A CONTENT ANALYSIS OF NCAA DIVISION I TRACK & FIELD TEAMS' TWITTER USAGE: DEFINING BEST PRACTICES IN SOCIAL MEDIA MARKETING

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ABSTRACT

ABIGAIL J. DORAN: A Content Analysis of NCAA Division I Track & Field Teams' Twitter Usage: Defining Best Practices in Social Media Marketing
(Under the direction of Coyte G. Cooper, Ph. D.)

Non-revenue sports face numerous challenges in marketing their programs; thus the need to self-market their program is becoming more essential to grow their fan base and reach recruits. Social media is an ideal form of communication to reach audiences that do not require any financial resources. This study performed a content analysis of 25 Division I track and field teams with the most Twitter followers to determine primary categories of content and correlation between number of followers and account practices.

Previous research on social media marketing has focused on professional teams, professional athletes, and athletic departments as a whole; no prior study has analyzed individual collegiate athletic teams. Among other findings, live results were found to be the most common form of content. The results of this study confirm that social media is an ideal way to help non-revenue teams with limited financial resources improve their marketing and branding efforts.

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TABLE OF CONTENTS

LIST OF TABLES

Tables

LIST OF FIGURES

Figure

Chapter 1

INTRODUCTION

Non-revenue sports have historically faced numerous challenges in marketing and branding their programs in all levels of collegiate athletics. The lack of funding, manpower and other resources limits what many Olympic sports can do to promote their programs due to the fact that many athletic departments invest heavily in reaching an extensive audience in sports such as football or men's basketball. With this being the case, the need to self-market their program is becoming more and more essential in order to grow their fan base and reach recruits. With the importance of positioning their product, programs need to keep their eye on potential mediums that allow them to market in a cost efficient manner.

With the advancement and access to technology now, social media is an ideal form of communication to reach a large audience as well as specific targeted audiences that do not require any financial resources. The number of users accessing the web through their mobile devices has nearly doubled each year since 2009 (Pring, 2012), giving people instant access to phone applications such as Twitter. Many organizations in the sport industry use social media, and particularly Twitter, to promote their teams and products, as well as simply share information. Since its start in 2006, the social media site has grown to more than 175 million global users as of April 2011 (Golijan, 2011). The site is available in more than 20 languages around the world, with more than 340 million tweets sent each day, and more than one billion tweets sent every three days (Twitter.com,

2012). As of February 2012, there were more than 465 million total accounts on Twitter, and the site is growing at a rate of 11 accounts per second, adding up to about 950,400 new accounts per day (Pring, 2012).

Statement of Purpose

The purpose of this study is to perform a content analysis of top Division I track and field teams (N=25) on Twitter to determine the primary practices that may improve marketing and communication with followers. The teams used in this study are not necessarily the top-25 programs athletically, so understanding the success of teams in their social media presence as opposed to solely their athletic success will provide the opportunity to apply the results of this study to more teams, particularly those programs which are not as successful athletically.

Research Questions

Based on a review of related literature, the following research questions were formed to guide this study:

RQ 1. What forms of content (e.g. videos, pictures, news stories) are most commonly being used by the top 25 teams, defined by their number of Twitter followers, in their marketing efforts via Twitter?

RQ 2. What is the correlation between athletic success (top-25 NCAA finish) of the program and their number of followers?

RQ 3. What is the correlation between the number of followers of a team and the following factors?

- Number of photos posted
- Number of videos posted

- Number of retweets/interactions with followers
- Number of accounts the team follows

Assumptions

1. The research methods used in this study are valid and reliable.
2. The Twitter accounts used in this study are the official Twitter accounts for each team chosen.

Delimitations

1. Accounts of the teams in the top-25 at the time of research are dynamic and constantly changing in terms of management and number of followers. The top-25 used may not accurately represent other and field Twitter accounts or be the top-25 in terms of followers at the completion of the study.
2. Research done over a one-year period may not be representative of the team's success over time on Twitter or in their social media usage.
3. Only 25 teams were chosen for content analysis, which may not accurately represent the total number of teams with successful social media presence.
4. Twitter is just one of several popular social mediums, and by exclusively studying teams' presence on this site may exclude teams successfully using other social media sites.
5. Only studying Division I programs limits the application of this research to Division II and Division III, as well as Junior College and NAIA programs.

Limitations

1. Saple results may not be representative of all Division I track and field programs and caution should be used when generalizing results of this study to other teams.

2. The results of this study may not be completely applicable to Olympic sports other than track and field, and the marketing techniques found to be successful with these teams may not work for other programs in different sports.

Definitions of Terms

1. **Tweet:** A content post on Twitter, made up of 140 or fewer characters. May not include text; could include just a picture, or video, or URL link to another page.
2. **Handle**: This is Twitter's version of a "username." A handle will have an "@" sign in front of it (e.g. @GoHeels).
3. **Follow:** Subscribing to someone's tweets. When you follow someone, their tweets will show up on the your timeline.
4. **Timeline:** This is the user's collected stream of tweets listed in real-time order.
5. **Mention:** Including someone else's handle in your tweet.
6. **Characters:** Each tweet can include up to 140 maximum characters. These characters include the "@" in a handle, the "#" in a topic, as well as spaces and punctuation marks.
7. **Reply:** A tweet posted in reply to someone else's tweet.
8. **Profile:** A Twitter page displaying information about a user, as well as the Tweet that they post from their account, including Retweets.
9. **Hashtag**: The symbol "#" marks a keyword on Twitter, making it a link and becoming a searchable topic.
10. **Nonrevenue/Olympic Sports:** Refers to the sport programs in NCAA athletic departments that are not seen as capable of generating a profit. In general, this means all sport programs outside of men's basketball and men's football.

11. **Trend:** A topic used with a hashtag can start trending when used enough. These trending topics are real time popular topics on Twitter from all users, not just those you follow. Trends can refer to worldwide trends or by city.
12. **Retweet:** Forwarding another tweet by someone else to all of your own followers.
13. **Follow Friday (#FF):** Twitter users use this hashtag to signify their suggestion of people who others should follow; this is done on Fridays.
14. **New Media:** A broad term to define all that is related to the Internet and interplay between technology and images. The definition is evolving over time.
15. **Traditional Media:** Also referred to as 'old media', this sort of media includes vehicles introduced before the use and advent of the internet, such as magazines, books, newspapers, and radio and television broadcasts.

Significance of Study

This study provides insight into techniques used by a selection of 25 NCAA Division I track and field teams' Twitter accounts. Determining practices used by the 25 teams with the most followers of all Division I track and field teams on Twitter will be beneficial in helping teams with fewer followers improve their presence on Twitter and potentially other social media sites. Research has been done on social media usage in athletics, but these studies have primarily focused on professional athletics and the usage of Facebook; there have been no studies prior to this one done on the usage of Twitter by individual collegiate athletic teams.

This study is essential for teams to understand practices that will improve collegiate teams' presence on Twitter, which in turn will improve their marketing efforts. As discussed previously, Olympic and non-revenue sports need all the help they can get

to market their programs to recruits and fans alike, and the results of this study will make those efforts more effective. With budget constraints hitting a majority of NCAA athletic departments and the individual athletic teams in those departments, staff and financial resources are decreasing across the board. This in turn means marketing techniques that use limited financial resources and manpower are much more in demand than ever before. The results of this study could also potentially be used by programs besides track and field to improve their social media presence as well as other track and field teams not included in this study.

Chapter 2

REVIEW OF LITERATURE

Sustainability and the Arms Race

College athletics have increasingly become more commercialized in terms of financial decisions over the past 20 years (Southall & Nagel, 2008), emphasizing profit more than ever. Traditionally, intercollegiate athletics provide the opportunity to integrate sport into higher education "so that the educational experience of the student-athlete is paramount" (NCAA, 2010). However, as seen with the arms race and emphasis on revenue-generation, the current state of intercollegiate athletics counters that position as athletic departments join the "never-ending battle for supremacy, national exposure, and financial awards" (Knight Commission on Intercollegiate Athletics, 2010).

Research done by Daniel Fulks shows a 27 percent increase in expenditures allocated to the two revenue sports, football and basketball, in Football Bowl Subdivision (FBS) athletics departments (NCAA, 2004). With an increase of spending allocated to these two sports, many non-revenue, or Olympic, sports are facing decreases in their spending allocations if not complete elimination. In a matter of 20 years, between 1988 and 2008, a total of 2,606 teams were dropped across the NCAA, with a net loss of 287 men's teams at the Division I level (NCAA, 2010). Some examples include Portland State, which cut their men's golf team to "chip away at a $225,000 reduction in institutional support," Bowling Green, which cut men's tennis, swimming and indoor and outdoor track to save $360,000 annually, and the University of Massachusetts, which cut

$1.1 million out of the athletic department's budget by eliminating seven teams (Steinback, 2003). With the current economic state of the country and budget issues facing most, if not all, institutions, more cuts are yet to be seen across the organization.

Many athletic programs are facing elimination because of these budget decreases, and others are facing more struggles in maintaining their sustainability at their institutions. Because of this, "nonrevenue-sport teams will need to enhance their revenue streams to avoid potential budget cuts or program losses" and these programs will need to find new ways to accomplish this, possibly even reaching the point of "adopting a fully endowed model to remain sustainable" (Cooper & Southall, 2010, p. 2). Previous studies have researched athletic directors' explanations for program elimination and have found that marketing does affect program sustainability. Cooper and Weight (2011) researched wrestling program discontinuations decisions and found that the sport popularity and fan support were two factors athletic directors considered. "It is becoming the economic reality for programs that traditionally generate a negative cash flow to actively seek fan and donor support for the program in order to ensure its position as a sport offered by the athletic department" (2011, p. 68). They further wrote that using creative promotional strategies can increase support at the grassroots level and "provide a strong case for enhanced fan loyalty among" these fans (2011, p. 70).

The Need for Self-Marketing and Branding

With decreases in revenue support, other channels to promote athletic programs must be used. Increasing the marketing and branding success of a program could lead to increased interest and support, and thus potentially increase that program's sustainability. The Internet offers simple and inexpensive means to market individual programs, and

social media sites are growing in popularity as a means of marketing and communication in collegiate sports. Limited budgets may mean fewer media guides, team posters or schedule cards printed, and these forms of promotion are being substituted for less expensive forms of promotion. Mirna Bard, a social media consultant, speaker, author and instructor of social media at the University of California at Irvine, writes of her own experience in marketing with social media:

> As an entrepreneur… I do not have the budget to reach a global audience through traditional channels for even one hour. By putting some effort into social media marketing with virtually no budget, I've built global presence that allows me to engage with my audience and nurture relationships with worldwide clients and prospects for the lifetime of my business (2011, para. 7).

Different from length requirements found in newspapers or magazines, the Internet offers endless space for news and feature stories, as well as extended opportunities for photo, video and audio content. Paul Farhi writes of Twitter: "Its speed and brevity make it ideal for pushing out scoops and breaking news to Twitter- savvy readers" (2009, p. 28). While some social media sites, such as Twitter, set guidelines on the number of characters in a particular message, repeated messages can be posted, allowing still for more marketing and communication opportunities. While there is essentially unlimited space online, the need for producing content that the program's audience is interested in still exists. In turn, "as coaches build their online fan database, they are afforded with the opportunity to deliver online content that will enhance loyalty among targeted consumers" (Cooper & Southall, 2010, p. 8). Controlling content of

online marketing and communication efforts is still vital so as to publish quality and effective products.

