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SEC ATHLETICS AND ENGAGEMENT OF FANS

A Thesis

presented in partial fulfillment of requirements

for the degree of Master of Arts

in the Department of Journalism and New Media

The University of Mississippi

John Harrison Rowland

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ABSTRACT

The Southeastern Conference (SEC) is one of the premiere affiliate conferences of the National Collegiate Athletic Association (NCAA). Sports of all kinds have, for some time, engaged fans in multiple ways with the advent of social media enabling new forms of engagement. One of the most popular social media platforms for fan engagement is Twitter. This study is one of the first to explore how SEC teams use Twitter to interact with fans.

After downloading Twitter data from all SEC baseball and football accounts, engagement was established. Engagement was defined as retweets plus favorites. With engagement defined and used as an independent variable, emojis, hashtags, media, and mentioning users were used as dependent variables. The independent variables were examined for frequency of use and relation to engagement. To examine the relationship to engagement, a hierarchical linear regression with three models was conducted. Under this study, hashtags were found to be a significant player in the role of engagement.

Overall, the results of this study found that sport did play a role in engagement as football had more of an impact on engagement. Additionally in the study, the only independent variable that provided significant results was hashtags. In this sample, not having a hashtag in the body of a tweet would lead to an increase in engagement.

Keywords: College football, college basketball, Twitter, Engagement, Fandom

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1. Introduction

Sport fandom is an undeniable part of our culture. Millions of Americans gather in front of televisions, in stadiums, and on various devices to watch and engage with “their team.” Over the past several decades, sport teams of all stripes have increasingly turned to social media, and a key platform for growing a fan base online has been Twitter. Highfield, Harrington, & Bruns (2013) state that Twitter is used as a predominant form of fandom since the user is allowed to offer their own commentary on “a universally shared media as an event takes place.” While the research of new media and social media has become more popular among the communication world, the one section that lacks research is collegiate athletics and their social media accounts. When someone dives into academic articles surrounding college athletics social media there is a shortfall of research.

This thesis will examine, in particular, the use of Twitter by athletic teams in the Southeastern Conference (SEC). According to research conducted by Parker and Hogervorst (2019), Twitter is a medium where athletic teams should be able to build constant, long-term, and financially beneficial relationships with fans. Parker and Hogervorst (2019) continue in saying that their research was limited to four baseball games in the Atlantic Coast Conference citing a limitation was needed to see how other sports teams engaged with fans to enhance the accuracy of their research.

Ballard (2019) states one event casual fans enjoy is one of the of the biggest events within the National Collegiate Athletics Association (NCAA) and in sports: March Madness. The near month-long postseason tournament of 68 teams is one of the biggest draws for

advertisement for sporting events, as an estimated billion dollars was spent in advertising in 2018's March Madness. In addition to college basketball, collegiate football constitutes five out of the top ten viewed broadcasts in America (Paulsen, 2019). Since it is one of the biggest draws on broadcasts throughout the year, football and basketball teams warrant research.

Crawford (2019) found that seven out of the top twelve head football coaches in terms of pay come from the South Eastern Conference (SEC). Though money is a reason to look in to the SEC programs, another reason has to do with their success on the football field. The on-field product is consistently among the most recruited. According to Crawford (2019), Alabama was home to the top eight recruiting classes out of the last nine years, and the only one to top Alabama was the University of Georgia, both of which are SEC programs. In addition to recruiting, the SEC has success in the postseason of the NCAA's bowl games (Palm, 2019). In bowl games for 2019, the SEC went 7-2. Tennessee, Georgia, Alabama, Kentucky, Florida, Texas A&M, LSU (who won two bowl games) accounted for the SEC's seven wins in the post season format (Palm, 2019).

Since the SEC's on field success is evident and social media is becoming more prominent in the landscape of fandom, one of the biggest ways that teams are choosing to engage with fans is through Twitter. Williams, Chinn, & Suleiman (2014) state that it is a valuable tool for fans to engage with their team. Chen (2016) confirms Williams et al. (2014) by saying that Twitter has "undoubtedly" become a more popular social media than has Facebook. Williams et al. (2014) research found that sports teams tweet year-round to engage users, often using tailored tweets to keep the users engaged and the fandom sparked year-round. Williams et. al. (2014) were able to come to this conclusion by conducting a two-phase study. In the first phase, a preliminary assessment of basic tweets was conducted whereas in the second phase qualitative data was

applied. This model is similar to the one to be conducted in this research, but the second phase will be a quantitative data set and not a qualitative one.

2. LIT REVIEW

Twitter is a social media platform that launched in 2006 and has become undoubtedly one of the most popular social media sites (Forsey, 2019). Alsam's (2019) statistical reporting of Twitter data reveals that there are 330 million active Twitter users and 500 million tweets sent per day. While Twitter has become a success story for social media, Carlson (2011) states that Twitter came from a failed podcast company attempt when Jack Dorsey (current CEO) came along to guide the company toward a status, or what is currently happening basis.

Twitter has several factors which are used to measure engagement. First, Twitter has a retweet option to share content. When a user elects to retweet a tweet, Twitter describes this as being able to quickly help you and others share a tweet with your followers. Users also have the ability to retweet both their own tweets along with someone else's tweet. Only users with public (not privatized) accounts can have their tweets retweeted. Another way a user can interact with tweets is by liking or favoriting the tweet. Here, the user clicks the outline of a heart under the tweet body. The main difference between this a retweet is that your followers will not see these appear in the timeline. Another difference is that a private account can have their tweets liked.

PSYCHOLOGY THEORY

Lee (2016) states that people favorite tweets on Twitter for two reasons: reaction/response and function/purpose. Lee (2016) found that reactions from users on Twitter are caused by the content of the tweet or the author of the tweet. Olmsted (2014) counters the findings of Lee (2016) and states that cognitive dissonance is the reason for clicking on and engaging with tweets. Olmsted (2014) states that challenging your audience and countering their

assumption is a great way to draw engagement. Additionally, Olmsted (2014) points to extrinsic value as a reason one may engage in a tweet. Olmsted (2014) would suggest that users of Twitter would be offering up a reward for clicking on a video.

Rivera (2017) found that fandom can take place in more than cheering for a team. Rivera (2017) states that when a fan identifies with a team, the fan will react accordingly to the results on the playing surface. The results of these actions can be jubilation for wins and anger for losses (Rivera, 2017). In addition to jubilation, mania may occur as a result of a team winning and can lead to riots and other forms of “counter-productive” means of celebration (Rivera, 2017).

Ma (2009) found that Twitter fulfills the social aspect on the Maslow’s Hierarchy of needs. Ma (2009) continues by stating that the fulfillment can go deeper than the social aspect and reach levels of self-esteem and social recognition. Dr. David Lewis, a cognitive neuropsychologist and director of research based at the University of Sussex stated: "Using Twitter suggests a level of insecurity whereby, unless people recognize you, you cease to exist. It may stave off insecurity in the short term, but it won't cure it (Ma, 2009)."

Grohol (2018) states that humans are inherently social creatures. Grohol (2018)’s findings continue by saying most people will not go on to write novels or books yet still have the social desire to be heard. Grohol (2018) would argue that the social need to be heard can be traced back multiple generations so that one is in the know and not missing out.

