

## **College Athletes & Trash-talking on Twitter**

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**ABSTRACT:** A pilot study of 111 Division III student-athletes explores online interactions wherein members of this group engage in or observe inappropriate, unsportsmanlike, and trash talking exchanges on Twitter. Among the findings, student-athletes acknowledge observing athletic peers post and respond to inappropriate content, and post and respond to unsportsmanlike conduct on Twitter. Further, this study reveals that female student-athletes were more likely to observe their peers engaging in inappropriate behaviors on Twitter than their male counterparts, while the male participants reported engaging in inappropriate behaviors themselves more often than their female peers. The results of this survey may appeal to audiences of scholars and athletic practitioners alike, as it produces information that may prove helpful in formulating guidelines and programming to support responsible social media use by collegiate student-athletes.

**Keywords:** (1) student-athletes, (2) uses & gratifications theory, (3) Twitter, (4) trash talking, (5) online interactions.

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### **Introduction**

An insult on the sports field leads to a shoving match between teams. An off-handed comment from the sideline draws a penalty flag from a referee. Words misspoken during a post-game press conference spiral into a heated new rivalry between competitors and their teams. Trash talking is nothing new. Likely as old as competition itself, it has become an accustomed practice before, during, and after sports events wherein athletes assert their superiority or try to undermine their opponents.

This study seeks to explore trash talking in athletics on a modern day and somewhat new playing field: the social media landscape, where those invested in the sports world can reach and interact with a wider audience than ever before possible (Filo et al., 2014). Examining college athletes' use of Twitter for interactions related to trash-taking and other positive and negative engagements, this study sets forth to gather

and analyze data with the intention to better grasp how Twitter influences collegiate athletic interactions and the behavior of student-athletes. Looking at these behaviors through the lens of the uses and gratifications framework, these researchers hope to gain awareness about the ways student-athletes use Twitter, including their frequency of use, purposes for use, and behavior – specifically, “inappropriate” behavior – on the platform. Based in theory, the hope is that findings on student-athlete behavior will be relevant to collegiate athletic stakeholders and higher education officials in charge of developing educational programs, policies, and procedures surrounding student use of social media, which have, to-date, presented social media in a primarily negative light (Sanderson et al., 2015).

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## Review of Literature

### *Talking Trash*

Rainey and Granito (2010) found that individuals engage in *trash talk*, a type of insult talk, for self-motivation, to damage the motivation of rivals, and to potentially even hinder the actual game-day performance of opponents. In many cases, trash talking has become an ingrained part of competition. For instance, just as there is a norm in ice hockey that players will physically brawl in some situations, so too do competitors (in some sports and certain scenarios more than others) feel that, though not required, trash talking is entirely permissible. However, a survey of officials across eleven different sports found that, based on those officials' in-game experiences and observations, only a minority of athletes engage in trash talk, with the highest instances indeed occurring in ice hockey, a sport where fighting is the norm (Rainey, 2012).

While trash talking is a well-established tactic, contexts and possibilities for its use have shifted. Over the past decade, major social media networks have opened a world of opportunities for individuals and organizations to connect and converse online to satisfy "a collection of motives including interactivity, information gathering, entertainment, fandom and camaraderie," motives which are also thought to be influenced by gender and other demographics (Filo et al., 2014, p.10). Along with those opportunities come threats, including behaviors like flaming, cyberstalking, and deceit. In the "real world," where trash talk is largely limited to the locker room and the dugout (face-to-face situations), or in limited instances disseminated by mass media, online social media open new possibilities for this type of interaction.

The changing dynamic does not only impact professional athletes; college student-athletes are viewed as public figures, role models, and the public faces of their respective institutions (Sanderson et al., 2015). Unfortunately, the athletes (professional and amateur), organizations, and schools making headlines regarding social media are typically doing so in the context of damage control after an athlete(s) posts something defamatory, discriminatory, or generally inflammatory online; in most of those cases, the student-athletes in question are unaware of social media policies banning such behavior and, by extension, the impact of these online missteps on themselves and their institutions (O'Connor, Schmidt, and Drouin, 2016).

### *Athletes, Twitter, and Sports Culture*

New media research and education for athletes often focuses on Twitter, which effectively allows athletes to "break down traditional barriers that once existed between themselves and the everyday fan" (Frederick et al., 2014, p.93). Launched in 2006, the popular micro-blogging site allows users to post 140-character "tweets," follow other users, and participate in conversations with user account tags and hashtags. Unlike some of its competitors, such as Facebook, Twitter is intended to be a more public forum. The point is not to limit one's activity only to friends, but for the user to have his/her musings, experiences, and updates open to the world. In this way, it has become a social media source where stories often break and where reporting can be anyone's job.