Determining effective marketing techniques is essential to promote one's program and attract more support. Audiences utilizing social media sites such as Twitter may not be looking for the same thing as audiences reading a newspaper, or watching the 5 o'clock news segment, and thus Cooper (2009) and Ross and James (2004) made the point that it's essential to identify primary motivational preferences so that nonrevenue coaches are able to invest their time and energy in marketing-based initiatives that grow their product starting at the grassroots level. Social media sites may attract younger audiences, but locking in their support as young fans could lead to a solid number of life-long supporters for the program. Cooper (2009) made the point that it's critical for nonrevenue-sport teams to develop marketing strategies to remain sustainable and to enhance consumer interest in their core product in future years.

Social Media vs. Traditional Media

As technology continues to advance, communication channels will continue to grow and change. New Media, generally referring to Internet-based communication, and in particular the use of social media, are now essential in marketing and communication. The overwhelming increase in the usage of new media has altered the need for traditional media and the way it is produced, as the "revolution" of new media caused traditional media to lose consistency (Tasente & Ciacu, 2011). Traditional and new media are often seen combined with one another, something Tasente and Ciacu call "unitary media." Tasente and Ciacu proposed that "the motivation that made the two media reunite was the need of traditional media institution to go on being on the market" (2011, p. 44). Online

webpages, including athletic department sites and social media sites alike, and other forms of New Media allow for quicker updates on content for audiences than Traditional Media may afford.

Social networking is described as "social systems composed of members and communication channels through which information about new products is transmitted" (Chatterjee, 2011, p. 82). Wausserman and Faust (1994) further describe social networks as collections of individuals, organizations and events, plus the shared relationships among them. Some examples of social networking sites include, but are not limited to, Facebook, Twitter, FourSquare, Flickr, Blogger, Jaiku, as well as numerous message boards and blog sites, to name a few. These networks are able to spread information quicker than traditional forms of media can. As Hambrick (2012) noted, having a large number of followers on Twitter helps users spread information quickly, particularly when their followers retweet the original message to all of their unique followers as well. Social networks are also an ideal way to reach target markets. Based on the findings of the author's study, Hambrick wrote, "Sport consumers rely on online social networks to receive and share information, and their heightened popularity almost dictates that organizations use them to reach current and prospective consumers" (2012, p.. 32). Mark Briggs, who runs the journalism school at the University of California-Berkeley, said that social networks such as Twitter provide a way "of bridging the gap with them [followers] and being more engaged with them" (Fahri, 2009, p. 29). Further, Cooper writes, "The effective use of new media provides athletic departments with a channel to communicate messages that build credibility with consumers who they are targeting" (2010, p. 30).

In addition to being considerably less expensive to produce content online as opposed to in print or on television, social media offers the audience an opportunity to interact with the source of content. As Jayaram K. Iyer writes, "Social media has challenged conventional marketing techniques… so the new mantra is 'engage the consumers" (2012, para. 6). Readers can comment and respond back and forth on sites such as Facebook and Twitter, as well as on message boards and blog sites. These outlets, which allow increased engagement with fans and users, can help improve on the relationship between the university or athletic program with their audience, and thus help build a larger fan base, and improve their brand image. Shama Kabani, the CEO of The Marketing Zen Group, a social media and digital PR firm, writes that, "While excellent and innovative products and stellar customer service are key requirements to building a loyal fan base, social-media marketing can help nurture and strengthen budding customer relationships" (2012, para. 1). The increased interaction that social media allows for elevating the fans' "status from silent receivers of your information to important partners in a relationship, building connection and loyalty" (Kabani, 2012, para. 3). Sujata Ramnarayan refers to Twitter as "essentially a free global broadcasting channel" (2012, p.19). Further, Bard writes that traditional marketing is in fact more expensive than new media marketing strategies, including social media sites like Twitter. "Yes, it takes time, money, manpower, experience and skill to get a social media program off the ground, but so does a campaign through traditional channels," (2011, para. 6). As George Christodoulides summarizes, sport organizations need to take advantage of these new media opportunities afforded them if they are to be successful in their future marketing methods.

What is Twitter?

In March of 2011, the College Sports Information Directors of America (CoSIDA) New Media/Technology Committee produced a document explaining the evolution of the social networking site Twitter. First created in 2006 by Biz Stone, Evan Williams and Jack Dorsey, the social network was called "twttr," and "began as an experiment in collective word design" (Sagolla, 2012). The original purpose of the site was for users to tweet what they were doing at that moment (CoSIDA, 2011), similar to a Facebook status, but the tweet had a maximum of 140 characters. The creator saw the site as "a venue for fostering conversations – sort of a Reader's Digest version of Facebook" (CoSIDA, 2011). Hambick further describes the site as a "microblog," a mini version of a web log, or blog, which allow users to "record their thoughts, ideas, and opinions while soliciting comments from readers through these online journals" (2012). Users can post results, links to game stories or other pages, short game recaps or highlights, announcements, pictures or video, or any other original content they wish to share with their followers. Paul Farhi likens tweets to "instant messaging or text messaging, but one-to-many, instead of one-to-one" (p. 28, 2009).

Users can follow other users they wish to receive updates from, such as other schools' athletic programs, news sources, conference or other organizations, members of the university community and fans. Many users retweet messages posted by some of the users they follow, wishing to spread the same information from that source instead of posting the content themselves. Posting and retweeting messages causes content to spread to more users than just one accounts' followers, facilitating "information sharing among Twitter users as information spreads from one Twitter user to her followers to her

followers of followers through the online social network" (Li & Du, 2011). Hambrick's study found that "gaining followers who had more followers early helped spread information about the events" (2012). Also, additional research has shown that users with more relationships – followers in regards to Twitter – can serve as relationship hubs for sharing information with a wider range of users (Zhou, Bandari, Kong, Oian, Roychowdhury, 2010). In addition, the author wrote that providing a variety of messages and varying the content and purpose of messages will help keep users interested and engaged (Hambrick, 2012). However, Hambrick's study found little correlation between the number of messages and the number of followers added daily for the accounts studied (2012). This last point is important to note for this research, which will asses potential reasons the 25 accounts chosen have so many followers.

Now Twitter boasts more than 200 million users with more than 140 million tweets sent per day, or an average of 1,600 per second (CoSIDA, 2011). General Twitter users engage with the site for a variety of reasons and tweet various forms of content. A recent survey by the CoSIDA New Media/Technology Committee shows that most members of the organization, primarily those working in sports information/athletic communications at universities and colleges, use the site "strictly as a news channel," providing fans with a "real-time news fix" (2011). A further study shows that athletic communication offices manage 62 percent of the Twitter accounts that were reported by members of the organization, with the remaining 38 percent managed by marketing departments. In addition, close to half of the reporting schools had separate accounts for individual sports at the school in addition to one main account for the athletic department as a whole (CoSIDA, 2011).

Now, six years after its creation, Fisher writes that Twitter is now the online social network of choice in the sport industry (2009). As Dorsey wrote in February of 2007, "one could change the world with one hundred and forty characters" (Sagolla, 2009). As our news-hungry society seeks updates quicker and quicker, Twitter is ideal, Farhi says, for an obvious reason: "Its speed and brevity make it ideal for pushing out scoops and breaking news to Twitter-savvy readers" (p. 28, 2009). In athletics, quick announcements are often needed, such as announcing recruits on signing day, or posting scores and results throughout competitions. Craig Stoltz, a heavy Twitter user and new media consultant, said that this particular social network "works best in situations where the story is changing so fast that the mainstream media can't assemble all the facts at once," (Fahri, p. 28, 2009), which is often just the case in athletics.

Previous Studies

In terms of this study, and similar research in this field, a content analysis involves examining messages within sports media, particularly messages posted on Twitter. Several previous content analyses studying media in athletics have been completed. Pederson (2002) completed a content analysis on the potential influences of coverage inequality, investigating the amount and type of newspaper coverage given to female and male high school athletics, the first such study to examine interscholastic athletics. Similarly, Cooper completed a study analyzing gender and individual sport team coverage provided on intercollegiate athletic websites.

Recently, scholars have started focusing on the type of coverage provided by new media sites, such as social networking sites. Hambrick (2012) completed a content analysis on the use of Twitter to promote professional cycling events, exploring how

"sporting event organizers and influential Twitter users spread information through the online social network." The findings of a content analysis completed by Greer and Ferugson (2011) examining Twitter sites of local television stations was that interactivity on Twitter gains followers. They also found that this site can be useful in breaking and communicating news, as opposed to just directing followers to the news broadcast (Greer & Ferguson, 2011).

Some studies have started examining the content and coverage produced on social media sites. Outside of athletics, McCorkindale completed a content analysis to determine how the 2008 Fortune 50 companies used Facebook. McCorkindale found that many organizations were not using Facebook to publicize any news or information about their organization, and that most of these companies could do more to engage and build relationships through their Facebook presence (2008). Naaman, Boase and Lai completed a content analysis of more than 350 Twitter users, examining message content to better understand the characteristics of social media activity. The authors found that users are generally split into one of two groups, either they are focused on the "self" or focused on sharing information (2010, p. 192). Bender, Jimenez-Marroquin and Jadad completed a content analysis of breast cancer support groups on Facebook and found that the function of social networking sites "makes them ideally suited for fundraising and awareness-raising purposes… but may make them less suitable for support-seeking related to topics that are embarrassing or socially stigmatizing" (para. 27, 2011).

Further content analyses have been done involving social media regarding professional teams, professional athletes and athletic departments as a whole. Tomko analyzed social media usage by collegiate athletic departments, and found that, "While

many fans appreciate the increased connection with their schools, athletic departments love the fact that social media is an inexpensive approach to marketing and a great way to gather information on its fan base" (para. 12, 2011). Tomko further noted that even with the increased use of social media to date, some marketing experts say, "Athletic departments have only just begun to scratch the surface with a marketing platform that won't be going away anytime soon" (para. 29, 2011). Hambrick, Simmons, Greenhalgh and Greenwell analyzed Twitter use among professional athletes who use Twitter to communicate with fans and other players. The authors found that many of the athletes studied used the site to communicate directly with their followers and very few were used for promotion, thus determining that "professional athletes may not be taking advantage of the promotional opportunities Twitter may provide" (Hambrick, et al., 2010, p. 454). This is a significant finding, especially considering that a recent tally by Tweeting-Athletes.com shows that there are at least 6,990 total professional athletes using Twitter, including 1,783 NFL players, 523 NBA players, 500 MLB players, and 336 NHL players (2012). Martin examined social media usage in the NFL and found that these professional athletes "are able to use social media to establish a sense of connection, or a 'relationship,' with fans that feel almost interpersonal in nature" and this in turn can "develop parasocial attachments to the athletes whom they follow via social media, resulting in increased identification with, and sometimes more support for, these human brands" (2012, p. 105). Kassing and Sanderson examined how fans experienced the Tour of Italy cycling event through Twitter, as the authors of the study tracked the tweets sent out by a selection of American and English-speaking riders during the race, finding that Twitter served to increase immediacy between athletes and fans. The findings also

purported that Twitter is a “powerful communication technology that affords a more social vs. parasocial relationship between athletes and fans” (Kassing & Sanderson, 2010, p. 1).

Chapter 3

METHODOLOGY

This study was conducted as a content analysis of NCAA Division I track and field programs' Twitter usage. Content analyses are used in a variety of ways in various fields, and have been defined several different ways based on past analyses performed**.** Riffe, Lacy, and Fico (2005) defined the process as a systematic and replicable examination of symbols within communication in order to describe the communication, draw inferences about its meaning, or to infer from the communication to its context (p. 25).