Marshall, Ferenczi, Lefringhausen, Hill, & Deng (2018) found that Twitter users have personality traits. Additionally, Marshall et al. (2018) state these personality traits can be expressed through Twitter. The personality traits can be expressed through Twitter because of what the user interacts with on Twitter and these interactions are reflected in their own tweets

(Marshall et al., 2018). The traits found were based on four categories, openness, extraversion, narcissism, Machiavellianism (Marshall et al., 2018).

Hooper (2017) found that high school athletes who are being recruited to play collegiate sports and make it to college campuses are changing the landscape of social media and athletics in a negative fashion. Hooper (2017) goes on to cite instances from the University of North Alabama (Football player tweeted racially charged tweet toward President Obama), Cardale Jones of Ohio State (posted a tweet saying attending classes for football players was pointless), and San Diego State University Women's Soccer players (posting alcohol and partying pictures). Hooper (2017) states the actions of these players lead to repercussions for those using social media in a negative way. Hull and Kim (2016) used Instagram to display how MLB teams use social media to display their charity efforts. Less than five percent of both post content and hashtags were related to charity, Hull and Kim (2016) found. Hull and Kim (2016) found that they Rays posted the most in regards to their charity and eight teams did not have any charity content. Hull and Kim (2016) discovered that posts coded as charity carried on average the third lowest amount of comments and in addition carried the fourth least number of likes.

LENGTH OF TWEETS

In 2017, Twitter expanded their character limit from 140 characters to 280 characters. Since the tweet length limit was doubled, Twitter's CEO Jack Dorsey claimed that tweets are not any longer than they were in length (Mohan, 2019). Perez (2018) corroborates the claim that tweets have not become longer in nature by stating that only one percent of tweets have hit the 280-character length and only 12% of tweets are longer than 140 characters. In addition to the findings from Perez (2018), Hunter (2018) found that tweets with over 140 characters demand more time to engage with the tweet and thus may not get as high of engagement. Furthermore,

Ryan Boyd stated that since Twitter was intended to be consumed as short messages and the ideal tweet for engagement is 1-2 sentences (McHugh, 2017). This statement from Ryan Boyd (McHugh, 2017) confirms what Perez (2018) found, that 33 characters are the best length for a tweet. Another way a shorter tweet could lead to an increase in engagement is a higher number of exclamation points used in a tweet helps garner replies, which overall leads to help in engagement (Perez, 2018). Hutchinson (2019) states that shorter tweets draw more engagement.

To counter these findings about tweets shorter in nature, The Ultimate Guide (2019) found that 71-100 characters is the ideal number to increase engagement. To further the counter argument of longer tweets, Social Report (2019) found that tweets with characters between 71-100 characters have a 17% higher engagement rate. QuickSprout (2019) supplements this by saying the engagement is 17% higher when the character length in a tweet is under 100 characters. This is important because for sports, some tweets may be accompanied by a non-specialized video or GIF, meaning statistics from the contest are not included which is why more characters may be more useful in sports: to state how well the team did breaking records, individual performances, etc.

TAGGING USERS IN TWEETS

While character length is important for engagement of users, the tagging of users can be equally important in sharing the message (Osman, 2017). Under the current constructs of social media, athletes are becoming their own brands from a very early age. This has become so much the case that the University of Texas made their entire 2020 signing class a logo for each player that will follow them throughout their career as a Longhorn (Cook, 2020).

Athletes are able to connect to a large audience on social media without spending much time doing so (Kian and Sanderson, 2014). Additionally, Kian and Sanderson (2014) state “the

process (of which athletes gain a following on social media) unfolds organically due to the high-profile nature of athletes.” Later in the text, Kian and Sanderson (2014) state athletes of all levels are picking up social media, in particular; Twitter, at an alarming rate.

The parasocial theory states that through mediated encounters, viewers particularly of television were more likely to consider characters on the screen as friends, despite having limited interactions (Horton and Wohl, 1951).

MEDIA IN TWEETS

A variety of links in the Twitter timeline is a good way to keep content fresh, this can either come from embedded website links or from a link in the tweet that is not embedded (Gotter, 2019). Gotter (2019) continues by stating that media in tweets can help increase engagement by 313%. Furthermore, Gotter (2019) goes on to state that videos outperform images. Additionally, Gotter (2019) found that video related content yielded 2.5x more replies, 2.8x more retweets, and 19x more favorites than does content that does not live natively in Twitter. Webster (2017) supplements the findings of Gotter (2019) by stating that tweets with media increase 34% in engagement. One way to drive engagement is through the use of quick GIFs Webster, 2017). In another form of media that can be used in the body of a tweet, images used in tweets can increase retweets by 150% (Klingman, 2019). Hutchinson (2019) states that there are around 1.2 billion video views on Twitter per day which equates to two times growth in the last year. Hutchinson (2019) continues by stating that video is the most engaging content. Hutchinson (2019) also found that tweets with video are ten times more likely to be engaged with opposed to when it does not have a media attached. QuickSprout (2019) found that photos may get more retweets and engagement, videos have more favorites.

TWITTER AND HASHTAGS

Twitter has the ability to hashtag an item. According to Yang, Sun, Zhang, and Mei (2012), the pound symbol (hashtag) followed by words have evolved from a basic form of communication to a tool used for a multitude of purposes such as ad campaign and online chats. As this previous research from Yang et al. (2012) shows, hashtags allow an easier search for a collection of tweets with the same context. This means that content can easily be searchable and organized by those sending the messages. For example, #BBN is a widely utilized hashtag for the University of Kentucky. In the 2019-20 season, the University of Kentucky athletic teams have 3 predominant hashtags with a different set of branding and messaging for each hashtag. #LaFamilia relates to players who have moved on from the basketball program either to the pro ranks or aside from basketball and deals with Alumni updates. #TGT - The Greatest Tradition - is used as the men's basketball team hashtag this year. Any search on Twitter will reveal Kentucky Men's Basketball content. #WeAreUK is a generalized UK Athletics branded hashtag where if this is searched, all sports can be found. All sports teams that will be researched in this piece all have a hashtag that is utilized by the team.

Webster (2017) found that tweets with at least one hashtag will generate 33% more engagement. In addition, Webster (2017) found that tweets with only one hashtag are 69% more likely to get more retweets than those with two or more. Furthermore, if your hashtag has 11 or more characters, it is 117% more likely to be retweeted than those tweets who have 6-10 character hashtags (Webster, 2017). Haden (2015) confirms what Webster (2017) says about hashtags by stating that tweets with hashtags will receive double the engagement opposed to those without. To expand upon the findings of Webster (2017), Gotter (2019) states that hashtags are an essential portion of the body of a tweet. Gotter (2019) states that the use of a hashtag can lead to a 1065% increase in engagement opposed to similar tweets. Luckie (2012) found that

hashtags related to a brand can increase engagement by 1.5x compared to when a hashtag is not used.

To confirm the findings of Luckie (2012), Lee (2019) found that tweets with one or more hashtags are 55% more likely to be retweeted. Additionally, Lee (2019) goes on to state 1-2 hashtags generate the most interactions or engagements with a tweet. West (2019) found that 1-2 hashtags are the ideal number for engagement. Continuing Lee (2019)'s findings: 3-4 hashtags lead to a 20% decrease in engagement, 6-10 hashtags used leads to a 40% decrease and 10+ hashtags lead to a 75% decrease in engagement.