For many of these same reasons, Twitter is considered the top social media outlet used by stakeholders in the sports world. As Browning and Sanderson (2012) point out, "athletes, coaches, and broadcasters from nearly every sport maintain a Twitter presence, which allows fans to obtain immediate information directly from these sports figures" (p.454). Indeed, Twitter has proven to be a platform of choice for athletes seeking to connect with their fans. For example, NBA star LeBron James announced his move from the Miami Heat back to his hometown Cleveland Cavaliers by tweeting a link to a Sports Illustrated op-ed written by James himself (James, 2014). Though the full copy resided on a mass media outlet, James' announcement illustrates how "athletes can use Twitter to connect directly with fans instead of having their messages filtered through the public relations departments of sports organizations and mainstream media outlets" (Hambrick, et al, 2010, p.454). In short, whereas broadcast media and sports networks would usually be the first to break this type of news - and, before them, even slower print media - athletes themselves now have greater control over their own messaging, should they accept it.

Like their professional counterparts, student-athletes are presented new opportunities by using Twitter (and social media in general) and the many new angles of communication they have opened. By way of these new modes of communication, relationships among athletes, between athletes and fans, and among fans has changed dramatically.

### *Uses of Twitter by Athletes*

Today, student-athletes can use social media to motivate and encourage others, keep abreast of game information, and keep in contact with teammates and

friends (Browning and Sanderson, 2012). Like other media forms, Twitter serves at least one of many distinct purposes. We might categorize those purposes under the umbrella of a need for social interaction (Chen, 2011), as “people who actively seek out Twitter are doing so out of a basic human need to connect with others that they can then gratify by using this computer medium” (p.760).

Accordingly, Twitter offers users the ability to connect and converse with anyone who maintains an account. Friends, celebrities, and strangers alike can form ties or at least entertain discussions with one another, a dynamic previously impossible without these online social networks. And for athletes, a specific and distinct subset of societal celebrities, the support of fans is a major element in determining popularity, with the “highly social” athlete’s followers feeling “a greater sense of attitude homophily...due to an active display of his thoughts, feelings, and behaviors on Twitter” (Frederick et al., 2012, p.495). In a content analysis of professional athletes’ tweets, Watkins and Lewis (2014) found that “a high level of Twitter activity [was] associated with the sharing of useful information and also usage of both dialogic loop and generation of return visits principles” (p.854). In other words, athletes who maintained a consistent presence (including volume and frequency of tweets) and shared interesting or useful information through the platform are most likely to enjoy greater support from their fans. Clavio and Walsh, in their research review (2014), similarly noticed a consistently high use of social media among fans and other athletic stakeholders for information gathering purposes and suggested the opportunities for athletes, teams, and organizations to connect with fans. Though much of this research was conducted in the professional realm, it is possible that a similar dynamic exists for collegiate athletes, though direct evidence of college student-athlete social media behavior – or misbehavior – is indeed the driving force of the present study.

Research suggests that males and females use social media somewhat differently and so, in seeking connection and sharing information, athletes’ behavior and types of posts may benefit from a focus on their respective audience’s established usage patterns. Yoon et al (2014) note that, for females, “entertainment and pass-time factors play an important role in making a decision to engage in STC [sport Twitter consumption] than other factors such as information and fandom,” the latter of which apply more to male Twitter users (p. 32-33). Filo et al. (2014) also found that gender and demographic variables play a role in users’ social media activities with generally heavier use among males in

regards to sports fandom specifically. It remains to be seen whether such gender differences will similarly play a role in online trash-talking behaviors among student-athletes and fans.

In addition to these many opportunities afforded by social media, usage and research suggests there is a dark side, one that is particularly salient for athletes and those in the public eye. Due to their public nature, athletes may face critical tweets – including online trash talking – from other players, fans, and even parents of student-athletes given the open and public nature of Twitter. Some athletes may feel tempted to initiate such forms of communication themselves. How student-athletes choose to interact online and respond to others’ negative comments is of great importance not just because their own reputations are on the line but, as student-athletes, they are seen as representatives of their respective schools (Sanderson et al., 2015). Given the contemporary online environment, there is now significant pressure on student-athletes to use social media effectively and responsibly, for them to “navigate between various identity positions such as athlete, student, and representative of the academic institution in determining how to handle critical tweets” (Browning and Sanderson, 2012, p.513).

