the number of tweets they want to collect. Once search parameters have been established, DiscoverText identifies tweets containing the desired hashtag and creates an online repository of all tweets. Incorporating the DiscoverText software into the methodology ensured that all coders were analyzing a single, static data set.

Coding

The total number of tweets gathered by DiscoverText over the duration of the World Series was 17,404. Using systematic random sampling, every 12th tweet was selected from the overall sample until 1,450 tweets had been selected for analysis. This sampling technique ensured that tweets were included from all seven World Series games. This sample size is consistent with previous research examining sport-specific tweets (i.e., Hambrick et al., 2010; Pegoraro, 2010). To provide a set of guidelines for coding tweet content, a coding protocol was developed for this study. In addition, to assist in coding, variables were modified from previous research (i.e., Clavio, 2008; Hambrick et al., 2010) and a code sheet was developed specifically related to the purpose of this study and its research questions. Two variables were used to code all the tweet content analyzed in this study. The two variables identified were who was using the tweet and how it was being used.

In terms of who was using #WorldSeries, coding categories were adopted and modified based on a study conducted by Frederick (2012). These categories included MLB/league official, player/MLB, player/other, media, celebrity, company/product, and layperson. These affiliations were determined by analyzing a user's Twitter biography. MLB/league official was defined as any Twitter account that had an official affiliation with MLB. Player/MLB was defined as any current MLB player, and player/other was defined as a current athlete in another professional or college sport. Media was defined as a television newscaster or newspaper columnist. Celebrity included individuals such as actors, musicians, and famous authors. Company/product was defined as someone who identified themselves as a

high-ranking official in a company (i.e., CEO). Finally, layperson included anyone who did not fit in the other categorizations.

To analyze how #WorldSeries was being used, coding categories were adopted and modified based on previous uses-and-gratifications research (i.e., Clavio, 2008; Hambrick et al., 2010; Seo & Green, 2008). These categories included interactivity, diversion, information sharing, content, fanship, promotional, and combinations thereof and were operationally defined as follows:

- *Interactivity* was defined as direct communication between two parties. Clavio (2008) defined interactivity as “giving input and opinions, participating in discussions, communicating with fellow fans, and sharing information” (p. viii). This definition was modified to fit the medium of Twitter, in which direct communication was identified where the “@” reply symbol was used (i.e., “@Sports_Guy_101 no I want the team with the better record to get home field in the #WorldSeries”).
- *Diversion* was defined by Clavio (2008) in his examination of sport message boards as “non-sports related elements of message boards including politics, religion, staying in touch with old classmates, and non-athletic news about the user’s alma matter” (p. viii). In this study, diversion was modified to include the discussion of non-sport-related information including the topics provided by Clavio (i.e., “Just made an awesome nacho dip! #WorldSeries”).
- *Information sharing* was defined by Hambrick et al. (2010) and included providing “insight into an athlete’s teammates, team, or sport, such as details about practices and training sessions or recent competitive events and results” (p. 460). Specifically related to the purpose of this study, information sharing was modified to include insights and details related to specific games (i.e., “David Freese is 3 for 4 against left-handers in this #WorldSeries”).
- *Content* was defined using Hambrick et al.’s (2010) definition of tweets that included “links to pictures, videos, and other Web sites such as an athlete’s blog or a team’s office Web site.” (p. 460). In this study, the content category was modified to include any tweet that included a link to a picture or video (i.e., In case you missed it, THIS HAPPENED last night . . . <http://t.co/R3XMoY9P> #WorldSeries).
- *Fanship* built on the collective definitions of Clavio’s (2008) argumentation category that was defined as “engaging in ‘smack talk’ and arguments with other users and observing the comments of fans of rival teams” (p. ix), Hambrick et al.’s (2010) fanship definition of occurring when “athletes discuss sports other than their own teams and teammates” (p. 460), and Seo and Green’s (2008) fanship motive defined as “reason that one considers oneself a huge fan of particular sports and teams” (p. 86). Using these definitions, fanship was defined as expressions of emotion and discussion regarding teams, athletes, and games (i.e., “I love the Cardinals! #WorldSeries”).
- *Promotional* was defined as “publicity regarding sponsorships, upcoming games, and related promotions such as discounted tickets or giveaways” (Hambrick et al., 2010, p. 460). Per this definition, tweets that included sponsorship-related information (i.e., “Check out the Rawlings defensive player of the game. #WorldSeries”) were coded as promotional.
- *Combo* tweet was a combination of two or more of these categories.

Three coders were selected to code all tweet content for this study. Each coder was selected due to their familiarity with Twitter, their understanding of the theory used in this study, and their previous experience with content analyses. All three coders participated in a collective training session where the coding protocol and code sheet were outlined and discussed. Once the training session was complete, the coders coded athlete tweets not included in the study's data set. This was done to ensure that most issues regarding the variables and coding protocol were discussed and resolved before they attempted to achieve intercoder reliability on the data set.