Content analyses have been used numerous times to study communication in collegiate athletics and have focused on a wide array of communication outlets (i.e., books, magazines, radio, television, Internet) in sport-related research (Cooper, 2007). Specifically, past research has focused largely on the content of three main media outlets: magazines, newspapers, and the Internet (Kane, 1988; Matheson & Flatten, 1996; Messner, Duncan, & Wachs, 1996), and Cooper (2007) focused on the application of a content analysis methodology to the individual institutional athletic Web pages.

Sample Selection

In order to determine how NCAA Division I athletic teams are using social media, an initial assessment was done to determine the 25 track and field Twitter accounts with the most followers. The sport of track and field was chosen because as an Olympic, non-revenue sport, track and field programs are continuously struggling for more resources,

financial and otherwise, and support from their athletic departments. To determine the top 25 teams, data on numbers of followers for each Division I track and field team was gathered and sorted to determine the top 25 teams. The amount of followers for each team will continue to increase daily, but the top 25 teams were chosen at the time the data was gathered and remained the subjects of research throughout the study. The teams determined to have the most followers were from seven different athletic conferences and had varying athletic accomplishments; this was an early indication that team performance was not always a major factor in gaining more Twitter followers.

Once the teams were selected, all messages posted on their Twitter accounts from the time period of July 1, 2011, through June 30, 2012, were compiled into documents for each team. Using a randomly constructed week for each month (randomly selecting one Monday, one Tuesday, one Wednesday, one Thursday, one Friday, one Saturday and one Sunday in each month), messages from the total compiled data were separated for use in this study. A randomly constructed week was used in order to eliminate any bias results that could occur from using one seven-day period in each month. Because social media and marketing efforts could differ at various times in each month and throughout the year, the randomly constructed month reduces the bias that could come from using the same week in each month for the study.

Table 1
Randomly Constructed Weeks for Each Month

MONTH	MON	TUES	WEDS	THURS	FRI	SAT	SUN
July	4	12	20	28	1	9	17
August	1	9	17	25	5	13	21
September	5	13	21	29	2	10	18
October	3	11	19	27	7	15	23
November	7	1	16	24	4	12	20
December	5	13	21	29	2	10	18
January	2	10	18	26	6	14	22
February	6	14	22	2	10	18	26
March	5	13	21	29	2	10	18
April	2	10	18	26	6	14	22
May	7	15	23	31	4	12	20
June	4	12	20	28	1	9	17

Pre-coding Procedures

Prior to analyzing message content, a coding protocol and codebooks were created to guide two coders involved with the data collection process. Two separate trained coders then participated in intercoder reliability testing to ensure that the pilot study contained reliability, which is a primary concern in content analysis research (Riffe, Lacy & Fico, 2005). The intercoder reliability testing consisted of two individuals gathering 5 percent (212 tweets) of the total tweets and coding that sample to the best of their ability. The two coders then coded the tweets independently, but discussed their reasoning afterwards, ensuring that they were in agreement as to how the different codes apply to the tweets. To ensure reliability, the two coders had to be highly familiar with the coding protocol used in the study. The results of this pilot study ensured that each of

the two trained coders was independently providing highly similar results during the data collection and coding process. A similar procedure was performed during the actual data collection and coding process for this study.

In order to eliminate chance, the Adjusted Scott's Pi statistic was utilized during the study. Craig (1981) explained that Scott (1955) proposed an index of agreement between two coders that takes into account both the observed proportion of agreement and the proportion that would be expected by chance. Therefore, the Scott's Pi formula eliminates the probability that coders will provide the same results by chance. In order for a content analysis to contain reliability, Riffe et al. (2005) explained that a percent of chance agreement must be at least 80% and the Adjusted Scott's Pi must be at least .70.

As illustrated by Riffe, Lacy, and Fico (2005), the results of this pilot coding test must be above the acceptable ranges of 80% for percentage of chance agreement (p. 147) and .80 for Adjusted Scott's Pi (p. 151) for the study to contain reliability. These acceptable ranges help establish that the coders are familiar with familiar with both the codebook and coding protocol for this test. After running the intercoder reliability test, Scott's Pi was found to be .943, greater than the minimum of .70, which confirmed agreement between the two coders. Following the independent analysis of 5 percent of tweets for intercoder testing, the remaining tweets for all programs used were divided between the two coders for data collection, with the head researcher completing 81% of the remaining tweets and the second coder completing 19% of the remaining tweets.

CHAPTER 4

MANUSCRIPT

Non-revenue sports have historically faced numerous challenges in marketing and branding their programs in all levels of collegiate athletics. With this being the case, the need to self-market their program is becoming more and more essential in order to grow their fan base and reach recruits. With the importance of positioning their product, programs need to keep their eye on potential mediums that allow them to market in a cost efficient manner. Social media is an ideal form of communication to reach a large audience as well as specific targeted audiences that do not require any financial resources.

The purpose of this study was to perform a content analysis of top Division I track and field teams (N=25) on Twitter to determine the primary practices that may improve marketing and communication with followers. The teams used in this study are not necessarily the top-25 programs athletically, so understanding the success of teams in their social media presence as opposed to solely their athletic success will provide the opportunity to apply the results of this study to more teams, particularly those programs which are not as successful athletically.

The research questions that guided this study were: (1) What forms of content (e.g. videos, pictures, news stories) are most commonly being used by the top 25 teams, defined by their number of Twitter followers, in their marketing efforts via Twitter? (2) What is the correlation between athletic success (top-25 NCAA finish) of the program and their number of followers? (3) What is the correlation between the number of

followers of a team and the following factors: a) Number of photos posted, b) Number of videos posted, c) Number of giveaways offered, and d) Number of teams they follow.

Sustainability and the Arms Race

College athletics have increasingly become more commercialized in terms of financial decisions over the past 20 years (Southall & Nagel, 2008), emphasizing profit more than ever. Traditionally, intercollegiate athletics provide the opportunity to integrate sport into higher education "so that the educational experience of the student-athlete is paramount" (NCAA, 2010). However, as seen with the arms race and emphasis on revenue-generation, the current state of intercollegiate athletics counters that position as athletic departments join the "never-ending battle for supremacy, national exposure, and financial awards" (Knight Commission on Intercollegiate Athletics, 2010).

Many athletic programs are facing elimination because of budget decreases, and others are facing more struggles in maintaining their sustainability at their institutions. Because of this, "nonrevenue-sport teams will need to enhance their revenue streams to avoid potential budget cuts or program losses" and these programs will need to find new ways to accomplish this, possibly even reaching the point of "adopting a fully endowed model to remain sustainable" (Cooper & Southall, 2010, p. 2). Previous studies have researched athletic directors' explanations for program elimination and have found that marketing does affect program sustainability. Cooper and Weight (2011) researched wrestling program discontinuations decisions and found that the sport popularity and fan support were two factors athletic directors considered. "It is becoming the economic reality for programs that traditionally generate a negative cash flow to actively seek fan

and donor support for the program in order to ensure its position as a sport offered by the athletic department" (2011, p. 68).

The Need for Self-Marketing and Branding

With decreases in revenue support, other channels to promote athletic programs must be used. The Internet offers simple and inexpensive means to market individual programs, and social media sites are growing in popularity as a means of marketing and communication in collegiate sports. The Internet offers endless space for news and feature stories, as well as extended opportunities for photo, video and audio content. Paul Farhi writes of Twitter: "Its speed and brevity make it ideal for pushing out scoops and breaking news to Twitter- savvy readers" (2009, p. 28). Further, "As coaches build their online fan database, they are afforded with the opportunity to deliver online content that will enhance loyalty among targeted consumers" (Cooper & Southall, 2010, p. 8).

Social Media vs. Traditional Media

As technology continues to advance, communication channels will continue to grow and change. New Media, generally referring to Internet-based communication, and in particular the use of social media, are now essential in marketing and communication. The overwhelming increase in the usage of new media has altered the need for traditional media and the way it is produced, as the "revolution" of new media caused traditional media to lose consistency (Tasente & Ciacu, 2011).

Social networks are able to spread information quicker than traditional forms of media can. As Hambrick (2012) noted, having a large number of followers on Twitter helps users spread information quickly, particularly when their followers retweet the original message to all of their unique followers as well. Social networks are also an

ideal way to reach target markets. Based on the findings of the author's study, Hambrick wrote, "Sport consumers rely on online social networks to receive and share information, and their heightened popularity almost dictates that organizations use them to reach current and prospective consumers" (2012, p. 32). Mark Briggs said that social networks such as Twitter provide a way "of bridging the gap with them [followers] and being more engaged with them" (Fahri, 2009, p. 29).

In addition to being considerably less expensive, social media offers the audience an opportunity to interact with the source of content. As Jayaram K. Iyer writes**,** "Social media has challenged conventional marketing techniques… so the new mantra is 'engage the consumers" (2012, para. 6). Readers can comment and respond back and forth on sites such as Facebook and Twitter, as well as on message boards and blog sites. These outlets, which allow increased engagement with fans and users, can help improve on the relationship between the university or athletic program with their audience, and thus help build a larger fan base and improve their brand image. Shama Kabani, the CEO of The Marketing Zen Group, a social media and digital PR firm, writes that, "While excellent and innovative products and stellar customer service are key requirements to building a loyal fan base, social-media marketing can help nurture and strengthen budding customer relationships" (2012, para. 1). The increased interaction that social media allows for elevating the fans' "status from silent receivers of your information to important partners in a relationship, building connection and loyalty" (Kabani, 2012, para. 3). As George Christodoulides summarizes, sport organizations need to take advantage of these new media opportunities afforded them if they are to be successful in their future marketing methods.

What is Twitter?

First created in 2006 by Biz Stone, Evan Williams and Jack Dorsey, the social network was called "twttr," and "began as an experiment in collective word design" (Sagolla, 2012). The original purpose of the site was for users to tweet what they were doing at that moment (CoSIDA, 2011), similar to a Facebook status, but the tweet had a maximum of 140 characters. The creator saw the site as "a venue for fostering conversations – sort of a Reader's Digest version of Facebook" (CoSIDA, 2011). Users can post results, links to game stories or other pages, short game recaps or highlights, announcements, pictures or video, or any other original content they wish to share with their followers. Paul Farhi likens tweets to "instant messaging or text messaging, but one-to-many, instead of one-to-one" (p. 28, 2009).

Users can follow other users they wish to receive updates from, such as other schools' athletic programs, news sources, conference or other organizations, members of the university community and fans. Many users retweet messages posted by some of the users they follow, wishing to spread the same information from that source instead of posting the content themselves. Posting and retweeting messages causes content to spread to more users than just one accounts' followers, facilitating "information sharing among Twitter users as information spreads from one Twitter user to her followers to her followers of followers through the online social network" (Li & Du, 2011). Hambrick's study found that "gaining followers who had more followers early helped spread information about the events" (2012). In addition, the author wrote that providing a variety of messages and varying the content and purpose of messages will help keep users interested and engaged (Hambrick, 2012). However, Hambrick's study found little

correlation between the number of messages and the number of followers added daily for the accounts studied (2012).