How do student-athletes navigate these new waters? Hambrick et al (2010) found that different levels of competition seem to elicit different usage expectations for student-athletes on social media. Those at the NCAA Division I level, for example, feel more compelled to imitate the behaviors of professional athletes, whose tactics include direct communication with fans, information sharing (about themselves, teammates, etc.), and promotion for one’s team and games. In response to negative or critical tweets, Browning and Sanderson (2012) note that student-athletes take differing approaches. Some ignore the tweets completely, while others use the negativity as motivation to perform at a high level. Still others were challenged by the negativity, and some student-athletes opted to confront the negativity by responding to the individual who posted it.

Evidence suggests that schools and athletic departments are, in fact, focused on the negative potential of social media. Sanderson et al. (2015) found that “most [school] policies primarily presented social media as having negative impact on a student-athlete’s future, or made vague references about its future impact” (p.60). So concerned are coaches and athletic departments now with the potential ramifications of irresponsible social media use that before they even begin actively recruiting a student-athlete, some college coaches will research a recruit’s social media profiles to determine

maturity and cultural fit (DiVeronica, 2014). Once they arrived and had become an active part of the team, certain schools have banned student-athletes from using social media in order to avoid negative publicity (Gay, 2012) while, in other institutions that didn't ban social media use, "student-athletes also were informed that they had an obligation to monitor their teammates' [social media] accounts and to take proactive steps if they observed a teammate posting what was considered to be inappropriate content" (Sanderson et al., 2015, p.63). To gather data, the present study will rely on this premise of student-athletes' knowledge of their own social media use and observation of social media use by their teammates and athletic peers.

### *Uses and gratifications framework*

Ruggiero (2000) argues that the rise and pervasive nature of new media and, as a result, computer-mediated communication, continues to validate the significance of uses and gratifications. He asserts that uses and gratifications provide an innovative approach by which to examine new mass communication channels as they emerge. Citing interactivity as one of the contemporary characteristics worthy of exploration using the framework, Ruggiero's contentions support the present study because Twitter interaction, based on established patterns of use by athletes, is at the nucleus of this research.

The examination by Park, Kee, and Valenzuela (2009) involving uses and gratifications revealed socializing, self-status, and information seeking as needs influencing the use of social media platforms. These gratifications vary based on gender and year in school, suggesting that the findings of the present study may affirm these differences. Further, Quan-Haasel and Young (2010) indicate that users have adopted a wide range of digital technologies to communicate with others, including social media channels. Their examination of Facebook revealed that the dimensions of problem-sharing, peer sociability, and social information are the gratifications which motivate using the platform (Quan-Haasel & Young, 2010).

More recently, Whiting and Williams (2013) recognize several uses and gratifications for using social media, and their findings may be relevant to the population of student-athletes. Motives of social interaction, information seeking and sharing, utility, and expression of opinion, and surveillance of others may all inspire the use of and appeal to the gratifications of collegiate student-athletes (Whiting & Williams, 2013). According to Snyder (2014) the majority of student-athletes feel that it is inappropriate to ban the use of social media,

while they do not object to being monitored online by their coach, athletic staff, and team leaders.

### *Purpose of the Study*

Sanderson and Browning (2013) suggest ambiguity in the guidance and regulation of social media among collegiate student-athletes contributes to misinterpretation of boundaries and appropriateness. These authors suggest that institutions of higher education might benefit from implanting or improving instruction and training for students-athletes regarding social media (Sanderson, and Browning, 2013). This potential application using the findings of this pilot study coupled, with the exploratory interpersonal and mass communication aspects, prompt the inductive inquiry of the following research question:

*RQ1: To what extent are student-athletes engaging in (a) inappropriate interactions, (b)*

*unsportsmanlike interactions, and (c) trash talking on Twitter?*

In collecting this behavioral data, this study's goal is to focus the attention of both researchers and practitioners alike towards areas of inappropriate use among student-athletes (including, as applicable, usage patterns and behavior by demographic characteristics as well as by sport) such that the industry might be better focused in addressing areas of concern and formulating best practices for handling student-athlete use and misuse of social media.