Twitter Hashtag (2019)'s data contests this data. Twitter Hashtag (2019) found that tweets with no hashtags engage the highest number of people. Twitter Hashtag (2019) offers the suggestion that some hashtags simply become jokes or become oversaturated. Twitter Hashtag (2019)'s data does confirm that the more hashtags there are in the body of a tweet, the less engagement the tweet will have.

Manzanaro, Valor, & Paredes-Gázquez (2018) used an experiment to find that there are four driving factors in corporate engagement on Twitter: the inclusion of media content and hashtags, use of English language and the age of the tweet. Hashtags and media very positively increase the likelihood of having a tweet become retweeted or favorited (Manzanaro et. al., 2018).

TWITTER AND EMOJIS

Emojis have been around since 1999 when they were first introduced to Japanese mobile phone users (Twitter Mention, 2019). Since then, emojis have become more commonplace and are on all social media sites, including Twitter. According to Twitter Mention (2019), the most popular emoji is "Face with tears of joy", (figure 1, emoji 1). The second most used emoji is the

red heart, (figure 1, emoji 2). The third most used emoji is the hearts eyes, (figure 1, emoji 3). While these were found to be the most popular, the emojis with the highest engagement were the moia (figure 1, emoji 4), dolphin (figure 1, emoji 5), and queen (figure 1, emoji 6). Most importantly, according to Twitter Mention (2019), emojis are more effective than are hashtags when it comes to increasing engagement. Twitter Mention (2019) offers the solution that bright little icons (emojis) make it more likely for people to react than do hashtags. More so, Twitter Mention (2019) found that the largest group of users with higher levels of engagement had an emoji contained in their username. Based on this, Twitter Mention (2019) claims that more emojis statistically engages more.

In computer mediated communication, emojis give a similar nonverbal cue as would be given in a face to face interaction (Tang and Hew, 2019). Furthermore, Tang and Hew (2019) found a higher use of emojis would lead to a higher perceived level of intimacy. This intimacy would ultimately lead to higher levels of engagement on social media (Tang and Hew, 2019). To conclude their studies, Tang and Hew (2019) found three major reasons to use emojis: “1. To express emotions. 2. To avoid misunderstanding and to substitute textual expressions. 3. For enjoyment and fun.”

Park, Baek, & Cha (2014) conducted tests that involved how the emojis look. For example, the first hypothesis tested vertical-style emojis and that they are more used in collectivistic cultures (Park, Baek, & Cha, 2014). This hypothesis from Park, Baek, & Cha (2014) was supported by data. A second hypothesis from Park et. al. (2014) “tested whether people from individualistic and collectivistic cultures favor emoticons with mouth-oriented and eye-oriented nonverbal facial cues, respectively. As anticipated, people from collectivistic cultures tend to suppress emotional expression by favoring emoticons focused on eye shape. In

contrast, those from individualistic cultures, who are encouraged to express personal feelings, use emoticons focused on mouth shape.”

Grossman (2018) states that emojis make it easy to convey emotion and save space in a conversation. Lam (2015) found that 76 percent of Americans have used emojis in business communication. Not only are emojis becoming more commonplace in business communication, it is becoming more prevalent in everyday social exchanges as well.

FIGURE 1

| Emoji | | |
|-------|-------------|---|
| 1 | Face of Joy | ☐ |
| 2 | Red Heart | ♥ |
| 3 | Heart eyes | ☐ |
| 4 | Moyia | ☐ |
| 5 | Dolphin | ☐ |
| 6 | Queen | ☐ |

While Bischoff and Palea (2019) deal with a specific demographic in teenagers, their research found that more than 75 percent of respondents use emojis in their instant communication when 45 percent of their researched body found that they use emojis often. Bischoff and Palea (2019) continues in saying emojis are often used to make sentences shorter and is an advantage because it helps the user to type quicker. In the world of collegiate sports, speed is essential when delivering a message on social media. At times, there are over 100 media members at a given game and all are trying to beat the other to get the message out the quickest. Score updates from teams after use emojis to represent teams since emojis are quicker to type than are words.

RESEARCH QUESTIONS

Hutchinson (2019) and Gotter (2019) research suggests the importance of media in tweets. Luckie (2012) states that hashtags can increase brand engagement by 1.5x. Horton and Wohl's (1951) findings suggested the influence of a relationship based on seeing someone on television or sporting event lead to a perceived increase in illusion of relationship. Based upon this prior research, the following research question is proposed to examine to what extent SEC schools use these elements.

Research Question 1 - How frequently do schools use:

- A. Media?
- B. Hashtags?
- C. Mentions?

Webster (2017) states that quick GIFs (a form of media) is an easy way to aid in driving engagement. Twitter Hashtag (2019) states that tweets with no hashtags engage the highest number of people. Horton and Wohl's (1951) parasocial theory would suggest an influence of positive engagement. Twitter Mention (2019) stated that emojis would make a user more likely to engage with a tweet. Based upon this prior research, the following research question is proposed to examine which, if any, of the following elements influence engagement.

Research Question 2 - Does the use of the following elements associate with engagement?

- A. Media
- B. Hashtags
- C. User Mentions
- D. Emojis

3. Methods

This study uses data collected from the public Twitter streaming API (Application Programming Interface). Tweets with a public privacy setting are captured and allows the researcher to examine many different facets of a tweet including: favorites, retweets, and tweet length along with many other variables.

In this research, engagement was defined as the combining of retweets and likes (favorites) in a tweet. The combining of favorites and likes were chosen to define engagement because these elements were practically isomorphic ($r = .96, N=502, p < .01$). Combining of favorites and retweets was also done because retweets and favorites cater to varying needs of the user but both reflect an interaction with a user and the tweet. After engagement was totaled, tweets from the specific sport account were sorted from most engaged to least engaged. From here, only the top 100 engaged with tweets were kept.

This means that for each school except Ole Miss, 200 tweets represent the sample of the school. One hundred per team was the cutoff as it allows for multiple tweets to come from the same game day as well as several tweets to have hype content. On game days, there are a plethora of content being output. Hype content on game days comes in multiple forms as graphics are made as well as video content. Other examples of game day content are tweets regarding updates such as big plays within the course of a ball game, final scores, and other forms of photo/video content from that game posted in the hours following the game. In this research, engagement will also represent the dependent variable.

Only organic tweets will be viewed in this research. Organic tweets will be defined as tweets that came from the original user and does not include quote tweeted content. While the quoted tweets may help the promotion of the program, what will be examined is the tweets tweeted by the program with no influence from outside sources. Future research may be considered in this area to see how it impacts branding along with engagement.

The independent variables for this research are the schools themselves, sport, media, hashtags, mentions, and emojis. Schools are tabbed as an independent variable since there are 14 separate teams. Sport was accounted as an independent variable as there are two different sports examined: football and basketball. Media, hashtags, mentions, and emojis were coded as variables based on them being present or not being present. The sport variable was defined as basketball being 0 and football being 1.

The SEC portion of play for the 2018-19 basketball season will be analyzed for the basketball portion of research. This will constitute both regular season SEC play as well as the SEC conference tournament. Since not all teams reached post season of March Madness, research will not be conducted following the tournament. The dates for the basketball research will be drawn from January 1, 2019 and contain tweets through March 20, 2019. The extra days before the opening of play and following the SEC tournament and before the NCAA tournament will allow the examination of hype content for teams as well as recap pieces of the regular and postseason.