After the cumulative data set had been coded, the interactive tweets were further analyzed to answer RQ3. As previously defined, any tweet that contained the @ symbol was categorized as an interactive tweet; retweets were not categorized as interactive tweets. The listed coding categories were employed to code the interactive tweets.

Intercoder reliability was established before coding the full data set to ensure that all coders were interpreting the variables and coding the data set similarly and to ensure that agreement between coders did not occur as a result of chance. A 17% subsample of the data set that included 250 tweets was randomly selected and provided to each coder to establish intercoder reliability. According to Riffe et al. (2008), an overlap of data of 10–20% is acceptable for the purposes of testing intercoder reliability. As stated by Wimmer and Dominick (2006) a kappa coefficient of .75 or higher indicates a highly acceptable level of intercoder reliability. That being said, the variables created for the specific purpose of this study had acceptable kappa values. Specifically, all Fleiss's kappa coefficients were above .90 (i.e., .91 and .95). After intercoder reliability had been established, each coder was provided with a copy of the full data set and the remaining 1,200 tweets in the set were randomly distributed to the coders for analysis.

The latest version of PASW/SPSS was used to analyze the data. Descriptive statistics were calculated on each variable. The variables included who sent the tweet; category of tweet; when a tweet was interactive, whom the user was being interactive with; and, when the user was interactive, the category of the tweet.

Results

RQ1 was concerned with who was using #WorldSeries. Overall, most message originators were laypersons ($n = 1,174$, or 87%). The lowest usage percentage belonged to the player/MLB category ($n = 5$, or 0.4%). In fact, players from other professional leagues used #WorldSeries more frequently ($n = 15$, or 1.1%) than MLB players did. The complete list of message originators is displayed in Table 1.

RQ2 focused on how #WorldSeries was being used. The complete list is displayed below in Table 2. Most user tweets were centered on fanship ($n = 779$, or 53.7%) or interactivity ($n = 328$, or 22.7%). An example of a fanship tweet was "I love the #Cardinals #WorldSeries." An example of an interactivity tweet was "@mlb The Rangers will win in 6 games #WorldSeries? RT @mlb Who will win the #WorldSeries?" Promotional tweets were used most infrequently ($n = 33$, or 2.3%).

Finally, RQ3 asked who was being interactive with #WorldSeries. To answer this research question, two frequency distributions were conducted. The first focused on the recipients of interactive tweets, while the second concentrated on the sub-categories of the interactive tweets. These results are displayed in Tables 3 and 4.

Table 1 Who Is Using #WorldSeries?

Message originator	Frequency	Percent
MLB/League official	17	1.3
Player/MLB	5	0.4
Player/Other	15	1.1
Media	76	5.6
Celebrity	19	1.4
Company/Product	44	3.3
Layperson	1,174	87.0

Table 2 How Is #WorldSeries Being Used?

Category of tweet	Frequency	Percent
Interactivity	328	22.6
Diversion	52	3.6
Information sharing	49	3.4
Content	56	3.9
Fanship	779	53.7
Promotional	33	2.3
Combination	153	10.6

Table 3 Recipient of Interactive Tweets

Message receiver	Frequency	Percent
MLB/League official	149	47
Player/MLB	15	4.7
Player/Other	5	1.6
Media	23	7.3
Celebrity	19	6.0
Company/Product	11	3.5
Layperson	95	30.0

Table 4 Subcategories of Interactive Tweets

Subcategory	Frequency	Percent
Diversion	14	4.9
Information sharing	6	2.1
Content	30	10.4
Fanship	230	79.9
Promotional	4	1.4
Combination	4	1.4

Recipients of interactive tweets comprised mainly MLB/league officials ($n = 149$, or 47%) and other laypersons ($n = 95$, or 30%).

In terms of the subcategory of interactivity, most tweets were related to fanship ($n = 230$, or 79.9%). An example of a fanship tweet was “@mlb The Cardinals are going to win this #WorldSeries!!!” Once again, promotional tweets were used infrequently ($n = 4$, or 4.9%). An example of a promotional tweet was “@mlb I think David Freese should win the Rawlings Defensive Player of the Game Award.”