The aforementioned research question leads us to test several hypotheses (listed below). Each of the hypotheses is tested at the alpha = 0.05 level, and two-sided tests are conducted in each case. In general, the hypotheses test to see whether or not relationships exist between participation in inappropriate interactions and the following: gender, age, and number of Tweets (three variables). Since there are 11 types of inappropriate interactions examined, there are, technically, 33 (11 \* 3) hypotheses to test here. Additionally, we test to see if there exists any significant difference in inappropriate interactions between sports. For the sake of parsimony, we denote the null and alternative hypotheses for inappropriate interaction  $i$  as  $H_{0i}$  and  $H_{1i}$ , respectively, where the index,  $i$ , runs from 0 through 11, as listed in the descriptions in Table 1.. The hypotheses are, therefore, as follows:

**Hypothesis 1:** We test to see if there is a significant difference between genders for each of the inappropriate interactions:

$$H_0: \mu_{\text{male}} = \mu_{\text{female}}$$

$$H_1: \mu_{\text{male}} \neq \mu_{\text{female}}$$

**Hypothesis 2:** We test to see if there is a significant difference between sports for each of the inappropriate interactions:

$$H_0: \mu_{\text{sport1}} = \mu_{\text{sport2}}$$

$$H_1: \mu_{\text{sport1}} \neq \mu_{\text{sport2}}$$

**Hypothesis 3:** We test to see if there is a significant relationship between age and each of the inappropriate interactions:

$H_0$ : There is no relationship between age and inappropriate interaction type i.

$H_1$ : There is a relationship between age and inappropriate interaction type i.

**Hypothesis 4:** We test to see if there is a significant relationship between Twitter usage and each of the inappropriate interactions:

$H_0$ : There is no relationship between Twitter usage and inappropriate interaction type i.

$H_1$ : There is a relationship between Twitter usage and inappropriate interaction type i.

### Methodology

#### Sample

A purposive method was used to recruit students to participate in this study. In order to reach the eligible population of collegiate student-athletes who are active users of Twitter, a NCAA Division III Athletic Conference Director was briefed on the study. Assistance was requested to reach eligible participants through the involvement of university Athletic Directors (ADs) at four small, private institutions in the northeast region of the United States. The participating ADs then asked their population of 938 NCAA student-athletes (total number among all participating schools) to complete an anonymous online survey hosted by Survey Monkey. In compliance with NCAA regulations, no incentives were offered for participation. A total of 150 students responded to the survey (including both complete and incomplete responses), yielding a response rate of 16 percent.

#### Procedure and Instrumentation

This study utilized a survey instrument comprised of a series of open- and closed-ended questions. First, the survey opened with a brief series of closed-ended demographic items (i.e. age, sport, year in school, gender) and questions about the participants' use of Twitter (i.e. frequency of use, types of content sharing, and following). Then, the survey asked a series of closed-ended questions regarding the frequency of personal and peer interactions involving trash talking, inappropriate, and unsportsmanlike conduct. Two open-ended questions asked participants to describe an example(s) when they posted inappropriate and/or unsportsmanlike content on Twitter and reveal their motivations for doing so.

This instrument was available for four weeks in the early months of 2015 and was administered online via Survey Monkey. After the initial outreach from the Conference Director to the Athletic Directors regarding the study, the researchers sent a welcome email along with the study link. While the instrument was live, one reminder was sent to these Athletic Directors at the two-week (mid-way) point in the data collection period to encourage participation. The research design, procedure, and survey instrument for this study adhered to IRB guidelines and received appropriate approval.

### Results

Of the total respondents, 111 student-athletes completed the survey in its entirety, including 41 males and 70 females. To analyze the data, 11 types of inappropriate and unsportsmanlike conduct investigated through the survey instrument were coded and these are abbreviated in this section for reporting as follows:

Abbreviation	Description
1. IndTweet	The individual posted inappropriate content on Twitter.
2. PeerTweet	The individual has seen any of their peers who are members of an athletic team post inappropriate content on Twitter.

3. IndRespond	The individual has responded to inappropriate content that someone else posted on Twitter.	11. TrashTalk	The individual has engaged in trash talking among other college athletes.
4. PeerRespond	The individual has seen peers respond to inappropriate content on Twitter.		
5. IndSport	The Individual has posted any unsportsmanlike content on Twitter.		
6. PeerSport	The individual has seen any of their peers who are members of an athletic team post unsportsmanlike content on Twitter.		
7. IndRSport	The individual has responded to unsportsmanlike content that someone else posted on Twitter.		
8. TRespond	The individual has seen teammates respond to unsportsmanlike content someone else posted.		
9. ITrashT	The individual has trash talked among other college student-athletes on Twitter.		
10. PTrashT	The individual has seen any of their peers who are members of an athletic team trash-talk among other college student-athletes on Twitter.		
		<b>Type of Behavior</b>	<b>Percent Engaging in Behavior</b>
		PeerTweet	47.8%
		PeerRespond	37.8%
		PTrashT	27.9%
		PeerSport	27.9%
		TRespond	25.2%
		IndRespond	16.2%
		IndTweet	14.4%
		IndRSport	3.6%
		IndSport	3.6%
		ITrashT	2.7%
		TrashTalk	2.7%