For the football accounts of the SEC teams, the dates of tweets examined will be from August 24, 2019 to December 14, 2019. This date range allows for hype content leading up to the first week of regular season play and allows pad for awards that were released upon the conclusion of play of the postseason and right up until bowl play began.

Data were collected from the following teams and accounts: Alabama Crimson Tide (@AlabamaFTBL) and (@AlabamaMBB), the Arkansas Razorbacks (@RazorbackFB) and (@RazorbackMBB), the Auburn Tigers (@AuburnFootball) and (@AuburnMBB), the Florida Gators (@GatorsFB) and (@FloridaMBK), the Georgia Bulldogs (@GeorgiaFootball) and (@UGABasketball), Kentucky Wildcats (@UKFootball) and (@KentuckyMBB), Louisiana State University Tigers aka LSU (@LSUFootball) and (@LSUBasketball), University of Mississippi Rebels aka Ole Miss (@OleMissFB) and (@OleMissMBB), Mississippi State University Bulldogs (@HailStateFB) and (@HailStateMBK), Missouri Tigers (@MizzouFootball) and (@MizzouHoops), South Carolina Gamecocks (@GamecockFB) and (@GamecockMBB), Tennessee Volunteers (@Vol_Football) and (@Vol_Hoops), Texas A&M Aggies (@AggieFootball) and (@aggiembk), and the Vanderbilt Commodores (@VandyFootball) and (@VandyMBB). One exemption to the list of SEC teams is the Ole Miss Rebels basketball account. Their basketball team deleted tweets as it was nearing being locked out of Twitter due to copyright material used in tweets. For this reason, the Ole Miss Men's Basketball team account will not be examined in this research.

With 2700 of their top 100 engaged with tweets, it is now possible to generate metrics from the tweets patterns and create comparisons between fan bases, sports, along with commonalities with the conference. The sum of 2700 tweets come from the SEC football programs which generated 1400 tweets and 1300 tweets coming from basketball. Linear regressions along with univariate, descriptive statistics such as ratios will be utilized to draw comparisons among the team's social engagement.

From the data collected, the following columns of data will be used:

- Created_at: Time when tweet was created.

- Screen_name: The user who posted the tweet.
- Text: The text contained within the tweet.
- Source: Where the tweet was posted from, platform wise.
- Favorite_Count: Total amount of favorites as of time of scrape.
- Retweet_Count: Total amount of retweets as of time of scrape.
- Hashtags: Items in tweet that were hashtagged
- Media_Type: What type of media is in tweet. IE: video, photo
- Mentions_Screen_Name: Who was tagged in the tweet. IE, @John_Rowland14

These fields collected will be used by the researcher to see the most basic of Twitter commonalities amongst fan bases and Twitter users. These variables were selected because of the value placed on them according to previous research. Kian and Sanderson (2014) evaluations on the stardom effect make the mentions category relevant. Twitter Mention's (2019) research found that hashtags and emojis play a significant role in the body of a tweet placing emphasis on them to be researched further in this particular case of college athletics. Perez's (2018) data found that tweets are generally shorter in length.

To answer Research Question 1, descriptive statistics will be run to see the frequency at which variables are used. To answer Research Question 2, a regression model will be used. The regression model will be run with Ole Miss as the constant to compare other schools in the SEC to Ole Miss. Ole Miss was chosen as the constant because the researcher wanted to compare teams to the institution which this paper represents.

4. Results

Research Question 1 asked the frequency at which schools use variables to increase engagement. RQ1A asked how often schools use media, defined as media being present in the tweet and media not being present in the tweet. As shown in Table 1, media was included in nearly every tweet from all schools. On average, football accounts used media in 99.14% ($n = 2677$) of tweets, and basketball accounts used media in 97% ($n = 2619$) of all tweets. Several teams used media in all their top 100 engaged with tweets. The football teams who used media in their top 100 tweets are: Arkansas, Georgia, Mississippi State, Missouri, Texas A&M, and Vanderbilt. The lone basketball team to include media in all 100 of their top engaged with tweets were the South Carolina Gamecocks.

RQ1-B asked the frequency at which schools use hashtags in their tweets, defined as hashtags being present in the tweet and hashtags not being present in the tweet. Overall, hashtags were used in 67.74% ($n = 1829$) of teams' top 100 tweets (Table 1). Only three of the 27 teams used a hashtag in all 100 of their top tweets, namely Alabama basketball, Texas A&M basketball, and Vanderbilt football. Schools saw quite a diverse range as to whether hashtags were used or not. Arkansas used hashtags in 19% ($n = 38$) of their top 200 tweets. Tennessee used hashtags in 38% ($n = 76$) of their top 200 tweets.

RQ1-C asked the frequency at which users were mentioned in tweets, defined as mentioning users being present in the tweet and mentioning users not being present in the tweet. Overall, users were mentioned in 27.7% ($n = 749$) of tweets (Table 1). Texas A&M is the only school to mention users in more than half their top 100 engaged with tweets as they mentioned a

user in 52% ($n = 104$) of tweets (Table 1). Football and basketball were very similar in their results. Football tagged users in 28.58% ($n = 400$) of their top 100 engaged with tweets whereas basketball tagged a user in 26.85% ($n = 349$) of their tweets (Table 1).

Additionally, as shown in Table 2, engagement of teams can be found. The schools who engage the most users on Twitter were Tennessee and LSU: both of who finished in the top third of both the sports final standings at the end of the season. In table 2, it can also be observed that football had a much higher engagement rate with 5839 engagements per tweet compared to basketball who had 1079 engagements per tweet.

Table 1 – Media, Tagging users, and Hashtags by School and Sport

| School | | Media Included | | Tagging Users | | Hashtags | |
|----------|-------|----------------|--------------|---------------|-------------|-----------|--------------|
| | | NO | YES | NO | YES | NO | YES |
| Alabama | FB | 1 (1%) | 99 (99%) | 80 (80%) | 20 (20%) | 8 (8%) | 92 (92%) |
| | BB | 3 (3%) | 97 (97%) | 89 (89%) | 11 (11%) | 0 (0%) | 100 (100%) |
| | Total | 4 (2%) | 196 (98%) | 169 (85%) | 31 (15%) | 8 (4%) | 192 (96%) |
| Arkansas | FB | 0 (0%) | 100 (100%) | 78 (78%) | 22 (22%) | 71 | 29 (9%) |
| | BB | 7 (5%) | 93 (93%) | 76 (76%) | 24 (24%) | 91 | 9 (9%) |
| | Total | 7 (3.50%) | 193 (96.50%) | 154 (77%) | 46 (23%) | 162 (81%) | 38 (19%) |
| Auburn | FB | 4 (4%) | 96 (96%) | 61 (61%) | 39 (39%) | 2 (2%) | 98 (98%) |
| | BB | 2 (2%) | 98 (98%) | 74 (74%) | 26 (26%) | 1 (1%) | 99 (99%) |
| | Total | 6 (3%) | 194 (97%) | 135 (68.50%) | 65 (32.50%) | 3 (1.5%) | 197 (98.50%) |
| Florida | FB | 2 (2%) | 98 (98%) | 68 (68%) | 32 (32%) | 13 (13%) | 83 (83%) |
| | BB | 4 (4%) | 96 (96%) | 74 (74%) | 26 (26%) | 17 (17%) | 87 (88%) |
| | Total | 6 (3%) | 194 (97%) | 132 (66%) | 68 (34%) | 30 (15%) | 170 (85%) |
| Georgia | FB | 0 (0%) | 100 (100%) | 89 (89%) | 11 (11%) | 12 (12%) | 88 (88%) |
| | BB | 2 (2%) | 98 (98%) | 83 (83%) | 17 (17%) | 88 (88%) | 12 (12%) |
| | Total | 2 (1%) | 198 (99%) | 172 (86%) | 28 (14%) | 100 (50%) | 100 (50%) |
| Kentucky | FB | 2 (2%) | 98 (98%) | 42 (42%) | 58 (58%) | 9 (9%) | 91 (91%) |
| | BB | 1 (1%) | 99 (99%) | 59 (59%) | 41 (41%) | 69 (69%) | 31 (31%) |
| | Total | 3 (1.50%) | 197 (98.50%) | 101 (50.5%) | 99 (49.5%) | 78 (39%) | 122 (61%) |
| LSU | | | | | | | |