Now Twitter boasts more than 200 million users with more than 140 million tweets sent per day, or an average of 1,600 per second (CoSIDA, 2011). General Twitter users engage with the site for a variety of reasons and tweet various forms of content. A recent survey by the CoSIDA New Media/Technology Committee shows that most members of the organization, primarily those working in sports information/athletic communications at universities and colleges, use the site "strictly as a news channel," providing fans with a "real-time news fix" (2011). A further study shows that athletic communication offices manage 62 percent of the Twitter accounts that were reported by members of the organization, with the remaining 38 percent managed by marketing departments. In addition, close to half of the reporting schools had separate accounts for individual sports at the school in addition to one main account for the athletic department as a whole (CoSIDA, 2011).

Now, six years after its creation, Fisher writes that Twitter is now the online social network of choice in the sport industry (2009). As Dorsey wrote in February of 2007, "one could change the world with one hundred and forty characters" (Sagolla, 2009). As our news-hungry society seeks updates quicker and quicker, Twitter is ideal, Farhi says, for an obvious reason: "Its speed and brevity make it ideal for pushing out scoops and breaking news to Twitter-savvy readers" (p. 28, 2009). In athletics, quick announcements are often needed, such as announcing recruits on signing day, or posting scores and results throughout competitions. Craig Stoltz, a heavy Twitter user and new media consultant, said that this particular social network "works best in situations where

the story is changing so fast that the mainstream media can't assemble all the facts at once," (Fahri, p. 28, 2009), which is often just the case in athletics.

Method

This study was conducted as a content analysis of NCAA Division I track and field programs' Twitter usage. Content analyses are used in a variety of ways in various fields, and have been defined several different ways based on past analyses performed**.** Riffe, Lacy, and Fico (2005) defined the process as a systematic and replicable examination of symbols within communication in order to describe the communication, draw inferences about its meaning, or to infer from the communication to its context (p. 25).

Content analyses have been used numerous times to study communication in collegiate athletics and have focused on a wide array of communication outlets (i.e., books, magazines, radio, television, Internet) in sport-related research (Cooper, 2007). Specifically, past research has focused largely on the content of three main media outlets: magazines, newspapers, and the Internet (Kane, 1988; Matheson & Flatten, 1996; Messner, Duncan, & Wachs, 1996), and Cooper (2007) focused on the application of a content analysis methodology to the individual institutional athletic Web pages.

Sample Selection

In order to determine how NCAA Division I athletic teams are using social media, an initial assessment was done to determine the 25 track and field Twitter accounts with the most followers. The sport of track and field was chosen because as an Olympic, non-revenue sport, track and field programs are continuously struggling for more resources, financial and otherwise, and support from their athletic departments. To determine the

top 25 teams, data on numbers of followers for each Division I track and field team was gathered and sorted to determine the top 25 teams. The amount of followers for each team will continue to increase daily, but the top 25 teams were chosen at the time the data was gathered and remained the subjects of research throughout the study. The teams determined to have the most followers were from seven different athletic conferences and had varying athletic accomplishments; this was an early indication that team performance was not always a major factor in gaining more Twitter followers.

Once the teams were selected, all messages posted on their Twitter accounts from the time period of July 1, 2011, through June 30, 2012, were compiled into documents for each team. Using a randomly constructed week for each month (randomly selecting one Monday, one Tuesday, one Wednesday, one Thursday, one Friday, one Saturday and one Sunday in each month), messages from the total compiled data were separated for use in this study. A randomly constructed week was used in order to eliminate any bias results that could occur from using one seven-day period in each month. Because social media and marketing efforts could differ at various times in each month and throughout the year, the randomly constructed month reduces the bias that could come from using the same week in each month for the study.

Table 1
Randomly Constructed Weeks for Each Month

MONTH	MON	TUES	WEDS	THURS	FRI	SAT	SUN
July	4	12	20	28	1	9	17
August	1	9	17	25	5	13	21
September	5	13	21	29	2	10	18
October	3	11	19	27	7	15	23
November	7	1	16	24	4	12	20
December	5	13	21	29	2	10	18
January	2	10	18	26	6	14	22
February	6	14	22	2	10	18	26
March	5	13	21	29	2	10	18
April	2	10	18	26	6	14	22
May	7	15	23	31	4	12	20
June	4	12	20	28	1	9	17

Pre-coding Procedures

Prior to analyzing message content, coding protocol and codebooks were created to guide two coders involved with the data collection process. Two separate trained coders then participated in intercoder reliability testing to ensure that the pilot study contained reliability, which is a primary concern in content analysis research (Riffe, Lacy & Fico, 2005). The intercoder reliability testing consisted of two individuals independently coding 5 percent of the total tweets in the sample to ensure reliability in the data collection method. To ensure reliability, the two coders had to be highly familiar with the coding protocol used in the study. The results of this pilot study ensured that each of the two trained coders was independently providing highly similar results during the data collection and coding process.

In order to eliminate chance, the Adjusted Scott's Pi statistic was utilized during the study. Craig (1981) explained that Scott (1955) proposed an index of agreement between two coders that takes into account both the observed proportion of agreement and the proportion that would be expected by chance. Therefore, the Scott's Pi formula eliminates the probability that coders will provide the same results by chance. In order for a content analysis to contain reliability, Riffe et al. (2005) explained that a percent of chance agreement must be at least 80% and the Adjusted Scott's Pi must be at least .70. The intercoder reliability testing for this study produced an agreement of 94.3%. Following the independent analysis of 5 percent of tweets for intercoder testing, the remaining tweets for all programs used were divided between the two coders for data collection, with the head researcher completing 81% of the remaining tweets and the second coder completing 19% of the remaining tweets.

Results

All Twitter messages produced by the 25 Division I track and field teams with the most Twitter followers were gathered from a 12-month period (July 2011- June 2012). To ensure a reliable sample, a number generator was used to obtain a random week (7 days) within each month during the time frame. In total, there were 4,015 tweets that were collected from all of the teams in the 12 random weeks, and these tweets were analyzed and coded based on seven main categories and 22 subcategories (see Appendix I). Under the meet related category, there were three subcategories: preview/information, live results, and recap. Under the non-meet related category, there were six subcategories: feature story, academics, another team, rankings, quotes/fun fact, and university related. The four subcategories under additional links were link back to the team's website, link

to another website, picture, video or graphic. A tweet could have more than one additional link coding, e.g. a picture and a link to their website, or a video and a link to another website.

Only original, track-related Tweets were analyzed for this study. Data on quantities of non-original and cross country related Tweets were gathered for informational purposes and to determine how common Tweets in these categories (cross country, re-tweets and interaction) were used. Based on the coding procedure described in Appendix II, if the Tweet was determined to be original content and not relating to cross country, the message was then determined to be either meet related or non-meet related. All cross country related tweets were filtered out in order to focus only on track and field related tweets.

For the correlation analyses determining the relationship of the factors to the number of followers, a Spearman *rho* correlation was employed. Values were calculated for each category across all 25 teams to determine which were the most common forms of content. Of the 4,015 Tweets studied, 3,223 had original content (80.3%), with 89.9% of the original tweets being track and field related, and 10% of the messages relating to cross country Of the non-cross country related tweets, 2,387 (82.4%) were related to a track and field meet while only 511 (17.6%) had non-meet related topics. Once the message was determined to be meet related or non-meet related, the coder then classified the tweet in one or more of the 22 subcategories (see Figure 1).

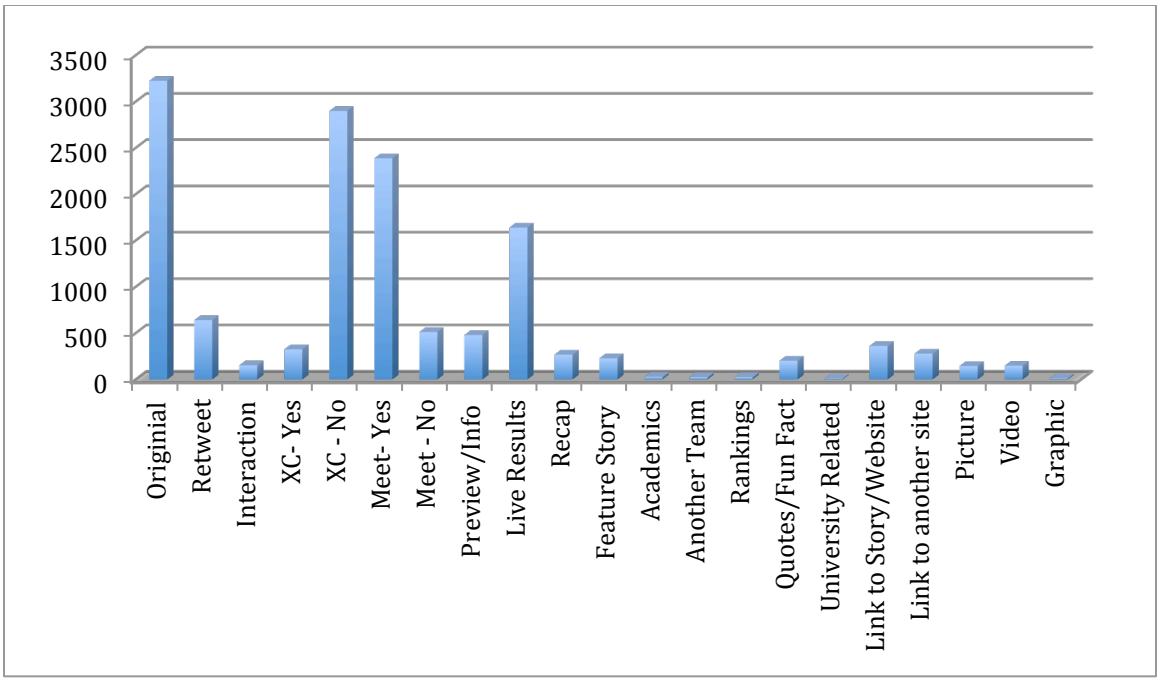


Figure 1. Coding Breakdown

Most Common Forms of Content

One of the primary goals of this study was to determine what forms of content were most commonly used by the 25 teams analyzed. Three primary categories emerged in the coding process (meet related, non-meet related, and additional links), and the results of each category will be discussed in the following sections. The top three forms of content most commonly used by the 25 teams studied were all meet related: live results, preview/information, and recaps.

Meet-Related Categories. Figure 2 shows the breakdown of the three meet-related categories, of which live results were by far the most common. Further, as Table 2 shows, live results during meets were the most common form for all but two teams, Utah and Air Force. Twenty-four teams had about 20% or more of their original content tweets as live results. Texas A&M had the most live results, as 78.9% of the team's original tweets were live results at meets. Nine additional teams had 50% or more of their original

tweets as live results: Florida State (68.8%), Oklahoma (67.7%), Oregon (65.4%), Florida (63.7%), LSU (62.8%), Miami (58.3%), Texas Women (54.2%), TCU (54.0%), and Kentucky (50%). It's interesting to note that Texas was the only school in the sample that had separate accounts for the men's and women's teams. Texas Women had a greater percentage of original tweets as live results, while Texas Men had about 7% less with 47.4% live results. The Air Force was the only school did that not produce any live results tweets, which is interesting to note particularly as the team hosts a large men's indoor track and field meet annually. Although it wasn't the team's highest category, Utah did produce a significant amount of live results tweets for a total of 28.6% of their original tweets.