**Table 1: Participation in Inappropriate Behaviors**

Table 1 above shows the percentage of respondents who engaged in each of the 11 types of inappropriate behaviors previously described. A complete description of each type of behavior is given in the prior page. These percentages ranged quite widely, from 2.7% to 46.8%. It is interesting to note the percentages of student-athletes who have seen their peers engage in inappropriate behaviors is noticeably (several times) higher than the percentage who reported engaging in these behaviors themselves. This makes intuitive sense, since an individual may have the opportunity to observe hundreds of their peers' interactions.

The 111 respondents were then separated out by gender, and the same percentages were calculated.

These results appear in Table 2. As noted earlier, 2-tailed T-tests were performed at the 5% level in order to assess any differences that may exist between the genders regarding their engagement in the aforementioned behaviors. Statistically significant differences (at the 5% level) existed between the genders for two of the behaviors. In particular, the female students were more likely to engage in or observe the particular behavior than were their male counterparts. Males overall were more likely to post inappropriate content on Twitter, as well as to respond to inappropriate content. Therefore, regarding hypothesis test 1 above, we reject the null hypothesis for the inappropriate interactions of TRespond (corresponding to  $H_{01}$ ) and PtrashT (corresponding to  $H_{010}$ ).

TrashTalk	2.4%	2.9%	-0.5%	0.8950
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**Table 2: Participation in Inappropriate Behaviors by Gender**

Next, T-tests were conducted to investigate any differences in behaviors that might exist between sports. Due to the limited sample size within any individual sport, only the two most popular sports for each gender, measured by the number of responses from student-athletes in those sports, were used for this analysis. On the women’s side, these sports were volleyball and field hockey, while on the men’s side, they were soccer and baseball. In neither case were any statistically significant differences found to exist between the sports, but lack may be due to the limited data sample. Hence, we fail to rejection null hypothesis 2.

Type of Behavior	Male Percent	Female Percent	Difference (Male-Female)	P-value of t-test for Difference Between Genders	Regression Equation	Nagelkerke’s R <sup>2</sup>
IndTweet	22.0%	10.0%	12.0%	0.1147	IndTweet = -9.84+0.28age+1.38gender*+1.14Ta-18.05Tb+2.30Tc*+2.50Td*	0.212
PeerTweet	43.9%	48.6%	-4.7%	0.6380	PeerTweet = 0.73-0.087age-0.14gender+1.86Ta* + 0.56Tb+1.07Tc+1.36*Td	0.166
IndRespond	14.6%	17.1%	-2.5%	0.7282	PeerRespond = 0.48-0.074age-0.004gender+1.36Ta + 0.31Tb+1.18Tc*+0.61Td	0.112
PeerRespond	26.8%	44.3%	-17.5%	0.0612	TRespond = 2.56-0.17age-1.35gender*+0.58Ta-19.96Tb+0.54Tc*+0.011Td	0.190
IndSport	7.3%	1.4%	5.9%	0.1828		
PeerSport	19.5%	35.7%	16.2%	0.0601		
IndRSport	4.9%	2.9%	2.0%	0.6108		
TRespond	12.2%	32.9%	-20.7%	0.0082		
ItrashT	0.0%	4.3%	-4.3%	0.0832		
PtrashT	17.1%	34.3%	-17.2%	0.0395		

**Table 3: Logistic Regression Equations (\* indicates the variable is significant at 0.05 level)**

Finally, 11 logistic regressions were carried out in order to assess the relationships between each of the inappropriate behaviors and the following explanatory variables: age, gender, and total number of tweets on Twitter. The frequency of posting data were consolidated into the following categories: fewer than 100, 100-499, 500-999, 1000-4999, and 5000 or more. From these five categories, four dummy variables were

created, with the “fewer than 100” category serving as the baseline or comparison point. In table 3, the variables corresponding to the four categories used are abbreviated at Ta, Tb, Tc, and Td, respectively. Similarly, a 0-1 dummy variable was created for gender, with males being assigned a 1 and females being assigned a 0. This variable is called “male” in table 3. A Hosmer-Lemeshow goodness of fit test was performed for each regression, and no evidence of misspecification was found. The results of the regressions that contained at least one statistically significant explanatory variable are presented in Table 3 above.