| | | | | | | | |
|------------|-------|-----------|--------------|--------------|-------------|--------------|--------------|
| | FB | 1 (1%) | 99 (99%) | 86 (86%) | 14 (14%) | 82 (82%) | 18 (18%) |
| | BB | 2 (2%) | 98 (98%) | 87 (87%) | 13 (13%) | 51 (51%) | 49 (49%) |
| | Total | 3 (1.50%) | 197 (98.50%) | 173 (86.50%) | 27 (13.50%) | 133 (66.50%) | 67 (33.50%) |
| Miss State | | | | | | | |
| | FB | 0 (0%) | 100 (100%) | 57 (57%) | 43 (43%) | 1 (1%) | 12 (12%) |
| | BB | 9 (9%) | 91 (91%) | 73 (73%) | 27 (27%) | 99 (99%) | 88 (88%) |
| | Total | 9 (4.50%) | 191 (95.50%) | 130 (65%) | 70 (35%) | 100 (50%) | 100 (50%) |
| Mizzou | | | | | | | |
| | FB | 0 (0%) | 100 (100%) | 68 (68%) | 32 (32%) | 26 (26%) | 74 (74%) |
| | BB | 28 (28%) | 72 (72%) | 77 (77%) | 23 (23%) | 6 (6%) | 94 (94%) |
| | Total | 28 (14%) | 172 (86%) | 145 (72.50%) | 55 (27.50%) | 32 (16%) | 168 (84%) |
| Ole Miss | | | | | | | |
| | FB | 2 (2%) | 98 (98%) | 59 (59%) | 41 (41%) | 43 (43%) | 57 (57%) |
| | BB | NA | NA | NA | NA | | |
| | Total | 2 (2%) | 98 (98%) | 59 (59%) | 41 (41%) | 43 (43%) | 57 (57%) |
| S. Car. | | | | | | | |
| | FB | 6 (6%) | 94 (94%) | 92 (92%) | 8 (8%) | 90 (90%) | 10 (10%) |
| | BB | 0 (0%) | 100 (100%) | 57 (57%) | 43 (43%) | 34 (34%) | 66 (66%) |
| | Total | 6 (3%) | 194 (97%) | 149 (74.50%) | 51 (25.50%) | 134 (62%) | 76 (38%) |
| TAMU | | | | | | | |
| | FB | 0 (0%) | 100 (100%) | 62 (62%) | 38 (38%) | 3 (3%) | 97 (97%) |
| | BB | 10 (10%) | 90 (90%) | 34 (34%) | 66 (66%) | 0 (0%) | 100 (100%) |
| | Total | 10 (5%) | 190 (95%) | 96 (48%) | 104 (52%) | 3 (1.50%) | 197 (98.50%) |
| Tenn. | | | | | | | |
| | FB | 5 (5%) | 95 (95%) | 84 (84%) | 16 (16%) | 40 (40%) | 60 (60%) |

| | | | | | | | |
|------------|-------|-------------|---------------|---------------|--------------|--------------|---------------|
| | BB | 5 (5%) | 95 (95%) | 84 (84%) | 16 (16%) | 84 (84%) | 16 (16%) |
| | Total | 10 (5%) | 190 (95%) | 168 (84%) | 32 (16%) | 124 (62%) | 76 (38%) |
| Vanderbilt | FB | 0 (0%) | 100 (100%) | 74 (74%) | 26 (26%) | 0 (0%) | 100 (100%) |
| | BB | 8 (8%) | 92 (92%) | 84 (84%) | 16 (16%) | 18 (18%) | 82 (82%) |
| | Total | 8 (4%) | 192 (96%) | 158 (79%) | 42 (21%) | 18 (9%) | 182 (91%) |
| TOTAL | | | | | | | |
| Overall | FB | 23 (.86%) | 2677 (99.14%) | 1000 (71.42%) | 400 (28.58%) | 400 (28.58%) | 1000 (71.42%) |
| | BB | 81 (3%) | 2619 (97%) | 951 (73.15%) | 349 (26.85%) | 471 (36.23%) | 829 (63.77%) |
| | TOTAL | 104 (3.90%) | 2596 (96.10%) | 1951 (72.30%) | 749 (27.70%) | 871 (32.26%) | 1829 (67.74%) |

Table 2 – Average Emoji Total Use and Engagement by School and Sport

| School | | Average Emoji Total | Average Engagement |
|------------|-------|---------------------|------------------------|
| Alabama | FB | .95 (SD= 1.60) | 3346.86 (SD= 1971.47) |
| | BB | 1.56 (SD=1.57) | 471.53 (SD= 589.69) |
| | Total | 1.26 (SD=1.61) | 1909.20(SD=2045.44) |
| Arkansas | FB | 0.84 (SD= 1.32) | 2565.12 (SD= 1754.83) |
| | BB | 1.44 (SD= 1.88) | 798.45 (SD= 684.22) |
| | Total | 1.14 (SD= 1.65) | 1681.78 (SD= 1596.58) |
| Auburn | FB | 2.01 (SD= 2.50) | 2679.73 (SD= 2095.15) |
| | BB | .98 (SD= 1.22) | 1118.97 (SD= 904.28) |
| | Total | 1.5 (SD= 2.02) | 1899.35 (SD= 1789.60) |
| Florida | FB | 1.66 (SD= 1.74) | 3637.38 (SD= 1336.2) |
| | BB | .80 (SD= 1.43) | 826.88 (SD= 701.78) |
| | Total | 1.23 (SD= 1.65) | 2232.13 (SD= 1765.76) |
| Georgia | FB | .93 (SD= 1.39) | 4004.16 (SD= 2294.28) |
| | BB | 1.76 (SD= 1.68) | 268.9 (SD= 464.86) |
| | Total | 1.35 (SD= 1.59) | 2136.53 (SD= 2496.34) |
| Kentucky | FB | 1.63 (SD= 1.43) | 1557.58 (SD= 834.32) |
| | BB | 1.29 (SD= 6.09) | 2136.79 (SD= 1077.95) |
| | Total | 1.46 (SD= 4.42) | 1847.19 (SD= 1004.32) |
| LSU | FB | .28 (SD= .51) | 14335.57 (SD= 16748.9) |
| | BB | 1.37 (SD= 1.02) | 1811.31 (SD= 1625.68) |
| | Total | .83 (SD= .97) | 8073.44 (SD= 13426.99) |
| Miss State | FB | 1.79 (SD= .96) | 1524.09 (SD= 770.54) |
| | BB | 1.34 (SD= 1.14) | 1105.86 (SD= 624.13) |
| | Total | 1.57 (SD= 1.07) | 1314.98 (SD= 730.15) |

