6-2017

CLASSIFYING STUDENT SOCIAL MEDIA USERS: A PRELIMINARY INVESTIGATION

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ABSTRACT

This paper reports on the results of a preliminary attempt to classify student social media users based on their posting behavior. Specifically, student users of Facebook and Twitter were classified using a matrix with two dimensions: posting content appropriateness and student privacy concern. The results indicate that the majority of students post content that they believe is appropriate for potential employers. Unfortunately, a significant number of students knowingly post content that they believe is inappropriate. The results also indicate that students have varying levels of concern for their online privacy. While many students limit access by making their accounts private, others keep their accounts public (regardless of the content being posted). The paper uses the results from this preliminary study to propose enhancements to the matrix and possible ways it could be used to modify student posting behavior.

Keywords

Social media, posting behavior, typology.

INTRODUCTION

Since the introduction of social media, college students have been some of the most avid users. Whether it is Facebook, Twitter, or Snapchat, college students constitute one of the largest and most active groups of social media users. This fact alone makes college student use of social media an interesting topic for investigation. The particular ways in which this group uses social media makes the topic even more compelling. While most college students share completely appropriate material through their social media accounts there is a significant subgroup that commonly shares material that is not considered appropriate for all audiences. Researchers such as Peluchette and Karl (2010) have shown that students often post material that casts them in a negative light, especially when viewed by potential employers. Given that employers are increasingly reviewing social media accounts to vet job applicants, inappropriate posting can affect a student's chances for employment after graduation (Jobvite, 2014).

Interestingly, students appear to understand that their posted material could be problematic if viewed by a potential employer (Root and McKay, 2014). At the same time, however, they don't take action to secure their accounts. This means the students are knowingly posting material that could hurt their chances for employment while making that material accessible to potential employers. Miller, Parsons, and Lifer (2010) named this phenomenon the Posting Paradox. In order to better understand this posting behavior researchers have proposed a typology for classifying student users of social media. This paper extends that research by reporting the results of a field study in which the typology was used to classify student users of Facebook and Twitter. The paper ends with a discussion of future research based on the results.

**RECRUITING AND THE POSTING PARADOX**

Social media has become a significant tool for recruiters. In fact, a recent report states that 93% of recruiters will review a job candidate's social media presence before making a hiring decision (Jobvite, 2014). The increased use of social media in the hiring process means that candidates must pay attention to the content that they post. Failure to do so can lead to negative outcomes since recruiters regularly reconsider candidates who post inappropriate content. According to Jobvite (2014), 55% of recruiters have reconsidered candidates with accounts containing posts about sexual activity, drug/alcohol use, and racial slurs. This is particularly problematic for college students because researchers have found that students commonly post these types of inappropriate content (Peluchette and Karl, 2010).

Researchers have also found that students are aware that employers routinely review their social media accounts as part of the vetting process (Root and McKay, 2014). Surprisingly, this knowledge does not seem to affect the students' posting behavior nor does it inspire students to restrict access to their accounts. Many students continue to post inappropriate content while leaving their accounts open to the public. The propensity of students to engage in this risky behavior while being aware of its possible negative effects has been dubbed the posting paradox (Miller et al., 2010).

Research has shown that the paradox is not limited to a single social media site, or just to social media accounts in the United States. The paradox has been noted on multiple social media platforms (Miller and Melton, 2015) and in students from a variety of countries (Melton, Miller, & Salmona, 2012). The pervasive nature of the paradox and its potential negative impact on student employment make this an important topic for research. Designing interventions to change this negative behavior will only be possible once there is a better understanding of how students use social media.

TYPOLOGY OF SOCIAL MEDIA USERS

Although the posting paradox has been shown to be a pervasive phenomenon, it is not present in every student social media account. This is largely due to the fact that different students use social media in different ways. Some students post inappropriate material while others do not. Some students make their accounts private while others share their content with everyone. These observations led to the acknowledgement that there is no single type of student social media user. Miller and Melton (2016) actually argue that social media users can be classified into one of four categories based on their content appropriateness and privacy concern. Their proposed typology is shown in Figure 1.
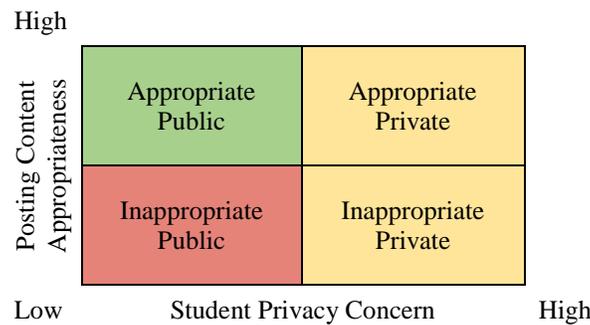
Figure 1. Typology of Social Media Users

According to the typology, social media users in the lower left quadrant post content that is inappropriate for potential employers. At the same time, these users show a low concern for privacy by making their accounts public or open to a wide group of viewers. These users are classified as Inappropriate Public. Users in the lower right quadrant also post content that is inappropriate for potential employers but these users are more concerned about their privacy. They make their accounts private in order to limit the potential viewers and are classified as Inappropriate Private. Students in the upper right quadrant post content that is appropriate for potential employers. These users also show a high concern for privacy by making their accounts private. These users are classified as Appropriate Private. Finally, students in the upper left quadrant are classified as Appropriate Public. They post content that is appropriate for potential employers while making their accounts public. In essence, they do a good job of using content to promote themselves and then make that content available to everyone.