First, let us note that the Nagelkerke r-squareds for each regression were between 0.112 and 0.212. These statistics show us the relative improvement in explanatory power of each model, as opposed to a base model that does not include any explanatory variables, with a value of 1.0 indicating that the model perfectly predicts outcome. It is not surprising that these r-squared values are relatively low, since behavioral phenomena are quite complex, and may include a great many variables, some of which may be difficult, if not impossible, to measure. For instance, any particular student-athlete could be influenced towards or away from online trash talking by his/her upbringing, observed behavior of peers, personal temperament, or an almost unlimited list of other variables. While perfection in an explanatory model would not be a realistic goal, a similar study with a larger sample size might offer better explanatory power.

Next, we observe that the models attempting to predict the following behaviors contained at least one explanatory variable that was significant at the 0.05 level: IndTweet, PeerTweet, PeerRespond, and TRespond. The regressions that attempted to predict tweeting inappropriate content and trash talking habits were more successful than the regressions attempting to predict the posting of unsportsmanlike content. Gender was statistically significantly related to both IndTweet and TRespond. This confirms our earlier rejection of the null hypothesis number 1 for TRespond ( $H_{01}$ ). This result also suggests that, within the context of a logistic regression, we may also reject this same null hypothesis in the case of IndTweet ( $H_{01}$ ). In the case of IndTweet, there was a positive relationship between male gender and tweeting inappropriate content. Table 2 shows that males reported tweeting inappropriate content more frequently than did females, although this difference did not rise to the level of statistical significance. In this regression, however, upon controlling for the other explanatory variables, we do see a positive and statistically significant relationship

between male gender and tweeting inappropriate content. This demonstrates the rich and complex set of interrelationships that exist between the variables under study, and seems to imply that, on a per-tweet basis, males are more likely to post inappropriately than females.

In the case of TRespond, there was a negative relationship between male gender and seeing one’s peers who compete on an athletic team respond to unsportsmanlike content on Twitter. This verifies the results of the t-test conducted earlier, which demonstrated that females were more likely to observe this behavior than were their male counterparts.

Furthermore, an individual’s total tweets played a role in predicting IndTweet, PeerTweet, PeerRespond, and TRespond. Hence, regarding hypothesis test 4, we reject the following null hypotheses:  $H_{01}$ ,  $H_{02}$ ,  $H_{03}$ , and  $H_{04}$ , respectively. In the case of IndTweet, those students who had 1000-4999 or 5000 or more total tweets were more likely (compared to the baseline student who had less than 100 Tweets) to tweet inappropriate content. This should not be surprising, since the more often one tweets, the more opportunities there are for doing so inappropriately. In the case of PeerTweet, those students who had either 100-499 or 5000 or more total Tweets were more likely to have seen their peers tweet inappropriate content. It is interesting, and somewhat surprising, to note that there was no significant relationship between PeerTweet and those students who had a moderate quantity of tweets (100-499 and 500-999). Also interestingly, students who either tweeted a great deal or only a very small amount were more likely to see their friends post inappropriate content. In the case of PeerRespond, those students who had a total of 1000-4999 tweets were more likely than their counterparts to see their peers respond to inappropriate content on Twitter. Finally, in the case of TRespond, those students who had between 1000 and 4999 total Tweets were more likely than their peers to have seen teammates respond to others’ inappropriate content.

On the whole, the results of the logistic regressions tend to show that female gender and high tweeting frequency tend to be associated with a greater likelihood of observing one’s peers engage in inappropriate behaviors. Conversely, male gender and high tweeting frequency appear to be associated with a greater likelihood of engaging in these behaviors oneself.

## Discussion

Given the existing body of research on uses and gratifications of social media use, specifically the



use cases of Twitter among professional and amateur student-athletes, but the lack of understanding into when, why, and how athletes misuse social media, this pilot study sought to start a new conversation by exploring factors that correlate with student-athletes “trash talking” and other inappropriate content posted through new media channels. By identifying several demographic and behavioral factors associated with this online phenomenon, this research paves the road for future researchers and athletic administrators to begin exploring underlying reasons why student-athletes turn to Twitter for negative reasons and then, hopefully, address those proactively.