| | | | |
|------------|-------|-----------------|-----------------------|
| Mizzou | | | |
| | FB | 2.64 (SD= 1.71) | 1001.01 (SD= 490.95) |
| | BB | 2.73 (SD= 1.38) | 404.2 (SD= 213.25) |
| | Total | 2.69 (SD= 1.55) | 702.61 (SD= 481.69) |
| Ole Miss | | | |
| | FB | 1.72 (SD= 1.78) | 1308.43 (SD= 2341.95) |
| | BB | NA | NA |
| | Total | 1.72 (SD= 1.78) | 1308.43 (SD= 2341.95) |
| S. Car. | | | |
| | FB | .65 (SD= .74) | 2848.91 (SD= 1912.33) |
| | BB | 2.66 (SD= 2.18) | 662.68 (SD= 334.29) |
| | Total | 1.66 (SD= 1.92) | 1755.79 (SD= 1753.8) |
| TAMU | | | |
| | FB | 1.45 (SD= 1.75) | 1394.45 (SD= 827.05) |
| | BB | 2.57 (SD= 2.70) | 163.85 (SD= 292.79) |
| | Total | 2.01 (SD= 2.34) | 779.15 (SD= 873.74) |
| Tenn. | | | |
| | FB | .87 (SD= 1.47) | 4150.84 (SD= 1775.24) |
| | BB | 1.18 (SD= 5.18) | 4156.08 (SD= 2475.07) |
| | Total | 1.03 (SD= 3.80) | 4153.46 (SD= 2148.35) |
| Vanderbilt | | | |
| | FB | .59 (SD= .82) | 297.13 (SD= 225.84) |
| | BB | .94 (SD= 1.56) | 108.4 (SD= 153.87) |
| | Total | .77 (SD= 1.26) | 202.77 (SD= 214.71) |
| TOTAL | | | |
| Overall | FB | 1.21 (SD= 1.41) | 5839.38 (SD= 2527.08) |
| | BB | 1.47 (SD= 2.23) | 1079.45 (SD= 768.31) |
| | TOTAL | 1.43 (SD= 2.29) | 2173.52 (SD= 4389.47) |

Research Question 2 looks at specific variables to see if a variables presence leads to engagement on Twitter. The summary of the regression model is presented as Table 3. Model 1 contained Alabama, Arkansas, Auburn, Florida, Georgia, Kentucky, LSU, Mississippi State, Missouri, South Carolina, Texas A&M, Tennessee, and Vanderbilt, which accounted for 19% of the engagement variability. Model 2 contained Alabama, Arkansas, Auburn, Florida, Georgia, Kentucky, LSU, Mississippi State, Missouri, South Carolina, Texas A&M, Tennessee, Vanderbilt, and sport, and accounted for an additional 6% of the variance in engagement. Model 3, which contained Alabama, Arkansas, Auburn, Florida, Georgia, Kentucky, LSU, Mississippi State, Missouri, South Carolina, Texas A&M, Tennessee, Vanderbilt, sport, media, emojis, mentioning users, and hashtags, provided a statistically significant increase in variance explained; however, that increase does not appear to be practically significant (1% additional variance explained).

Table 3: Model Summary

| Model | R | R ² | Adjusted R ² | Std. Error | R ² Change | F Change | df1 | df2 |
|-------|-----|----------------|-------------------------|------------|-----------------------|----------|-----|------|
| 1 | .43 | .19 | .18 | 3968.51 | .02 | 47.38** | 13 | 2686 |
| 2 | .50 | .25 | .25 | 3811.09 | .06 | 227.47** | 1 | 2685 |
| 3 | .51 | .26 | .25 | 3795.28 | .01 | 6.60** | 4 | 2681 |

** $p < .01$

To approach RQ2, a hierarchical linear regression was conducted to evaluate the prediction of engagement from schools: Alabama, Arkansas, Auburn, Florida, Georgia, Kentucky, LSU, Mississippi State, Missouri, South Carolina, Texas A&M, Tennessee, and Vanderbilt (Table 3). For the first block analysis, the predictor variable of school was analyzed. The results of this first block hierarchal linear regression analysis revealed a model where all but three schools (LSU, Tennessee, and Vanderbilt) were not to be statistically significant ($p > .05$). Additionally, the R2 value of .19 associated with this regression model suggests that the school

accounts for 19% of the variation in engagement, which means that 81% of the variation in engagement cannot be explained by school alone. A different outcome was found from the second block analysis.

For the second block analysis (Table 4), the predictor variable sport was added to the analysis. The results for the second block hierarchical linear regression analysis revealed a model to be statistically significant ($p > .01$). Additionally, the R^2 change value of 0.06 associated with this regression model suggests that the addition of sport to the first block accounts for 6% of the variation of engagement, which means that 25% of the variation in engagement cannot be explained by school and sport alone. Controlling for sport, the regression coefficient [$\beta = .025$, 95% C.I. (1961.42, 2547.65) $p < .05$] associated with school suggests that the addition of sport, there was an association between football and an increase in engagement.

For the third block analysis (Table 5), the predictor variables emoji, media, mention, and hashtag were added to the analysis. The results for the third block hierarchical linear regression analysis revealed a model to be statistically significant ($p > .01$). Additionally, the R^2 change value of .01 associated with this regression model suggests that the addition of emoji, media, mention, and hashtag to the second block accounts for 1% of the variation of engagement, which means that 74% of the variation in engagement cannot be explained by school, sport, emoji media, mention, and hashtag alone. Controlling for emoji, the regression coefficient [$\beta = -.03$, 95% C.I. (-123.64, 8.90) $p < .05$] associated with school and sport suggests that with the addition of emoji, the presence of emoji leads to a decrease engagement. Controlling for media, the regression coefficient [$\beta = 0.00$, 95% C.I. (-860.08, 661.87) $p < .05$] associated with school and sport suggests that with the addition of media, there was no association between media in tweets and engagement. Controlling for mentions, the regression coefficient [$\beta = -.02$, 95% C.I. (558.78,

111.58) $p < .05$] associated with school and sport suggests that with the addition of mentions, there was an association between the presence of mentions in tweets leads to a decrease in engagement. Controlling for hashtags, the regression coefficient [$\beta = -.09$, 95% C.I. (-1228.04, -461.14) $p < .05$] associated with school and sport suggests that with the addition of hashtags, there was an association between the absence of hashtags in tweets and an increase in engagement.