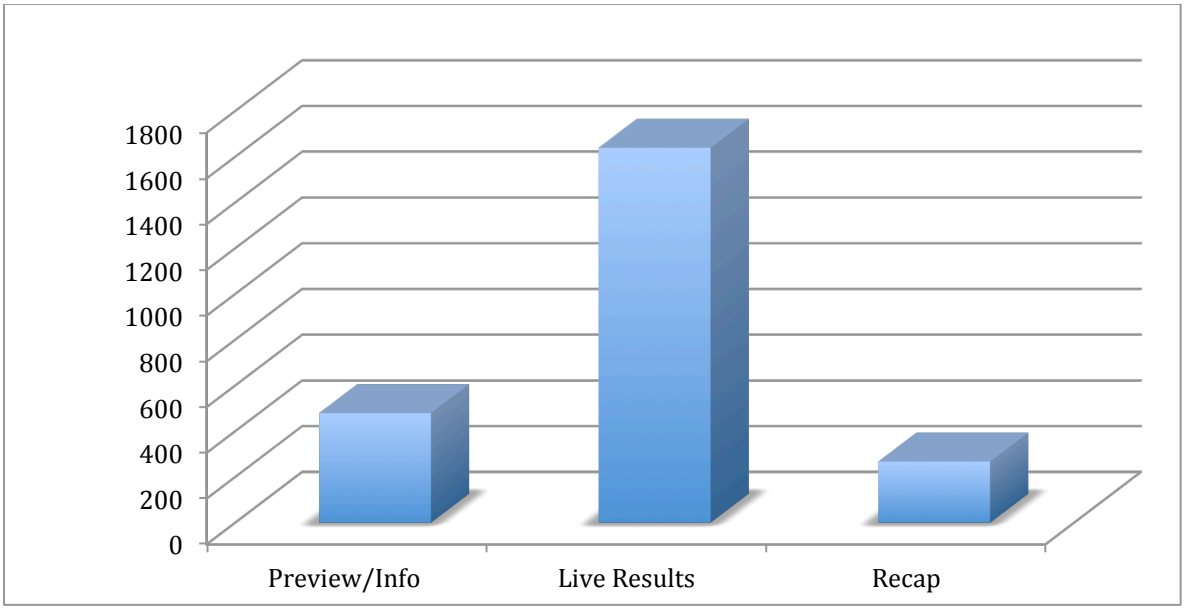


Figure 2. Meet Related Categories-Overall

Table 2
Live Results Tweets

Team	Percent of Original Tweets Studied	Other Majority Category
Florida	63.7%	
Kentucky	50.0%	
Michigan	24.0%	
Texas A&M	78.9%	
Florida State	68.8%	
LSU	62.8%	
Wisconsin	38.2%	
Texas Men	47.4%	
Utah	28.6%	33.7%- Quotes/Fun Facts
Texas Women	54.2%	
Oklahoma State	34.4%	
Oklahoma	67.7%	
Virginia	24.6%	
Air Force	0.0%	56.5%- Pictures
Washington	44.0%	
Oregon	65.4%	
Illinois	29.9%	
Iowa State	47.3%	
Miami	58.3%	
Alabama	42.0%	
Penn State	19.4%	
Duke	20.0%	
Louisville	36.8%	
UCF	39.5%	
TCU	54.0%	

Non-Meet Related Categories. In the non-meet related categories, feature stories were most common with 228 tweets, or 44.4% of the tweets in that category, as Figure 3 shows. Quotes/fun facts were next with 201 (39.2%). This category included quotes of the day, random or fun facts about the team, and statements regarding the team that were not tied to a feature story or that fell into another category. Academic-related tweets totaled 28 for 5.5% of the non-meet related tweets, while rankings and tweets about

another team each had 24 for 4.7% each. University-related tweets only came to eight total for all teams, with 1.6%. As mentioned previously, only two teams did not have live results tweets as their most common form of content, Utah and Air Force. Utah's most common form of content was "Quotes/Fun Facts" (33.7%), and the Air Force's most common form of content was "Pictures" (56.5%).

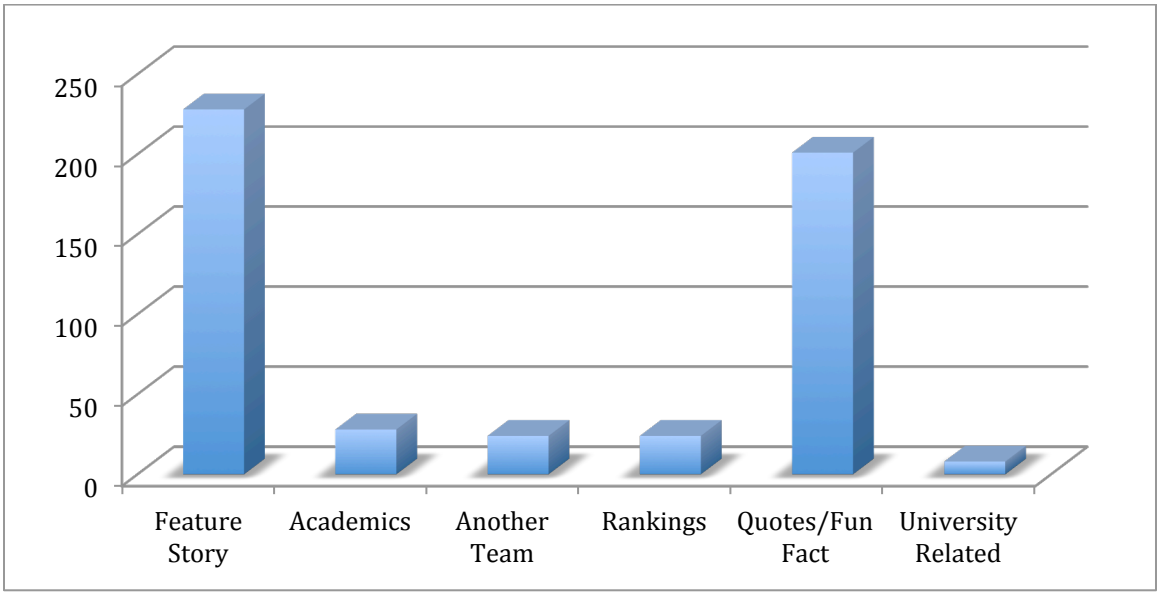


Figure 3. Non-Meet Related Categories – Overall

Further analyses determined LSU and Penn State had the most feature stories, with 32 and 31 respectively, while two teams had no tweets coded as feature stories (Michigan and Texas Men). Ten additional teams had five or fewer tweets in the feature story category, but 12 teams, including LSU and PSU, had 10 or more feature story tweets. As mentioned, the subcategories of academics, another team and rankings had less than 30 total tweets across all teams (see Table 3). Nearly two-thirds of the teams had no tweets about another team, indicating little interaction even with other teams at their school. This may be an opportunity for teams to gain followers of other teams and

bring more awareness to their athletic department as a whole, which in turn could benefit their program. Nine teams also did not have any tweets relating to academics, while the teams that did each had three or fewer tweets total in this category. As collegiate athletics continues to stress the importance of balancing athletics and academics, including more tweets related to academics – whether it's awards-related or not— may be something teams should consider.

Table 3
Non-Meet Related – Team Breakdown

Team	Feature Story	Academics	Another Team	Rankings	Quotes/ Fun Fact	University Related
Florida	13	3	7	0	22	0
Kentucky	2	0	2	0	1	0
Michigan	0	1	0	0	7	0
TexasA&M	8	0	0	4	2	0
FSU	18	1	0	1	4	0
LSU	32	1	0	3	10	0
Wisconsin	11	1	1	5	8	0
Texas- M	0	0	0	0	1	0
Utah	2	1	4	0	39	2
Texas -W	3	3	0	0	0	0
Ok. State	3	0	0	0	1	0
Oklahoma	13	3	1	3	0	0
Virginia	14	1	2	0	22	3
Air Force	5	0	0	0	2	2
Washington	13	2	0	1	2	0
Oregon	3	0	1	2	11	0
Illinois	12	0	0	1	2	0
Iowa State	5	0	2	0	28	0
Miami (all)	1	1	0	0	7	0
Alabama	11	3	0	1	0	0
Penn State	31	2	0	1	14	0
Duke	11	3	4	1	4	0
Louisville	10	1	0	0	2	1
UCF	3	0	0	1	6	0
TCU	4	1	0	0	5	0

Multimedia Links. Overall, 303 tweets included some form of multimedia content, as Figure 4 shows. Of these tweets, 147 (48.5%) included video, 145 (47.9%) included pictures, and 11 (3.6%) included a graphic. The most common forms of additional links were: links back to the team website; pictures; and links to another website. A total of 361 tweets linked back to the team's website while 278 tweets provided a link to another website.

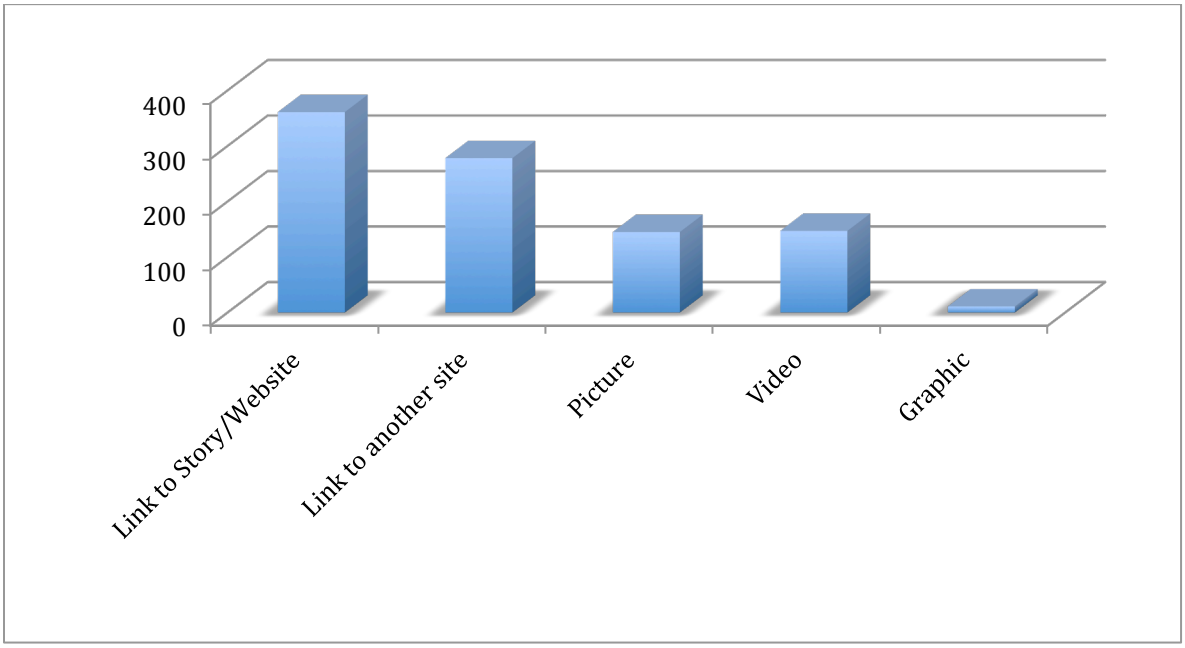


Figure 4. Additional Links

Photos and videos were the most popular of the multimedia facts listed previously. Of the tweets studied, 147 included a video and 145 included a photo. Wisconsin (17), Virginia (16), Miami (15), Utah (14) were the leaders in numbers of photos tweeted. It was interesting to find that four teams (Kentucky, Florida State, Iowa State and Duke) all did not post any photos in the tweets studied. Five teams other teams did not post any videos (Michigan, Texas Men, Texas Women, Air Force and Washington). Florida had

the most videos, with 21, while Florida State (20) and Penn State (17) also had quite a few videos. LSU (13) and Wisconsin (11) were the only other two teams with more than 10 videos. Overall, Penn State had the most photos (17) and videos (17) combined. This school, however, was lacking in interaction with fans and followers, as the account had only one retweet and five tweets at or in response to followers.