Discussion

The use of the uses-and-gratifications perspective was based on employment of the perspective to analyze similar mediums such as message boards (Clavio, 2008), blogs (e.g., Armstrong & McAdams, 2011; Frederick, et al., 2012; Hollenbaugh, 2011), and social-media platforms such as Facebook (e.g., Hanson et al., 2010; Park, et al., 2009) and Twitter (e.g., Chen, 2011; Clavio & Kian, 2010; Hambrick et al., 2010). While many of those studies employed surveys to derive gratifications sought from subject populations, the current study evaluated the outcomes derived from the use of #WorldSeries to evaluate the gratifications sought. Employing the conceptualization of the perspective of Katz et al. (1974) and Fisher (1978), the results of this study indicated that individuals used #WorldSeries to satisfy the gratifications of fanship and interactivity. Furthermore, as outlined by Rubin (2009), media use under this perspective is purposive and goal-directed, which indicated that users were using #WorldSeries for the purpose of broadcasting their affiliations with their respective teams and engaging in dialogue (i.e., interactivity) with MLB/league officials, other laypersons, and media members. Most of the interactive dialogue was fanship oriented.

The goal-directed use of Twitter and #WorldSeries to satisfy fanship and interactivity is similar to that found in previous research examining uses and gratifications on this platform (Clavio & Kian, 2010; Hambrick et al., 2010). In addition, the low use of promotional tweets was consistent with the results of Hambrick et al. This study expands on previous literature in its examination of various audience gratifications through the use of hashtags. Hashtags provide a central digital location for dialogue between multiple constituencies.

Theoretical Implications

In further examination of the results of this study, several aspects for discussion emerged. RQ1 asked who is using #WorldSeries, and the results indicated that it was predominantly laypersons. In addition, the results highlighted the use of #WorldSeries by seven user groups in the sample, including the previously discussed layperson group (87%), media members (5.6%), companies or products (3.3%), celebrities (1.4%), MLB/league officials (1.3%), player/other (1.1%), and player/MLB (0.4%). Previous research investigating Twitter in the sport industry has examined groups of individuals including athletes and fans and their corresponding use of the medium (Hambrick et al., 2010; Pegoraro, 2010). Those studies were conducted using a content analysis to examine the specific Twitter feeds of athletes such as Serena Williams (e.g., @serenajwilliams). Although this study also employed a content-analysis methodology to analyze tweet content containing #WorldSeries, the examination of a hashtag, not a specific Twitter feed, enabled the collection of descriptive information to code each of the Twitter users.

According to Ovadia (2009), hashtags are linked to specific topics and act as archives for information. Unlike Twitter feeds, they are not linked to one group of individuals (e.g., athletes). Clavio and Kian (2010) employed a survey methodology to examine the demographics and uses and gratifications of followers of a retired female athlete. While their study focused on the Twitter feed of one athlete, a survey distributed to followers of the athlete allowed the authors to obtain demographic information including age, gender, race, and Twitter use that may not have been possible through a content analysis of the same athlete's Twitter feed. The results found in the current study relating to the first research question are not as in-depth as could be obtained by using a survey methodology, as this study only identified the #WorldSeries use of the seven user groups consisting of laypersons, media members, companies or products, celebrities, MLB/league officials, player/other, and player/MLB. However, the results do serve to highlight how the examination of a hashtag can expand on previous Twitter-related research that employed content analysis methodologies (Hambrick et al., 2010; Pegoraro, 2010) by providing additional descriptive information of Twitter users. The continued investigation of hashtag use in future research may help connect Twitter-related research that employs differing methodologies such as content analysis and survey design.

RQ2 asked how #WorldSeries is being used. The results indicated that it was being used to engage in fanship (53.7%) and interactivity (22.7%). The findings regarding the use of fanship and interactivity are consistent not only with previous research investigating the uses and gratifications of Twitter in the sport industry (Clavio & Kian, 2010; Hambrick et al., 2010) but also with Twitter research outside the sport industry (Chen, 2011). Research concerning other social-media platforms such as Facebook (Park et al., 2009; Raacke & Bonds-Raacke, 2008; Urista et al., 2009) has also found interactivity to be a primary usage gratification. Although these findings are consistent with previous research, further investigation into the results of RQ2, including surveying individuals producing fanship tweets, may lead to future implications in regard to uses-and-gratifications-based research on social-media platforms.

The results of this study indicated that individuals using #WorldSeries primarily did so to express fanship. Given the relative lack of interactive tweets (i.e., those specifically directed at other users), it is possible that #WorldSeries users may not have been as concerned with interactivity as the users examined in prior social-media studies. Although prior literature investigated the use of message boards, blogs, Facebook, and Twitter, those studies did so primarily from a traditional survey-methodology perspective, using motivation statements that users replied to on a Likert-type scale. In turn, these items would coalesce within a factor analysis, leading to constructed dimensions of gratification based on the self-reporting of users. As such, the users' content-consumption patterns may have been the primary items captured.