Table 3: Hierarchical Regression of Engagement – Model 1

| Coefficients a | Model 1 (School Variables) | | | | | | |
|---------------------|----------------------------|----------|------------|-------|-------|-------------|-------------|
| | β | B | Std. Error | T | Sig. | Lower Bound | Upper Bound |
| Constant (Ole Miss) | | 1308.43 | 396.85 | 3.30 | .00** | 530.27 | 2086.59 |
| Alabama | .04 | 600.77 | 486.04 | 1.24 | .22 | -352.29 | 1553.82 |
| Arkansas | .02 | 373.36 | 486.04 | .77 | .44 | -579.7 | 1326.41 |
| Auburn | .04 | 590.92 | 486.04 | 1.22 | .22 | -362.13 | 1543.97 |
| Florida | .06 | 923.70 | 486.04 | 1.90 | .06 | -29.35 | 1876.75 |
| Georgia | .05 | 828.10 | 486.04 | 1.70 | .09 | -124.95 | 1781.15 |
| Kentucky | .03 | 538.76 | 486.04 | 1.11 | .27 | -414.30 | 1491.81 |
| LSU | .40** | 6765.01 | 486.04 | 13.92 | .00** | 5811.96 | 7718.06 |
| Miss State | .00 | 6.55 | 486.04 | .01 | .99 | -946.51 | 959.60 |
| Mizzou | -.04 | -605.83 | 486.04 | -1.25 | .21 | -1558.88 | 347.23 |
| South Carolina | .03 | 447.37 | 486.04 | .92 | .36 | -505.69 | 1400.42 |
| Texas A&M | -.03 | -529.28 | 486.04 | -1.09 | .28 | -1482.33 | 423.77 |
| Tennessee | .17** | 2845.03 | 486.04 | 5.85 | .00** | 1891.98 | 3798.08 |
| Vanderbilt | -.07* | -1105.67 | 486.04 | -2.28 | .02* | -2058.72 | -152.61 |

* $p < .05$. ** $p < .01$.

Table 4: Hierarchical Regression of Engagement – Model 2

| Coefficients a | Model 2 (School and Sport Variables) | | | | | | |
|---------------------|--------------------------------------|----------|------------|--------|-------|-------------|-------------|
| | β | B | Std. Error | T | Sig. | Lower Bound | Upper Bound |
| Constant (Ole Miss) | | 3562.96 | 409.37 | 3.30 | .00** | -1748.83 | -143.38 |
| Alabama | .10** | 1728.03 | 472.71 | 1.24 | .22 | 801.12 | 2654.94 |
| Arkansas | .09** | 1500.62 | 472.71 | .77 | .44 | 573.71 | 2427.53 |
| Auburn | .10** | 1718.19 | 472.71 | 1.22 | .22 | 791.28 | 2645.09 |
| Florida | .12** | 2050.97 | 472.71 | 1.90 | .06 | 1124.06 | 2977.87 |
| Georgia | .12** | 1955.37 | 472.71 | 1.70 | .09 | 1028.46 | 2882.27 |
| Kentucky | .10** | 1666.02 | 472.71 | 1.11 | .27 | 739.11 | 2592.93 |
| LSU | .47** | 7892.28 | 472.71 | 13.92 | .00** | 6965.37 | 8819.18 |
| Miss State | .07* | 1133.81 | 472.71 | 0.01 | .99 | 206.90 | 2060.72 |
| Mizzou | .03 | 521.44 | 472.71 | -1.25 | .21 | -405.47 | 1448.35 |
| South Carolina | .09** | 1574.63 | 472.71 | .92 | .36 | 647.72 | 2501.54 |
| Texas A&M | .04 | 597.99 | 472.71 | -1.09 | .28 | -328.92 | 1524.89 |
| Tennessee | .24** | 3972.30 | 472.71 | 5.85 | .00** | 3045.39 | 4899.20 |
| Vanderbilt | .00 | 21.60 | 472.71 | -2.28 | .02* | -905.31 | 948.51 |
| Sport | .26** | -2254.53 | 149.48 | -15.08 | .00** | 1961.42 | 2547.65 |

* $p < .05$. ** $p < .01$.

Table 5: Hierarchical Regression of Engagement – Model 3

| Coefficients a | Model 3 (School, Sport, Emoji, Media, Mentions, and Hashtag Variables) | | | | | | |
|---------------------|--|----------|------------|--------|-------|-------------|-------------|
| | β | B | Std. Error | T | Sig. | Lower Bound | Upper Bound |
| Constant (Ole Miss) | | 4393.11 | 585.76 | 7.50 | .00** | -1330.02 | 853.10 |
| Alabama | .12** | 2004.35 | 481.33 | 4.16 | .00** | 1060.54 | 2948.17 |
| Arkansas | .07* | 1135.29 | 476.25 | 2.38 | .02* | 201.44 | 2069.15 |
| Auburn | .12** | 2066.41 | 479.94 | 4.31 | .00** | 1125.32 | 3007.5 |
| Florida | .14** | 2262.14 | 476.25 | 4.75 | .00** | 1328.3 | 3195.99 |
| Georgia | .11** | 1845.97 | 473.27 | 3.90 | .00** | 917.96 | 2773.99 |
| Kentucky | .10** | 1735.01 | 471.71 | 3.68 | .00** | 810.07 | 2659.96 |
| LSU | .45** | 7612.08 | 475.18 | 16.02 | .00** | 6680.31 | 8543.84 |
| Miss State | .09** | 1447.93 | 477.93 | 3.03 | .00* | 510.78 | 2385.07 |
| Mizzou | .05 | 793.39 | 477.68 | 1.66 | .10 | -143.26 | 1730.05 |
| South Carolina | .08** | 1405.41 | 472.25 | 2.98 | .00* | 479.40 | 2331.41 |
| Texas A&M | .06 | 1017.38 | 479.37 | 2.12 | .03* | 77.41 | 1957.34 |
| Tennessee | .22** | 3743.70 | 473.80 | 7.90 | .00* | 2814.66 | 4672.74 |
| Vanderbilt | .01 | 237.89 | 479.87 | 0.50 | .62 | -703.06 | 1178.85 |
| Sport | .26** | -2315.78 | 151.51 | -15.29 | .00** | 2018.69 | 2612.87 |
| Emoji | -.03 | -57.37 | 33.80 | -1.70 | .09 | -123.64 | 8.90 |
| Media | .00 | -99.10 | 388.08 | -0.26 | .80 | -860.08 | 661.87 |
| Mentions | -.02 | -223.60 | 170.94 | -1.31 | .19 | -558.78 | 111.58 |
| Hashtags | -.09** | -844.59 | 195.55 | -4.32 | .00** | -1228.04 | -461.14 |

* $p < .05$. ** $p < .01$.

5. Discussion

This study examined how the teams in the SEC engage with their followers on Twitter. This study's results provide one of the first steps at examining American collegiate athletics and how one of the largest conferences attempts to engage its fan base.

The first research question asked what SEC schools include in the body of their tweets and does it have an impact on engagement. The results in the first research question found that media is present in 96.10% ($n = 2596$) of the top 100 engaged with tweets per team. While media being present in 96.10% ($n = 2596$) of tweets in this sample confirms previous research from Gotter (2019) and Klingman (2019) that media is present at a high rate.

Within this sample, the results of RQ1 support the concept that schools in the SEC use media at a very high rate. Despite the fact that schools in this sample who use media most and who also have the highest levels of engagement (LSU and Tennessee), graphic designers and video should not be considered an essential role to any athletic department if engagements on Twitter are the goal of the department. The graphic designers and videographers are those who make the graphics and video content that attempt to grab people's attention to engage in the tweet.

The first research question was also proposed to examine the frequency at which hashtags are used. The results of this found that schools use hashtags in two-thirds of their tweets. Football used hashtags at a higher rate than did the basketball teams (71.42% vs 63.77%).

One area in the future that will be important to assess is Lackie (2012) who stated that the increase is in part due to brand awareness. This is important to examine moving forward because

some teams exhibit uses of hashtags at nearly all times whereas others use them more sparsely. A team specific hashtags evaluation would be an excellent way to dissect this even further to see an impact on branding. For example, in this research, the Alabama Men's Basketball team and Vanderbilt Football team used hashtags of some kind in ALL of their top 100 tweets. To contrast Alabama Men's Basketball and Vanderbilt's Football use of hashtags, the Arkansas Men's Basketball team and South Carolina's Football accounts combined for 19 hashtags total used in their team's top 100 tweets.