It was interesting to see how many teams had no interaction with their followers, i.e. did not retweet or tweet in response to or at a follower at all. As Table 4 shows, three teams (Air Force, Washington and Alabama) had no interaction at all, and 10 teams had less than 10 interactions with followers (Kentucky, Michigan, Florida State, Texas Men, Texas Women, Oklahoma State, Iowa State, Penn State, Louisville and TCU). Oregon by far had the most interaction with followers, with 280 retweets and 27 tweets at or in response to followers. Two other teams had more than 100 total retweets and interactions. Florida had 95 retweets and 12 interactions, and Wisconsin had 42 retweets with 59 interactions.

Table 4
Multimedia- Team Breakdown

Team	Retweets/ Interactions	Photos	Video
Florida	107	0	21
Kentucky	7	0	8
Michigan	1	5	0
Texas A&M	25	1	1
Florida State	1	0	20
LSU	26	6	13
Wisconsin	101	17	11
Texas Men	4	2	0
Utah	39	14	1
Texas Women	3	1	0
Oklahoma State	6	2	1
Oklahoma	14	3	5
Virginia	37	16	4
Air Force	0	13	0
Washington	0	5	0
Oregon	307	8	2
Illinois	25	3	5
Iowa State	2	0	22
Miami (all)	40	15	2
Alabama	0	4	3
Penn State	6	17	17
Duke	17	0	6
Louisville	7	2	3
UCF	13	4	1
TCU	3	7	1

Note: *Oregon was the only team to have more unoriginal (retweets or interactions) than original tweets. Oregon had 307 unoriginal and 237 original tweets.*

Correlation with Athletic Success

At the time when Tweets were compiled (June 2012), eight women's and eight men's teams of the 25 teams included in the sample finished in the top 25 at the 2012 NCAA Division I Outdoor Track and Field Championships (see Table 5). On the other

hand, eight women's and 11 men's teams did not even earn points at the NCAA Championships. The correlation of women's final NCAA finish and their followers was .7057, and the correlation of men's final NCAA finish and their followers was .2219. This indicates a positive, correlation between the two factors. This means strong athletic success does not necessarily cause teams to have more followers. Teams should still market and communicate their athletic success in order to draw attention to their program and their accomplishments, but team's with less success should feel encouraged by this minimal correlation in that their lack of success doesn't mean they can't still have a high number of followers.

Table 5
Final Team Rankings

Team	Final Rank- Women	Final Rank- Men
Florida	12	1
Kentucky	NR	NR
Michigan	NR	33
Texas A&M	2	3
Florida State	14	4
LSU	1	2
Wisconsin	NR	NR
Texas Men	N/A	9
Utah	NR	NR
Texas Women	11	N/A
Oklahoma State	NR	NR
Oklahoma	7	NR
Virginia	NR	56
Air Force	NR	54
Washington	NR	NR
Oregon	2	9
Illinois	30	11
Iowa State	38	49
Miami	38	NR
Alabama	40	NR
Penn State	29	21
Duke	63	NR
Louisville	50	NR
UCF	19	NR
TCU	30	64

***Note**: Final rankings are team finishes at the 2012 NCAA Division I Outdoor Track and Field Championships*

Correlation of Retweets/Interactions, Videos, Photos and Accounts Followed

Tables 4 and 6 both break down the frequency of each team and each factor, but the correlation between the number of followers and retweets/interactions, videos and

how many accounts the team was following all had very small, but positive, R values. The highest correlation was in how many photos were posted (R= .3210), which may indicate this is a form of content followers wish to see. The second highest correlation was in how many other accounts the team was following (R= .2803), which gave a strong indication that following more accounts can add to one's followers. This may be true for several reasons, including creating awareness of the account and showing interest in others' accounts can lead to more interest in the team's account. The correlation of number of retweets and interactions was only .0821, and the correlation of the number of videos posted was just .0436.

Table 6

Team Follower and Following Data

Team	Followers	Following
Florida	3,444	107
Kentucky	3,126	329
Michigan	2,084	87
Texas A&M	1,954	241
Florida State	1,816	44
LSU	1,754	362
Wisconsin	1,503	104
Texas Men	1,473	18
Utah	1,382	341
Texas Women	1,279	17
Oklahoma State	1,178	16
Oklahoma	1,071	79
Virginia	1,007	97
Air Force	951	112
Washington	944	49
Oregon	937	223
Illinois	937	98
Iowa State	926	43
Miami (all)	871	380
Alabama	864	29
Penn State	838	156
Duke	814	117
Louisville	785	17
UCF	767	57
TCU	766	75

Note: *All account data gathered in June 2012.*

Discussion

Summary

The purpose of this study was to perform a content analysis of top Division I track and field teams (N=25) on Twitter to determine the primary practices that may improve marketing and communication with followers. The reason for studying the top 25 teams in terms of Twitter followers, as opposed to the top 25 teams in terms of final NCAA finish, is that is provided the opportunity to apply the results of this study to teams that aren't as successful athletically.

The results of this study show that the most common form of content in these 25 teams' Tweets was by far live results. Only one team, Air Force, did not produce any live results tweets in the 12-month period studied. Of the remaining 24 teams, about 20% or more of their original content tweets were live results. In addition, only one team had a coding category that was more common than live tweets: Utah had 28.6% live results tweets but had 33.7% Random facts/Quotes. Given that live results were a major part of all but one team, teams with fewer followers may want to consider incorporating more live results into their Twitter usage as these teams did. This will engage followers throughout meets, and is a quick and simple way to increase excitement and attention for the teams and their track and field meets. Since messages are limited to 140 characters, Twitter is ideal for short and immediate updates throughout the meet. As Fahri wrote, Twitter's "speed and brevity make it ideal for pushing out scoops and breaking news to Twitter-savvy readers" (p. 28, 2009). Further, providing live results updates throughout the meet can inform more people than the number who would just read the post-meet recap. Hambrick (2012) wrote that when teams have more followers, Twitter can help

users spread information quicker, particularly when their followers retweet the original message to all of their unique followers as well. A further study could analyze if the person running the Twitter account has an affect on the amount of live results tweets. Many track and field sports information directors don't travel with the teams, and if they are the primary person running the account that may cause less live results tweets than if a coach or team staff member was running the account.

As stated, quotes/fun facts had the most tweets of the non-meet related categories with 200. These tweets were not related to a separate story, but their short statements provided information, inspiration or just random facts to followers. Although an entire story online may not be necessary, sometimes it is still important to share the information in these tweets. Hambrick determined from a 2012 study that, "Sport consumers rely on online social networks to receive and share information, and their heightened popularity almost dictates that organizations use them to reach current and prospective consumers" (2012). Their audience may not read an entire article with the information, but a tweet can provide some of the same information in a quicker, more accessible medium which consumers rely on.

Another interesting aspect of this study's results was that the top team 25 finishers at the 2012 NCAA Division I Track and Field Championships were not necessarily the teams with the most followers on Twitter, indicating that athletic success was not primarily responsible for having more followers. This should encourage teams that may not be quite as successful athletically that they can still develop a strong Twitter presence and grow a large audience despite their lesser athletic accomplishments. These teams can build their fan base, increasing their sustainability initiatives that all teams need,

especially teams that aren't performing as high as others. As prior research has shown, athletic directors' explanations for program elimination and have found that marketing does affect program sustainability, so teams can at least ensure stronger marketing techniques if their athletic achievements are subpar. As Cooper (2009) pointed out, it's critical for nonrevenue-sport teams to develop marketing strategies to remain sustainable and to enhance consumer interest in their core product in future years. Previous research has also shown that "as coaches build their online fan database, they are afforded with the opportunity to deliver online content that will enhance loyalty among targeted consumers" (Cooper & Southall, 2010, p. 8). Strengthening their Twitter presence is one way for teams to build their fan base, enhance loyalty, and ensure future interest in their programs, no matter how successful they are athletically.

One team to note is Oregon, which did not join the Twitter world until March of 2012; this was the only team to not have tweets throughout the entire 12 months. Despite having less than half of the amount of time to accrue followers compared to the other 24 teams studied, Oregon had the 16th most followers at the time of the study. One clear difference between Oregon and the remaining 24 teams is the high amount of retweets and interactions (307), which is 200 more retweets and interactions than the next highest team (Florida with 107). While it's hard to prove that this is the primary reason for Oregon having more followers, it is definitely a significant observation to point out.

A final note to point out is that of all the types of content studied, there were no tweets containing promotions of any sort across all 25 teams. This may relate to the individual in charge of running the account, which is generally the sports information director for that sport or a member of the team staff. If a marketing person were to get

more involved with the tweet content, advertising and running promotions through social media could be a great way to increase engagement with followers, and drive attendance at meets and support for the team overall. Interaction through the promotions could also be a good way to determine the level of engagement on the followers' side, by measuring their engagement with the promotion and determining how many people are reading and responding to the content that is posted.

Limitations and Future Research

This study was limited to the 25 Division I NCAA track and field teams with the most Twitter followers as of June 2012. Because tweets from only 25 teams were analyzed, the sample results of this study may not be representative of all Division I track and field teams, non-Division I track and field teams, or non-track and field teams.

Another limitation is the random dates generated for each week studied. A bias in the results could have occurred if the random dates generated included days on which Twitter usage was unusually high or on the other hand, unusually low. Many of the teams had a high frequency of tweets on days where the team was competing, so the random weeks may have included many of those days of meets, or possibly missed days with meets where Twitter usage may have been higher.

Delimitations discussed earlier include the fact that the top 25 teams as of June 2012 may not be the top 25 teams throughout the time of the study. Also, the research done over this particular time period (July 2011- June 2012) may not be representative of the team's success over time on Twitter. Further, Twitter is just one of several popular social mediums, and studying Twitter usage exclusively may exclude teams successfully using other sites, such as Facebook, Instagram or Pinterest.

This study is one of the first to analyze individual collegiate athletic team's Twitter usage. Numerous studies have focused on professional athletes and teams, athletic departments as a whole, and individual student-athletes, but very little research has been done on how collegiate teams use social media to market and promote their teams. Hopefully this analysis can be a base study for numerous additional future studies that can build on the framework of this research.

One possible future study would be to follow up with the 25 teams used in this study and determine if they are still as successful in terms of Twitter followers and their Twitter presence after a one-year period. Another additional study could be to analyze the "bottom 25," or the 25 teams with Twitter accounts that have the least followers. A future study could survey followers of a team to determine their reason for following that particular team. This survey could also be a means to gauge the followers' interest and interaction with the account, as well as provide information so that account could cater to their followers' needs and interests. The survey could have at least two goals: determining the followers' relation to that team (i.e. alum of the program or that school, a fan in general, have friend or child on the team, etc.) as well as determining their primary purpose for following that team on Twitter (i.e. live results, finding out news about the team, picture or video updates, etc.)

A further idea for a future study could be to have two test groups whose Twitter usage is measured and analyzed. One group would Tweet as they normally would, and another group could follow a set marketing and communication plan with the goal of attaining more followers. The two groups could be compared in how many followers they

have after a particular amount of time to see if planned marketing and communication efforts assist in attracting new followers and fans.