In response to the research question, this study determines that the most common online behaviors on Twitter acknowledged by the student-athletes were observing athletic peers posting inappropriate content online (47.8%), responding to inappropriate content (37.8%), posting unsportsmanlike content (29.7%), responding to unsportsmanlike content (25.2%), and trash talking (27.9%). In addition to making observations about their peers on Twitter, individual participants admitted to posting inappropriate content (14.4%) and responding (16.2%) on Twitter. Only 2.7% of respondents admitted to trash talking and 3.6% posted unsportsmanlike content online.

This study found that females were more likely to observe their peers engage in inappropriate behaviors more often than did males. Conversely, males were more likely to have reported engaging in inappropriate behaviors themselves than were their female counterparts. These findings should be replicated on a larger scale to confirm a pattern, but future research may choose to explore the psychological and/or phenomenological underpinnings of this significant difference in behavior. For example, one might ask: is it possible that females hold a more broad definition of “inappropriate behavior,” and therefore felt they observed more of it among their peers? Did female respondents generally spend more time on social media and/or follow more accounts than did male respondents, thus inflating the likelihood that they would observe inappropriate behavior? Similarly, were males more likely to “speak” (tweet) than were female students? (Or, in other words, did males have a higher posting-to-observing ratio?) These are elements of the social media experience not directly accounted for in the demographic and user behavior data collected for this study. Note, also, the differences in Twitter use among males and females noted by Yoon et al (2014) as described earlier, specifically that females tend to use Twitter more for entertainment and pass-

time factors than did males. While we can speculate that these tendencies would support females’ higher rates of observing inappropriate behavior, future research would require more data to make any statistical diagnosis.

Unsurprisingly, an individual’s total number of reported tweets and followers did correlate with the likelihood of their engaging in inappropriate tweeting. This finding suggests that those who have spent more time creating tweets and building an online following were more likely to have either observed inappropriate tweeting or engaged in it themselves. Again, this correlation may simply stem from the fact that those more involved with online social media have more opportunities to observe or engage in inappropriate behavior. As an alternative, it is possible that those with less of a propensity to conform their social media behavior to best practices also tend to spend more time observing and posting on social media. No cause-and-effect direction can be determined from the present study, but these are factors to be considered in future research, especially as grounded in a uses and gratifications framework to further explore the reasons behind trash-talking and inappropriate posting on social networks.

As a preliminary, exploratory pilot study, these insights may be expanded and made more generalizable through future research. First, this study is limited by number of responses. Of 150 total survey responses, 111 were complete and used in data analysis. While this sample did offer statistically significant observations on the behavior of male versus female student-athletes, respondents were spread thin over many intercollegiate sports and, therefore, no sport-specific conclusions may be drawn. This is certainly an open door for further study. For example, are athletes in certain sports more or less likely to engage in inappropriate posting on social media channels? And, within those individual sports, are males more likely than females to engage in inappropriate behavior and/or trash-talking, as was found in this study across intercollegiate sports generally? If the answer to any of these questions is “yes,” it gives athletic administrators and other college or university policy-makers a direction in which to focus their efforts.

In addition, the self-reported tendencies of the student-athletes in this survey might not be generalizable across other populations of intercollegiate athletes in the U.S. and abroad. Respondents all attend small, private, Division III colleges, and both the environment of their schools and quality and competitiveness of their athletic programs may influence the prevalence of social media use (or

misuse) among student-athletes. Generally, Division I athletics are considered the most competitive collegiate sports in the United States. Would, for example, the more public and media-rich environment of Division I athletics have any bearing upon the student-athlete experience in regards to using social media? Future research might expand the sample of student-athlete respondents into a different level of competition or, perhaps, diversify a surveyed sample across multiple levels of competition.

Finally, this study relied on self-reported data; the survey instrument was sent to student-athlete respondents by their respective Athletic Directors and/or athletic administrators, who encouraged their participation. Though their responses were completely anonymous and demographic data was collected only for categorical purposes (explicitly stated in the informed consent form), it is reasonable to assume that fear of reprimand due to the sensitive nature of the topic may have dissuaded both survey completion and overall honesty. Further, the data is subject to the self-report bias, wherein participants, despite the anonymity of the instrument, consciously or subconsciously portray a better picture of themselves than may be accurate. And, despite providing specific definitions of “trash-talking” and “inappropriate behavior” in the survey, participants’ responses are still subject to their personal interpretations and memories/framing of their own behavior. Thus, it is possible that self-reporting bias can skew the results of this and similar studies.