In the current study, however, the output of the users of #WorldSeries was studied, and the results indicated disconnect between the primary gratifications sought by users in prior literature (i.e., information gathering and interactivity) and the types of messages actually being employed by users in this study. Rather than appealing to other users for informational or interactive feedback, users in this study were tweeting primarily as an act of personal expression. This is a key finding in social-media research and should be investigated further. While the functions of a hashtag in the overall social-media spectrum are not completely understood, it would behoove researchers to undertake content analysis of social-media messages in concert with surveys of those same users, to see if their stated goals of social-media use are dovetailing with their actual use.

RQ3 examined the question of interactivity within #WorldSeries, with particular attention paid to who was being interactive. The results indicated that laypersons were being interactive with MLB/league officials and other laypersons. In addition, the results relating to the subcategory of interactive tweets revealed that most interactive tweets were expressions of fanship. According to Hambrick et al. (2010), identification has been found to be positively associated with the need for affiliation with a group. It may be possible that the use of #WorldSeries in conjunction with the expression of fanship found in this study is related to high levels of fan identification and the desire to belong to a group consisting of fellow supporters of a user's team.

When engaging in interactivity, laypersons were being interactive with MLB/league officials and other laypersons to express fanship (79.9%). One way to increase fan identification is through increased accessibility, and sport entities such as teams and leagues are using Twitter to provide accessibility (Pegoraro, 2010). The result of laypersons being interactive with MLB/league officials and other laypersons to express fanship could be indicative of the increased opportunities fans now have to interact with leagues, teams, and other individuals to satisfy group affiliation and maintain their level of identification, as Twitter provides an outlet for these social interactions (Hambrick et al. 2010). The results from RQ3 could also help expand the uses and gratifications perspective into more marketing-based areas. According to Ruggiero (2000), the uses and gratifications perspective can be applied to highlight the benefits of the Internet, with one benefit being the ability to engage in interactivity. If interactive opportunities are related to accessibility and fan identification, then investigation of the interactive behavior by sports fans on Twitter, either with specific athletes or through the use of a hashtag, may be beneficial.

Practical Implications

The current study aimed to determine the affiliation and gratifications of Twitter users who used a hashtag during a hallmark sporting event in the United States. This study examined #WorldSeries, which was specifically created by Major League Baseball. Examination of this hashtag allowed for insights into gratifications sought by users, thereby illuminating methods in which major sport properties can better engage their fan base during marquee sporting events.

Recently, Major League Baseball continued the use of hashtags to promote various initiatives during their All-Star events. Hashtags employed included All-Star game final player votes, All-Star game Most Valuable Player (MVP), and the actual game itself (i.e., #ASG). Before the All-Star game, a fan “final vote” was conducted by MLB on Twitter and other online media. Fans were asked to use a player-specific hashtag (e.g., #FreesePlease, for David Freese) to cast their vote (Gallo, 2012). MLB gave fans the opportunity to vote for the All-Star game MVP on Twitter using a player-specific hashtag (e.g., #VoteMelky for Melky Cabrera or #VotePablo for Pablo Sandoval). Finally, after the players left the game, they were permitted to engage in an online conversation using the Social Media Suite to tweet and possibly interact with fans. According to analytic data, more than 245,000 uses of #ASG occurred (McGrath, 2012).

Due to the continued use of hashtags by sport entities, from a social-media management perspective, sport leagues and organizations could benefit from a greater understanding of hashtag use. Improved understanding could contribute to increased awareness, promotional potential, and image management of major sporting events through the facilitation of the fan/organizational conversation. In addition to implications for the sporting event, further investigation into hashtag use could also examine team- or event-specific generated hashtags and the practical implications associated with their use. For example, Twitter and NASCAR recently ran an advertisement during a summer race to promote #NASCAR as an actual page. The page included conversations about drivers, their crews, commentary about the race, and pictures or behind-the-scenes news during the race. The European Championships followed suit by creating a similar partnership with Twitter (Panzarino, 2012). Twitter expects more leagues to use this tool to brand their products. The new hashtag page will allow organizations to create a sport league- or team-specific hub for fan communities (Lawler, 2012). In addition, similar to the use of hashtag pages by marketing firms during the 2012 London Olympics, this feature facilitates the cross-promotional use of hashtags to increase visibility of content related to particular sporting events. These sport partnerships not only are a new and dynamic way for sport organizations to connect and communicate directly with their fan base, but they also provide potential promotional opportunities to new, and possibly highly identified, target markets. As Panzarino states, “Twitter has become the de-facto second channel for most people watching sports” (p. 1). These partnerships with Twitter are a crucial way for organizations to promote and develop their brands.