The final subsection of the first research question was introduced to see the rate at which schools mentioning users on Twitter. It was proposed under the ideology that the parasocial theory would carry influence on the top 100 engaged with tweets. While not always the case, some student-athletes have a following that is larger than the team's account and when they engage with the tweet, the tweet becomes more engaged with by the student-athlete's following. The result found that mentioning users was present in 27.70% ($n = 749$) of the tweets examined. Kentucky lead the way for schools by mentioning users in 49.50% ($n = 99$) of their tweets. Opposite of Kentucky, LSU mentioned the least number of users at 13.50% ($n = 27$).

In RQ2A, the statistical significance of media found in tweets was found to not be significant. Since significance was not found, these findings run contrary to previous research that found that media in tweets would result in a higher level of engagement. Gotter (2019) found that the use of images can increase engagement by 313%, Klingman (2019) found that media usage increase engagement by 150%. Klingman (2019) found this number through Widrich (2014) who found through Buffer's built in analytics, there was a significant increase when media is used.

RQ2B found that hashtags present was statistically significant and that the association was negative. This result means hashtags not present would lead to higher engagement under the parameters of this study. The results in this study do not support Webster (2017)'s research that states tweets hashtags can increase engagement. This also denies Gotter (2019)'s findings that hashtags increase engagement.

Additionally, in RQ2C the results found that mentioning users in tweets did not lead to an increase in engagement as the association was found to not be statistically significant in the sample. In the future, it would be advantageous to research the specific mentioning of users from the account. The tagging of specific users would be important to research because mentioning a user who carries either a larger crowd could exposes the tweet to a new host of users who can engage with the tweet. In turn, these users can become fans of the team's interactions on Twitter leading to an increase in engagement.

Finally, in RQ2D the third model examined the use of emojis and how they impact engagement in the sample. In this case, there was not a significant finding. This result counters Twitter Mentions (2019) findings that state emojis are a way to boost engagement.

Under the sample of this study, the results of this research are that media being present in tweets, emojis being present in tweets, and mentioning users does not have a significant impact on engagement. Since these findings challenge previous research, the research conducted in this piece should be examined at a more thorough level in future research. One of the reasons significance may have not been reached is because of the sample for this research. This research does not reflect the team's Twitter feed as a whole but instead focuses on tweets with high engagement.

Future research should give consideration to this and look at a sample that more reflects the whole identity of the team's account on Twitter and not one that examines only the most engaged with tweets. If a random sample of tweets were selected opposed to selecting the top 100 engaged with tweets, a more normal level of distribution may have been achieved and lead to a significant finding. The research in this piece allows a future researcher to compare their findings in a randomly selected sample to those with the highest engagements found in this research.

Despite the skewed sample in this data set, perhaps in a random sample similar results would occur. Engaging with a tweet provides the user an outward expression of fandom. Since the sense of fandom is high following a win (Rivera, 2017), it is possible that the presence of media, tagging users, and emojis would not be significant even in a random sample of tweets. Rivera (2017) states that winning can produce symptoms of mania which is why riots occur in streets following wins. Since the emotions following a win can produce a euphoric feeling: a user may not care to see media, emojis, or tagging of users because they are so excited to share their fandom by engaging in the tweet.

The aforementioned results of the research questions are building blocks for the future research that can affect the way SIDs, Communications folks, and other people associated with posting on the team accounts post tweets. This data gives insights as to how fans interact with one of the largest conferences and its most engaged with tweets. For smaller schools who have less resources, this may be a place where one wanting to forge their own path can apply these findings and expand upon them. With everything in the above considered one of the reasons that the lack of significance should be heavily considered is because of just how many tweets had a media object present in the body of the tweet.

The school who engaged the most users (LSU) also had among the highest of media usages. From this, it could be speculated that winning aids in this engagement. LSU would go on to have an undefeated season in football, capturing the national championship, and having a Heisman award winning in starting quarterback Joe Burrow. The national championship is the highest honor for a team in the NCAA and the Heisman trophy is presented to the most valuable player in collegiate football at the Division-1 level. Basketball also played a pivotal role for LSU in engagement. LSU came through with a 16-2 record in conference play. This paves the way for future research that winning and popularity as a result could be a factor in engagement. Future research should include a variance for winning or measuring some form of on court success as a variable for engagement.

Overall within the parameters of this study, RQ2 found that only hashtags and football were the only significant factors outside of the individual schools. Overall, not using hashtags and tweeting from the football account generated more engagement from the top 100 tweets.

With school as a variable, LSU and Tennessee generated the most engagement. LSU's success on the field may very well have been a factor in this engagement. Tennessee had some success on the playing fields but not nearly that of the LSU Tigers. Since Tennessee was second in engagement, it could be evaluated that under this study, winning is not the driving force of engagement. Tennessee finished in the middle of the pack of the SEC in football with their 8-5 record while Georgia, Florida, Alabama and Auburn were ahead of their overall record. The 8-5 mark also ties that of Texas A&M.

While perhaps on field success is not the only reason for a school's association with engagement, one element that cannot be ignored is the sample of football's impact on engagement. From Table 2, football generates nearly five times the engagement than does

basketball. When variables from both sports in table 3 are compared, the values are similar in nature. This means that social strategies are similar for both sports under the parameters of this study.

6. Limitations and Future Research

When it comes to future research, this study helps lay some ground work for future looks in to American sports social media culture. Not only this, it allows an even more specific look in to the SEC's fan base. This research also comes with several limitations. In this sample, only the top 100 engaged with tweets were examined. This is a limitation because it does not account for the tweets from these accounts with lower overall engagement. A broader sample of tweets may have exhibited different characteristics based on certain variables. The researcher wanted to look at the top engaged with tweets in particular in order to observe commonalities among teams and to see if certain variables lead to more engagement among the team's top 100 tweets. Since this limitation exists, this research would provide future researchers a successful data point to compare randomly sampled tweets with.

The second at-large limitation was time for the researcher. A more in-depth analysis would have liked to have been pursued for this project. Team specific hashtags, photo vs. video content, and mentioning specific users are only a few examples of what the researcher would have liked to have completed with more time. With this investigation in to team hashtags, team branding is brought in to play and the concept of brand awareness. Photo vs video content would be a good topic of research because either a static graphic or moving video would have to engage the user enough to evoke engagement in the tweet.

The limitations of this research point toward several topics and ideas to be researched in the future. Twitter, social media, and fan engagement trends will continue to evolve. The following are a few areas for future research.

- Does geographic region have an influence on fan behavior? Would the traits exhibited in this research carry on to other conferences?
- Would a random sample of tweets yield similar results?
- Do specific types of media lead to more engagement?

7. CONCLUSION

This research shows the relationships between the top engaged with tweets from SEC teams and their presence on Twitter to see how they interact with fans. Overall, this research found several significant findings that related to specific aspects of the tweets themselves. Media in tweets, emojis and mentioning were found to be not significant aspects to engagement while hashtags and being from a football account were found to be a significant variable. These findings matter in the landscape of college athletics because of how fans are interacting with teams. Each team's following on social media is increasing daily and this trend will only grow as time goes on.

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