Though rooted in theory, specifically in motivations, use cases and outcomes, the purpose of this and future similar research is to offer actionable benefits to student affairs professionals and athletics administrators in secondary and post-secondary education. Key findings are meant to inform the directions that administrators take in addressing inappropriate behavior on new media channels. For now, researchers and administrators may benefit from preliminary data which suggests differing usage and observation patterns between male and female athletes. Typically, policies apply to entire athletic departments or entire institutions, not to individuals or specific athletic teams. Higher education professionals, then, might use this data to focus their additional education and programming efforts towards the individuals and teams that demonstrate a propensity towards the behaviors in question and, ideally, curb that behavior before it happens.

To pre-empt unsportsmanlike conduct, some schools employ programs designed to encourage greater thoughtfulness and intention behind student-athlete behavior. There are examples of such

programs that exist within the researchers’ current (or former) institution of higher education where this study originated, and these initiatives are helpful in proactively addressing student-athlete behavior online. First, the university offers a chaplaincy program for all sports teams, as it is a religiously-affiliated institution of Catholic tradition. Specifically, each athletic team is assigned one or more team chaplains, who serve as faith friends and spiritual advisors to the team. Team chaplains aim to model and instill in the athletes the core values of the university which include reverence, integrity, service, excellence and stewardship (with the acronym “Rises”). Chaplain-athlete programming ranges from informal contact with the athletes, including things such as prayer, conversation, and watching competitions and practices, to more formal programs which include activities such as evenings of reflection, Masses, and team banquets.

In a separate initiative, the university developed a center called the Institute for Sport, Spirituality and Character Development, which emphasizes the spiritual and ethical dimensions of sports and the opportunities athletics offer to transcend self and strengthen core values. Each athletic season, student-athletes participate in special team reflections to unify around goals and intentions for that season. They attend leadership development seminars tailored to each team, and join in season commissioning ceremonies to send them forward in their respective sports with a sense of purpose and support. The Institute’s staff develops activities that will enrich student-athlete relationships and build awareness in those athletes of the need to go beyond self in service to others. Though the Institute’s programming is not designed specifically to combat unsportsmanlike behavior, it seeks to solidify core values espoused by the aforementioned Rises values.

Other programs, both at mass scale and at the local level, similarly work hard to instill positive values in the athletes they serve. For instance, the Positive Coaching Alliance offers tools and courses to help coaches develop character-building sports programs for young athletes, a mission that falls in contrast to the growing hyper-competitiveness of many youth programs. The Fellowship of Christian Athletes, an international organization, takes a spiritual approach to supporting and mentoring athletes by building programs based on the values of religious texts rather than the whims of competitive demands. These programs, too, attempt to combat unsportsmanlike behavior by first creating great sportspeople of positive character who, in those moments when unsportsmanlike behavior is present, choose to take a higher road.

In addition to these established programs and existing research on this subject, an opportunity for more exploration and examination of this subject within this particular population exists. Future research and data should inform proactive choices to educate student-athletes about the consequences of new media use for themselves, their teams, and the communities they represent. This task, of course, would benefit from more behavioral indicators – data that can point directly to “why” student-athletes trash talk on Twitter or other social media platforms – rather than only data that indicates if, when, and how frequently they engage in negative social media conversations. The latter data as presented in this study does offer some focus for practitioners, providing areas within their respective programs as they create or explore the possibility of social media education and policies for their student-athletes. Administrators may, for example, find key individuals or groups more likely to misuse social media through trash-talking or posting of other inappropriate content. In this study, males were more likely to post inappropriate content on Twitter than females. Though this finding should be verified through replication in future research, preliminary data suggest that males may be more likely to misuse new media channels. Athletics administrators and coaches may need to keep a closer eye, then, on male athletes, but also do extra legwork to ensure they are adequately educating and addressing the benefits and dangers of social media use before reactive responses are necessary.

Indeed, this research was initiated in agreement with Sanderson and Browning (2013), who have suggested that education can help students make informed choices about “strategic and responsible” use of new media. Additionally, social media are powerful tools to help student-athletes in self-branding and meaningful connection. They carry very positive opportunities if used correctly; it would be an injustice to the duties of educators and administrators to sweep education on

these opportunities under the rug. Thus, future data that could illuminate what influences student-athlete engagement, unsportsmanlike, or inappropriate interactions on Twitter would benefit the athletic community by offering glimpses into the behavioral underpinnings of the content reported in this study. Twitter and other digital platforms, of course, are simply outlets for trash talking and perhaps not the cause of the behavior itself. Identifying the factors that influence trash talking and other inappropriate conversations may help athletic administrators address the true source of the behavior.

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