The largest number of tweets fell into the category of fanship (e.g., “Rangers can win #World Series tonight!!!”). The results suggest that fans used the hashtag not only to express interest in the World Series but also to display identification with a specific team. Many of the analyzed fanship tweets included references to a favorite team such as the St. Louis Cardinals or the Texas Rangers. In addition,

when laypersons were being interactive, they simultaneously expressed fanship in tweets. The findings of the current study draw a parallel to the research conducted by Hambrick et al. (2010) in which they found interactivity between users. Based on the level of interactivity observed in the current study between laypersons and MLB/league officials, there is a potential for continued interaction with individuals expressing fanship through the use of hashtags.

It should be noted that the low number of tweets sent from players and MLB officials could be a direct reflection of the low number of information-sharing and promotional tweets. MLB could have been sending out a large amount of information-sharing and promotional tweets, but with such a large number of laypersons tweeting about fanship, fanship took over the #WorldSeries hashtag.

Online social-media platforms such as Twitter and Facebook allow players and sports organizations to bypass mainstream-media outlets and attract fans with unique content (Hambrick et al., 2010). Hashtags allow various audiences to come together to discuss a particular event (Dehnart, 2011; Lawler, 2012; Silberman, 2011). Television stations have employed hashtags for promotional purposes beginning in 2011. Networks gained awareness of television shows trending on Twitter and realized a need for a single, identifiable hashtag for fans of their shows. Fox Broadcasting Company has employed this tactic with shows such as *Glee* (#Glee) and *American Idol* (#Idol; Schneider, 2011). Television viewers often see Twitter handle names for news anchors and sport commentators, as well as the hashtags for specific shows (Clay, 2011). In addition, hashtags promote and create an “online living room” (Silberman, 2011). For example, Jeff Probst, the host of *Survivor*, does a weekly “Interactive Living Room” during each episode using the hashtag, #Survivor. He answers questions, discusses the episode, and facilitates fan interaction.

Sport organizations and events can use hashtags in a similar way to not only give fans an outlet to foster interaction through a liaison but also provide a platform to promote their product or organization. For example, the New York Mets held a “Social Media Night” during the 2012 MLB season. The Mets ticket office sold numerous packages including promotional items such as a chance to watch batting practice, a chance to participate in a question and answer with a Mets player, and a T-shirt that said “#ConnectMets” on the front. During the game, fans were encouraged to use #ConnectMets for a chance to win signed gear and other prizes (Mets Social Media Night, 2012). #ConnectMets not only gave fans a chance to engage in interactivity as part of the ongoing conversation with other fans but also enabled a sport organizations to target a specific group of fans.

Limitations

The data-collecting site DiscoverText, while efficient in collecting tweets, missed “push-button” retweets. This includes tweets that are retweeted from a mobile phone that were not collected by the data program. While the overall population for the data set included 17,574 tweets, the lack of capability of DiscoverText to capture “push-button” retweets could have limited the potential size of the population. In addition, DiscoverText can pull, or “fetch,” tweets on a scheduled interval (e.g., every 15 minutes) for a set number of fetches. Previous sport-related Twitter research has employed various sampling strategies to compose a data set. Prior strategies used include a timeframe of analysis (Pegoraro, 2010) and a specific number of tweets per athlete included in a sample (Hambrick et al., 2010). In the current study, tweets

were collected from 5 p.m. EST the day of the World Series game until 1 a.m. EST the day after the game. Due to the strategy used to capture data, tweets including #WorldSeries not posted during this period were not captured for analysis, which could limit the potential population. Although this study employed a systematic sampling strategy to reduce the population of tweets to the sample selected for analysis, the scope and purpose of the study were delimited to the examination of one hashtag produced for a single sporting event. As such, the results of this study are not generalizable to future sporting events employing hashtags specific to those events.

Future Research

This study lays the groundwork for future studies of not only hallmark events but regular-season games, as well. This is something that can be examined as social media continue to develop. As such, future studies could examine hashtag use during major sporting events such as the NBA Finals, NHL Finals, the Super Bowl, and the Olympics. In addition, hashtag use during college sporting events such as football and basketball games could be examined. Future studies could also examine differences between leagues, sports (e.g., MLB vs. NHL, individual vs. team sports, etc.), and major sporting events.

The results of this study may increase the awareness of the need for sport organizations to be more actively involved in social media. Sport organizations could be more active on a game-by-game basis to provide their fans with an “interactive living room.” One possible avenue for future research could include conducting an experimental study where hashtag use is facilitated by a third party operating on behalf of the sport organization. This could then be compared with hashtag data where no facilitation is performed to analyze differences in hashtag use.

Continued research into hashtag use during major sporting events could also help elucidate gratifications derived by Twitter users. This could prove beneficial for further theoretical understanding of the uses and gratifications perspective, as increased research specific to Twitter could provide a comparison point for uses-and-gratifications studies. This could not only help determine if gratifications are consistent between specific uses of Twitter, such as hashtag use, but also provide clarity on the employment of uses and gratifications on various Internet platforms. In addition, the categories used in the study could be broken down into subcategories. For example, fanship could be broken into subcategories such positive and negative or cheer, vent, and neutral.