Conclusions

Social media is, and will continue to be, an essential outlet for communication and marketing in athletics. As technology continues to grow, access to the Internet and social media outlets will become increasingly important modes for marketing and communicating with fans. Because of this, teams need to learn how to optimize their social media usage in order to capitalize on their very accessibly audiences.

Success on Twitter does not necessarily mean just increasing numbers of tweets, as accounts such as Kentucky or Michigan show. Kentucky had the second most followers with 3,126 and Michigan had the third most with 2,084, but Kentucky only had 41 tweets fall on the random 12 weeks, and Michigan only had 27. In comparison, a team like Penn State had the 22nd most followers with 838, but had a much larger amount of tweets studied from the 12-week period (287).

Overall, the results of this study serve as a strong base for future studies in determining best marketing and communication practices in social media. The results show that live results were the most common form of content for all but two teams, which may encourage teams to either continue or start tweeting live results during track and field meets.

APPENDICES

Appendix I

Team Twitter Account Data

Team	Twitter Handle	Followers	Conference	Tweets Studied
Florida	@GZTrackField	3,444	SEC	327
Kentucky	@KentuckyTrack	3,126	SEC	25
Michigan	@umichtrack	2,084	Big10	26
Texas A&M	@aggietrk	1,954	Big12	366
Florida State	@FSU_track	1,816	ACC	113
LSU	@LSUTrackField	1,754	SEC	416
Wisconsin	@Badger_Track	1,503	Big10	402
Texas Men	@TexasMTF	1,473	SEC	23
Utah	@Utah_trackfield	1,382	Pac-12	158
Texas Women	@TexasWTandF	1,279	SEC	27
Oklahoma State	@run4okstate	1,178	Big12	38
Oklahoma	@OUTandF	1,071	Big12	178
Virginia	@UVA_Track	1,007	ACC	171
Air Force	@AirForceFalcons	951	Mountain West	23
Washington	@UWTrack	944	Pac-12	116
Oregon	@OregonTF	937	Pac-12	544
Illinois	@IlliniTrackXC	937	Big10	112
Iowa State	@ISUTrackXC	926	Big12	133
Miami (all)	@MiamiTrack	871	ACC	155
Alabama	@AlabamaTrack	864	SEC	81
Penn State	@PennStTFXC	838	Big10	290
Duke	@Duke_TF_XC	814	ACC	107
Louisville	@LouisvilleTrack	785	SEC	75
UCF	@UCF_Track	767	Conference USA	56
TCU	@TCUTrackField	766	Mountain West	53

***Note**: All account follower data retrieved June 2012*

Appendix II

Coding Protocol for Team Twitter Content Analysis

1. Only official team Twitter accounts should be coded.

2. Only tweets from dates on random calendar should be analyzed. (Appendix C)

3. Each tweet should be coded in the following order:
    a. **Column 1 - Cross Country or Track?** Determine if tweet is regarding track & field or if it's about cross country.
        i. If track & field, move on to Column 2 to record source of content.
        ii. If cross country, do not sort further.

    b. **Column 2 - Source of content:** Original content, Retweet, or Interaction
        i. If original content, move on to Column 3 to determine if tweet is meet related or non-meet related
        ii. If unoriginal content, determine if message is a retweet or interaction and do not sort further.

    c. **Column 3- Meet Related?:** If tweet is meet related, move on to Column 4. If tweet is non-meet related, move on to Column 5

    d. **Column 4- Meet Related:** Determine if message is a preview or information prior to the competition; live results throughout the meet; or post-meet recap.

    e. **Column 5- Non-meet Related**: Determine if message is a feature story; is related to academics; is in regards to another team; related to rankings; motivational quotes; or related to the university.

    f. **Column 6- Multi-Media:** Does the tweet content also include multi-media in the form of a picture or video? Mark this column in addition to any previous columns.

    g. **Column 7- Miscellaneous**: If tweet content does not fall into any previously listed code category, mark this column. Coder should describe content of tweet so that similar miscellaneous messages may be categorized.

Appendix III

Tweet Categories

1. Original content?
    a. Yes
    b. No
        i. Retweet
        ii. Interaction
2. Cross country related?
    a. Yes
    b. No
3. Meet related?
    a. Yes
    b. No
4. Meet related
    a. Meet preview or meet related information
    b. Live Results
    c. Meet recap
5. Non meet related
    a. Feature/Interest story
    b. Academics
    c. Involving another team
    d. Rankings
    e. Quote/Random fact
    f. University Related
6. Additional links used
    a. Link to that story or that school's website
    b. Link to another website
    c. Picture
    d. Video
    e. Graphic
7. Miscellaneous – specify

Appendix IV

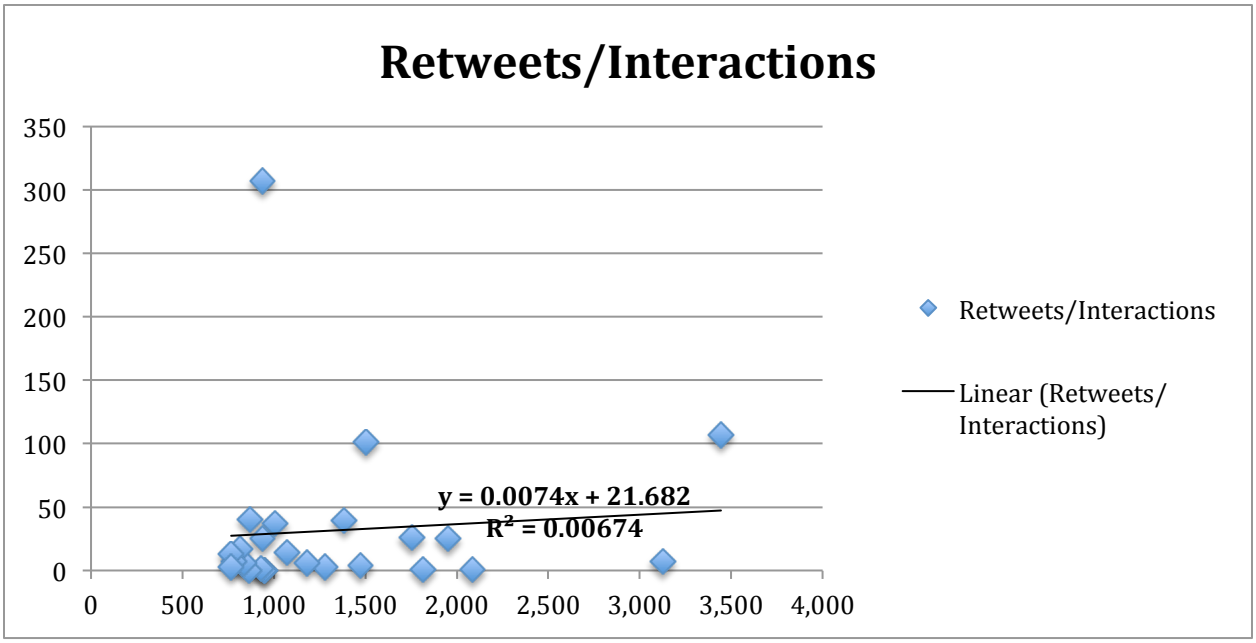
Coding Sheet

Column 1			Column 2		Column 3		Column 4			Column 5						Column 6					Column 7
Original Content?			Cross Country?		Meet Related?		Meet Related Tweets:			Non-Meet Related						Additional Links					Miscellaneous (Specify)
Yes	No		Yes	No	Yes	No	Preview/Info	Live Results	Recap	Feature Story	Academics	Another Team	Rankings	Quotes/Fun Fact	University Related	Link to Story/Website	Link to another site	Picture	Video	Graphic	
	Retweet	Interaction																			