Sport organizations could create a branding strategy directly related to hashtag use. Future investigation could examine if hashtag use has any impact on a sport organization’s brand equity (e.g., image, awareness, loyalty, perceived quality) and if sport organizations are using their team- or event-specific hashtags as part of their overall branding strategy. Investigation of team-specific hashtag pages could facilitate investigation in this area.

Conclusions

Social-media use is a developing research area due to the growth of various online platforms such as Twitter and Facebook. The current study sought to understand the nature of hashtag use through the theoretical lens of uses and gratifications. As stated in previous research (e.g., Clavio & Kian, 2010; Hambrick et al., 2010), Twitter has

given fans unprecedented access to athletes and teams, which could lead to an increase in fan identification. The results of this study suggest there are potential benefits for sport organizations in using hashtags to interact with fans. Hashtags have given fans access that crosses geographic boundaries to other fans they may have never come in contact with otherwise. Organizations can improve these interactions by developing unique social-media strategies to enhance communication with consumers. These strategies can include having an organization member facilitate the fan conversation during games, arranging promotions that involve using the team-identified hashtag, and using hashtags to increase organization notoriety. Through the examination of #WorldSeries, a solid foundation for understanding hashtag use has been provided. It is suggested that future research be conducted in this area to continue to expand the body of knowledge in this area in regard to further understanding of potential outcomes associated with hashtag use by sport organizations.

References

- Andrew, D.P.S., Pedersen, P.M., & McEvoy, C. (2011). *Research methods and design in sport management*. Champaign, IL: Human Kinetics.
- Armstrong, C.L., & McAdams, M.J. (2011). Blogging the time away? Young adults' motivations for blog use. *Atlantic Journal of Communication, 19*(2), 113–128. doi:10.1080/15456870.2011.561174
- Beech, J., Chadwick, S., & Tapp, A. (2000). Surfing in the Premier League: Key issues for football club marketers using the Internet. *Managing Leisure, 5*, 51–64.
- Bennett, S. (2012, January 13). Twitter on track for 500 million total users by March, 250 million active users by the end of 2012. *Media Bistro*. Retrieved from http://www.mediabistro.com/alltwitter/twitter-active-total-users_b17655
- Bradley, A. (2010). A new definition of social media [Web log post]. *Gartner*. Retrieved from http://blogs.gartner.com/anthony_bradley
- Chen, G.M. (2011). Tweet this: A uses and gratifications perspective on how active Twitter use gratifies a need to connect with others. *Computers in Human Behavior, 27*, 755–762. doi:10.1016/j.chb.2010.10.023
- Clavio, G. (2008). Uses and gratifications of Internet collegiate sport message board users. *Dissertation Abstracts International, 69*(8). Retrieved from ProQuest Digital Dissertations database (Publication No. AAT 3319833).
- Clavio, G., & Kian, T.M. (2010). Uses and gratifications of a retired female athlete's Twitter followers. *International Journal of Sport Communication, 3*, 485–500.
- Clay, K. (2011, October 27). TV becomes more social with Twitter [Web log post]. Retrieved from <http://www.lockergnome.com/social/2011/10/27/tv-becomes-more-social-with-twitter/>
- Coyle, P. (2010, January 4). Teams active in social media build strategic advantage. *Sports-Business Journal*. Retrieved from <http://www.sportsbusinessdaily.com/Journal/>
- Dehnart, A. (2011, November 17). Even Jeff Probst's pleading couldn't stop the inevitable on Survivor [Web log post]. Retrieved from http://www.realityblurred.com/realitytv/archives/survivor_redemption_island/2011_Nov_17_two_votes-dawn-whitney
- D'Orazio, D. (2012, June 10). Twitter introduces all new events pages with #NASCAR, first TV ads. Retrieved from <http://www.theverge.com/2012/6/10/3076989/twitter-nascar-hashtag-page-tv-ads>
- Eighmey, J., & McCord, L. (1998). Adding value in the information age: Uses and gratification of sites on the World Wide Web. *Journal of Business Research, 41*(3), 187–194. doi:10.1016/S0148-2963(97)00061-1

- Favorito, J. (2011, November 24). Of tweets, handles and hashtags [Web log post]. Retrieved from <http://joefavorito.com/2011/11/24/of-tweets-handles-and-hashtags/>
- Filo, K., & Funk, D.C. (2005). Congruence between attractive product features and virtual content delivery for Internet marketing communication. *Sport Marketing Quarterly*, 14, 112–122.
- Filo, K., Funk, D.C., & Hornby, G. (2009). The role of Web site content on motive and attitude change for sport events. *Journal of Sport Management*, 23, 21–40.
- Fisher, B.A. (1978). *Perspectives on human communication*. New York: Macmillan.
- Fisher, E. (2009, June 1). Flight or fancy. *Sports Business Journal*. Retrieved from www.sportsbusinessjournal.com
- Frederick, E.L. (2012). A world of one-way and two-way streets: Exploring the nuances of fan-athlete interaction on Twitter. *Dissertation Abstracts International*. Retrieved from ProQuest Digital Dissertations database.
- Frederick, E.L., Clavio, G.E., Burch, L.M., & Zimmerman, M.H. (2012). Characteristics of users of a mixed-martial-arts blog: A case study of demographics and usage trends. *International Journal of Sport Communication*, 5, 109–125.
- Gallo, D. (2012, July 5). Get your hashtag on for MLB All-Star vote. *ESPN PlayBook*. Retrieved from www.espn.com
- Hambrick, M.E., & Mahoney, T.Q. (2011). “It’s incredible—Trust me”: Exploring the role of celebrity athletes as marketers in online social networks. *International Journal of Sport Management and Marketing*, 10, 161–179. doi:10.1504/IJSM.2011.044794
- Hambrick, M.E., Simmons, J.M., Greenhalgh, G.P., & Greenwell, T.C. (2010). Understanding professional athletes’ use of Twitter: A content analysis of athlete tweets. *International Journal of Sport Communication*, 3, 454–471.
- Hanson, G., Haridakis, P.M., Cunningham, A.W., Sharma, R., & Ponder, J.D. (2010). The 2008 presidential campaign: Political cynicism in the age of Facebook, MySpace, and YouTube. *Mass Communication & Society*, 13, 584–607. doi:10.1080/15205436.2010.513470
- Hernandez, B.A. (2012, June 11). Twitter: New hashtag pages are for events, not brands [Web log post]. Retrieved from <http://mashable.com/2012/06/11/twitter-hashtag-event-pages-nascar/>
- Hollenbaugh, E.E. (2011). Motives for maintaining personal journal blogs. *CyberPsychology, Behavior, and Social Networking*, 14, 13–20. doi:10.1089/cyber.2009.0403
- Java, A., Song, X., Finin, T., & Tseng, B. (2007, August). *Why We Twitter: Understanding microblogging usage and communities*. Paper presented at the ninth WebKDD and first SNA-KDD Workshop on Web Mining and Social Network Analysis, San Jose, CA.
- Kassing, J.W., & Sanderson, J. (2010). Fan–athlete interaction and Twitter tweeting through the Giro: A case study. *International Journal of Sport Communication*, 3, 113–128.
- Katz, E., Blumler, J.G., & Gurevitch, M. (1974). Utilization of mass communication by the individual. In J.G. Blumler & E. Katz (Eds.), *Uses of mass communications* (Vol. III, pp. 19–32). Beverly Hills, CA: Sage.
- Kaye, B.K. (2010). Going to blogs: Toward the development of a uses and gratifications measurement scale for blogs. *Atlantic Journal of Communication*, 18, 194–210. doi:10.1080/15456870.2010.505904
- Kim, Y. (2011). Understanding j-blog adoption: Factors influencing Korean journalists’ blog adoption. *Asian Journal of Communication*, 21, 25–46. doi:10.1080/01292986.2010.524229
- Krippendorf, K. (2004). *Content analysis: An introduction to its methodology*. Thousand Oaks, CA: Sage.
- Larson, D. (2011, December 27). Twitter records: The highest tweets-per-second [Web log post]. Retrieved from <http://blog.tweetsmarter.com/twitter-stats/infochart-tweets-2011-tweets-per-second-records/>