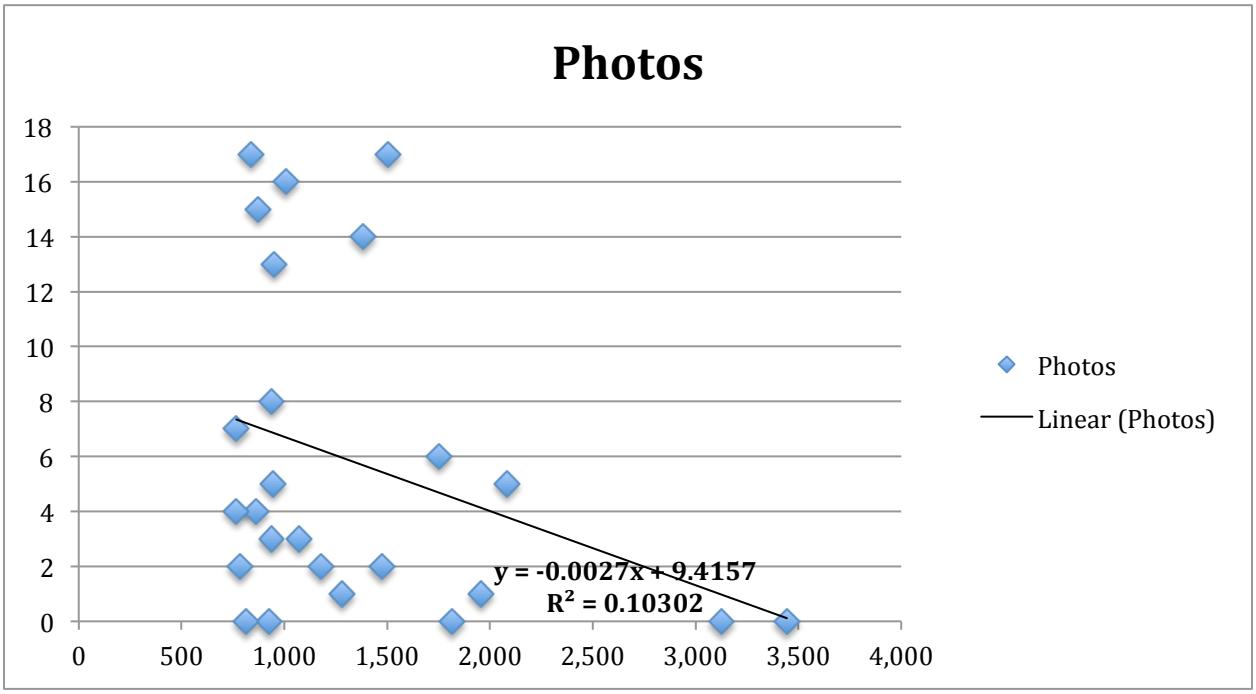
Appendix V

Correlation Graphs

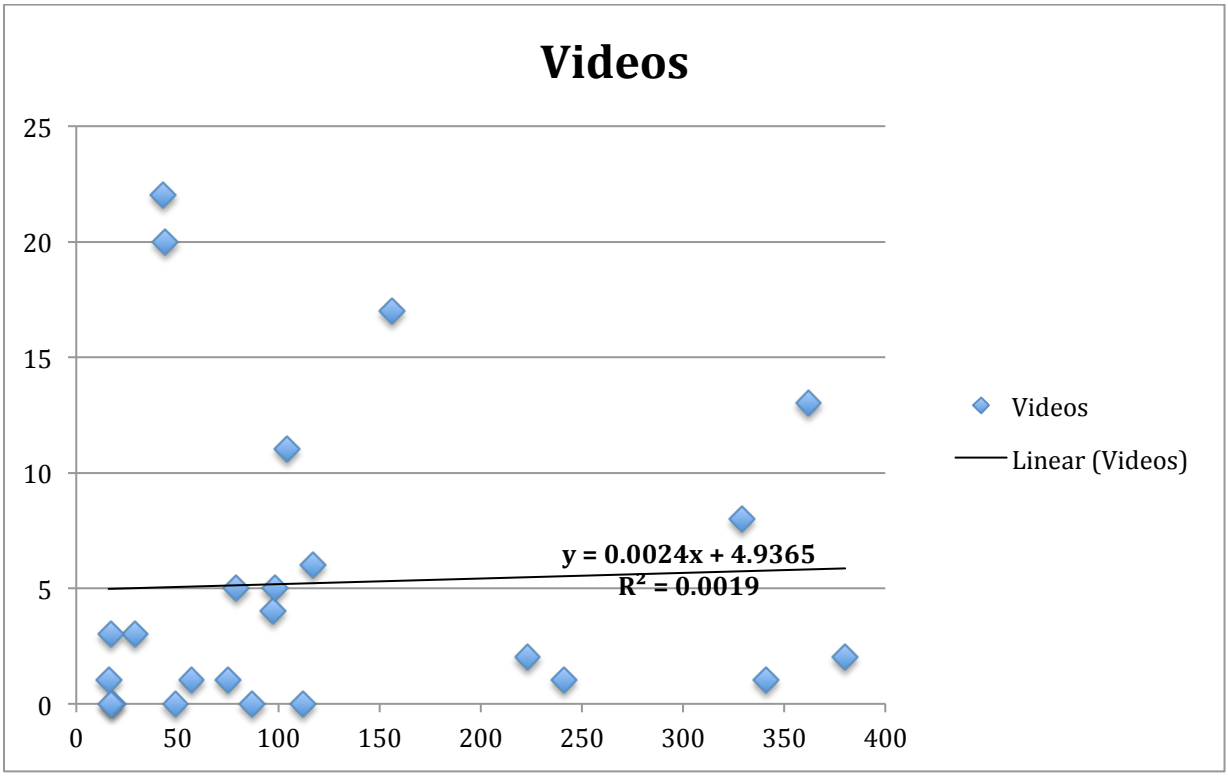
Graph A: Correlation of Retweets/Interaction and Followers



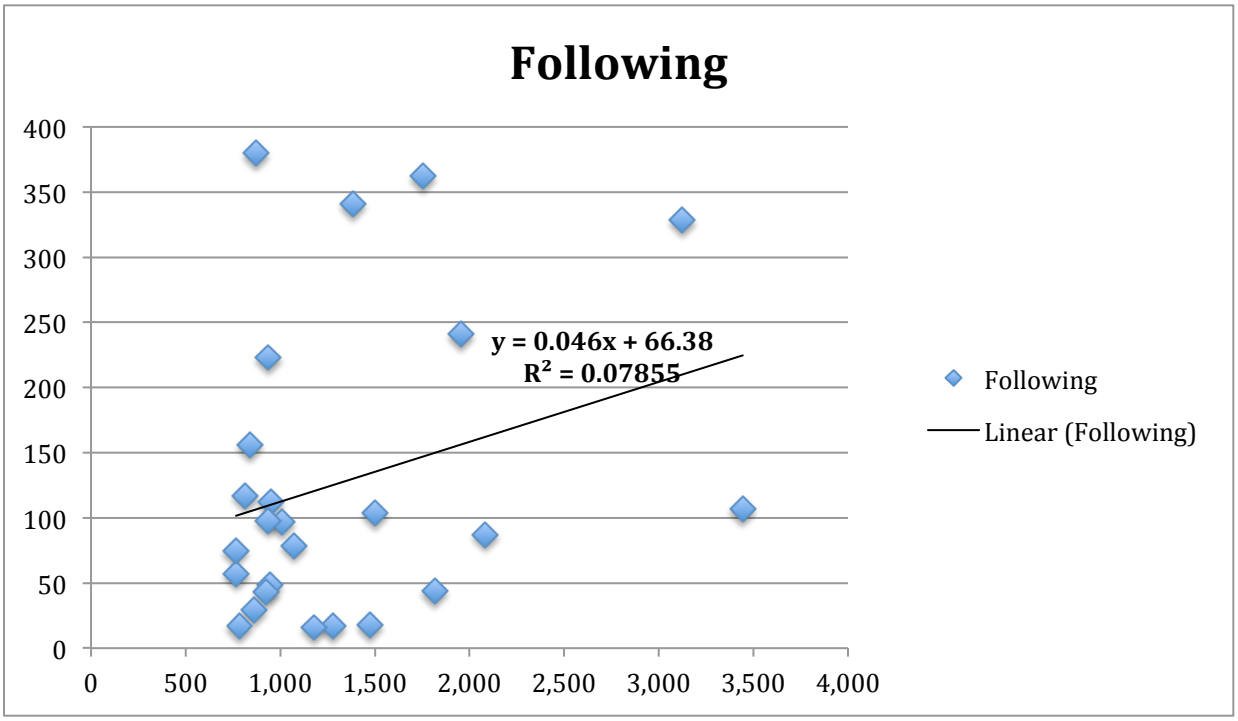
Graph B: Correlation of Photos and Followers



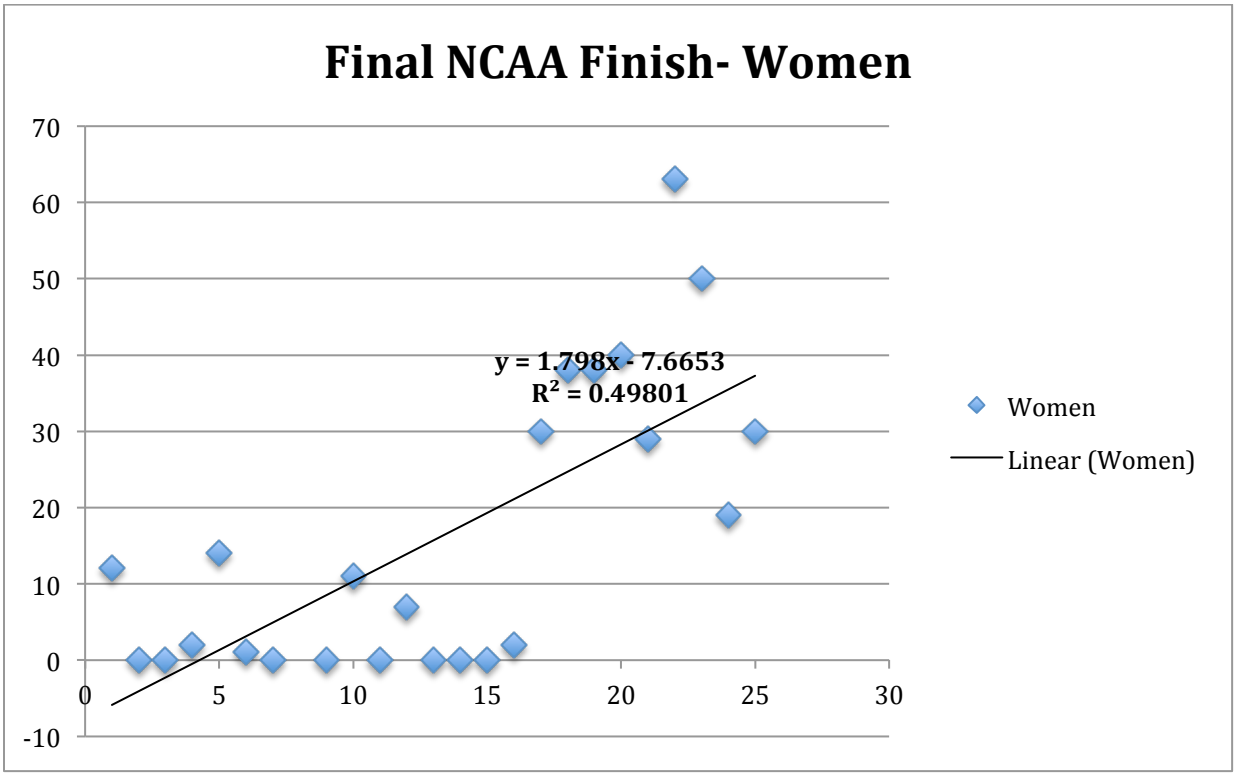
Graph C: Correlation of Videos and Followers



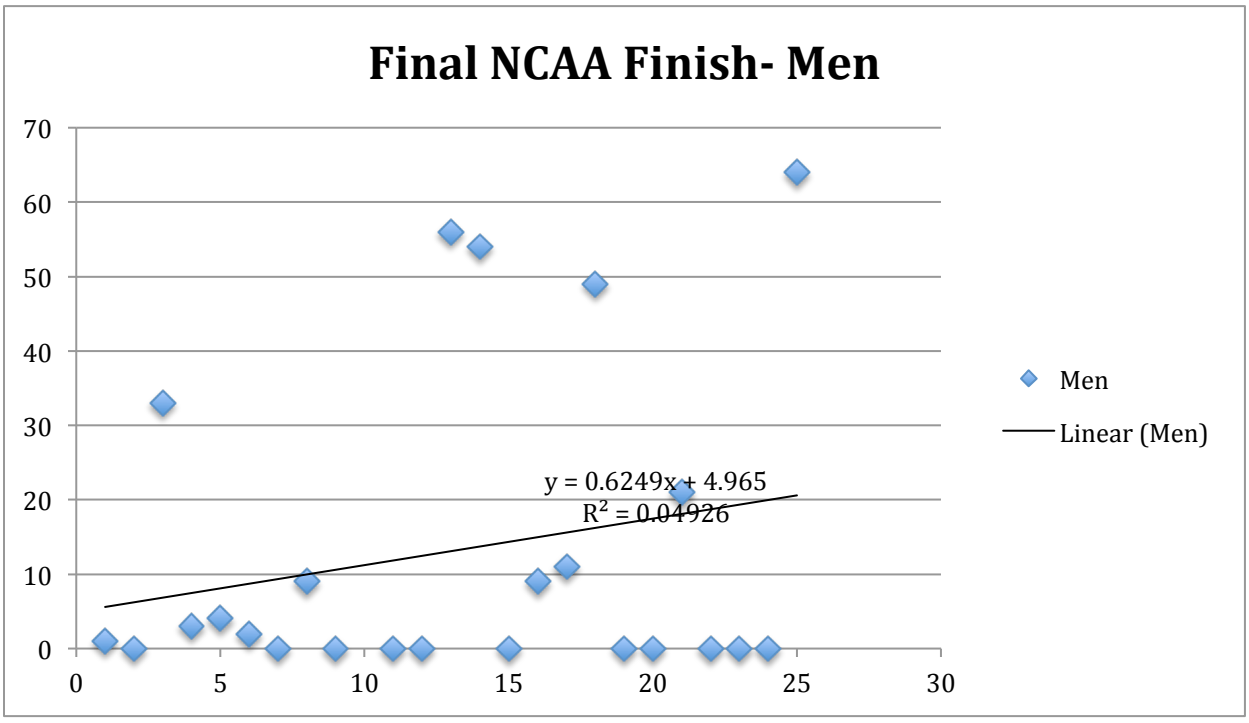
Graph D: Correlation of Accounts Followed and Followers



Graph E: Correlation of Women's Final NCAA Finish and Followers



Graph F: Correlation of Men's Final NCAA Finish and Followers



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