- Lawler, R. (2012, June 10). Twitter uses its first TV ad as an opportunity to launch hashtag pages. *Tech Crunch*. Retrieved from <http://techcrunch.com/2012/06/10/twitter-hashtag-pages/>
- Louise, M. (2012, April 23). Unique 2012 Kentucky Derby hashtag trends. *Yahoo! Sports*. Retrieved from <http://sports.yahoo.com/>
- McGiboney, M. (2009, March 18). Twitter's tweet smell of success [Web log post]. *Nielsen Wire*. Retrieved from http://blog.nielsen.com/nielsenwire/online_mobile/twitters-tweet-smell-of-success/
- McGrath, K. (2012, July 12). MLB All-Star Game's social media success [Web log post]. Retrieved from <http://activ8social.com/2012/07/12/mlb-all-star-game-social-media-successinfographic/>
- Mets Social Media Night. (2012, June). #ConnectMets and get social at the Mets social media night. Retrieved from <http://newyork.mets.mlb.com/nym/>
- Morris, M., & Ogan, C. (1996). The Internet as mass medium. *The Journal of Communication*, 46, 39–50.
- Newhagen, J.E., & Rafaeli, S. (1996). Why communication researchers should study the Internet: A dialogue. *The Journal of Communication*, 46, 4–13.
- Ovadia, S. (2009). Exploring the potential of Twitter as a research tool. *Behavioral & Social Sciences Librarian*, 28, 202–205. doi:10.1080/01639260903280888
- Panzarino, M. (2012, June 22). Twitter launches special sports section for Euro 2012 Championships after NASCAR partnership. Retrieved from www.thenextweb.com
- Park, N., Kee, K., & Valenzuela, S. (2009). Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes. *Cyberpsychology & Behavior*, 12, 729–733. doi:10.1089/cpb.2009.0003
- Pegoraro, A. (2010). Look who's talking—Athletes on Twitter: A case study. *International Journal of Sport Communication*, 3, 501–514.
- Raacke, J., & Bonds-Raacke, J. (2008). MySpace and Facebook: Applying the uses and gratifications theory to exploring friend-networking sites. *Cyberpsychology & Behavior*, 11, 169–174. doi:10.1089/cpb.2007.0056
- Riffe, D., Lacy, S., & Fico, F.G. (2008). *Analyzing media messages: Using quantitative content analysis in research* (2nd ed.). New York: Routledge Taylor and Francis Group.
- Ross, S.D. (2006). A conceptual framework for understanding spectator-based brand equity. *Journal of Sport Management*, 20, 22–38.
- Rubin, A.M. (2009). Uses-and-gratifications perspectives on media effects. In J. Bryant & M.B. Oliver (Eds.), *Media effects: Advances in theory and research* (3rd ed., pp. 165–184). New York, NY: Lawrence Erlbaum.
- Ruggiero, T.E. (2000). Uses and gratifications theory in the 21st century. *Mass Communication & Society*, 3, 3–37. doi:10.1207/S15327825MCS0301_02
- Sanderson, J. (2011). To tweet or not to tweet: Exploring Division I athletic departments' social-media policies. *International Journal of Sport Communication*, 4, 492–513.
- #SB46 fans take to social media to navigate Indy. (2012, February 3). Retrieved from www.foxnews.com
- Schneider, M. (2011, April 21). New to your TV screen: Twitter hashtag. *TV Guide*. Retrieved from www.tvguide.com
- Schoenberg, S. (2012, June 20). #ScottBrownDebateDemands: Hashtags help tweets go viral. *The Republican*. Retrieved from <http://www.masslive.com>
- Seo, W.J., & Green, B.C. (2008). Development of the motivation scale for sport online consumption. *Journal of Sport Management*, 22, 82–109.
- Silberman, L. (2011, September 26). Social TV: How *Survivor*'s Jeff Probst bridged the gap between CBS and its audience. *TV Guide*. Retrieved from <http://www.tvguide.com/>
- Sweetser, K.D., & Kaid, L.L. (2008). Stealth soapboxes: Political information efficacy, cynicism and uses of celebrity weblogs among readers. *New Media & Society*, 10, 67–91. doi:10.1177/1461444807085322

- Sweetser, K.D., Porter, L.V., Chung, D.S., & Kim, E. (2008). Credibility and the use of blogs among professionals in the communication industry. *Journalism & Mass Communication Quarterly*, 85, 169–185. doi:10.1177/107769900808500111
- Twitter, NBC partner for Olympic promotion, hashtag page can help marketers boost content visibility [weblog post]. (2012, July 27). Retrieved from <http://www.brafton.com/news/twitter-nbc-partner-for-olympic-promotion-hashtag-page-can-help-marketers-boost-content-visibility>
- Urista, M.A., Dong, Q., & Day, K.D. (2009). Explaining why young adults use MySpace and Facebook through uses and gratifications theory. *Human Communication*, 12, 215–229.
- Webster, T. (2010, April 29). Twitter usage in America: 2010. *Edison Research*. Retrieved from <http://www.edisonresearch.com/?s=Twitter+use+2010>
- Weinburg, T. (2009). *The new community rules: Marketing on the social web*. New York: O'Reilly.
- Williams, J., & Chinn, S.J. (2010). Meeting relationship-marketing goals through social media: A conceptual model for sport marketers. *International Journal of Sport Communication*, 3, 422–437.
- Wimmer, R.D., & Dominick, J.R. (2006). *Mass media research: An introduction* (8th ed.). Belmont, CA: Thomson Higher Education.
- Zarella, D. (2010). *The social media marketing book*. Sebastopol, CA: O'Reilly.