While Miller and Melton (2016) make a strong argument for this classification scheme, they did not verify if the typology truly represented the diversity of social media users. This paper extended their work by applying the typology to real students as a preliminary investigation of social media user classification.

RESEARCH METHOD

In order to investigate the typology it was decided to collect data directly from students who use Facebook and Twitter. To accomplish this, the authors created a web-based survey with questions to collect demographic data along with questions about the student's use of social media sites and the content that they post. The study sample was drawn from undergraduate business students attending a large university in the Midwest United States. Based on the nature of the questions, the students were assured that, if they chose to participate, their responses would remain anonymous. Of the 265 students who responded, 255 used Facebook and 192 used Twitter. While many of the students used both Facebook and Twitter the data was analyzed separately for each social media site (as will be explained in the next section). The demographic breakdown for users of each site is given in Table 1.

	Facebook		Twitter	
Gender	**n**	**%**	**n**	**%**
Male	157	62%	109	57%
Female	98	38%	83	43%
Time to Graduation	**n**	**%**	**n**	**%**
Less than 1 year	5	2%	4	2%
1 year	38	15%	23	12%
2 years	81	32%	58	30%
3 years	35	14%	28	15%
4 years	83	33%	72	38%
More than 4 years	13	5%	7	4%

**Table 1. User Demographics**

RESULTS

Previous research (e.g., Miller and Melton, 2015) has shown that the posting paradox, while present on Facebook and Twitter, is more pronounced on Twitter. While the reasons for the difference are still a matter of debate, it has been suggested that students view the two sites differently in terms of their purpose and intended audience. For these reasons, the data was analyzed for each site separately, creating two distinct matrices.

Table 2 reports the results for Facebook users relative to the appropriateness of content for specific audiences and the privacy settings used on the accounts. To assess the appropriateness of content, students were asked to report their level of comfort with their accounts being viewed by a variety of audiences from friends to potential employers. As in previous posting paradox research, students reported far less comfort with their accounts being viewed by potential employers. The results in Table 2 also show that the majority of students (80%) restrict access to their accounts by limiting them to friends alone. This leaves 20% of the Facebook accounts open to viewers beyond friends, with 13% of accounts open to everyone.

Audience Comfort	**Mean**	**SD**
Friends	6.49	0.92
Parents	5.72	1.46
Boyfriend/Girlfriend Parents	5.44	1.64
Professor	4.98	1.75
Employer	4.50	1.96
Privacy	**n**	**%**
Everyone	34	13%
Friends and networks	4	2%
Friends of Friends	14	5%
Friends only	203	80%

Table 2. Facebook User Results

Using the responses to the audience comfort and privacy questions, a matrix was generated to categorize student Facebook users (see Figure 2). The majority of Facebook users (53.7%) were classified as Appropriate Private. The Inappropriate Private category made up the next largest percentage at 25.9%, with Appropriate Public (13.3%) and Inappropriate Public (7.1%) coming in third and fourth, respectively.

High

Low   Privacy Concern   High
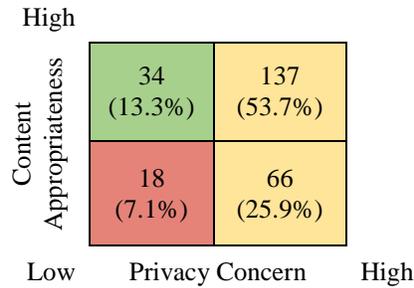
Figure 2: Typology of Facebook Users

After analyzing the results for Facebook users, the same process was used for users of Twitter. Table 3 reports the results of the content appropriateness and the privacy settings questions for Twitter users.   Just as with the Facebook users, Twitter users reported far less comfort with their accounts being viewed by potential employers. Twitter users also reported lower comfort levels as compared with Facebook users for the same potential audience. As for account privacy, Twitter's privacy settings are simpler than Facebook, allowing an account to be either public or private. The results in Table 3 show that only 29% of students restrict access to their accounts by making them private. The vast majority (71%) leave their accounts open to everyone.

Audience Comfort	Mean	SD
Friends	6.39	1.03
Parents	4.85	1.92
Boyfriend/Girlfriend Parents	4.65	1.98
Professor	4.30	1.96
Employer	3.84	1.99
Privacy	**n**	**%**
Public	137	71%
Protected	55	29%

Table 3. Twitter User Results

Again using the responses to the audience comfort and privacy questions, a matrix was generated to categorize student Twitter users (see Figure 3). The largest group of Twitter users (36.5%) were classified as Appropriate Public. The Inappropriate Public category made up the next largest percentage at 34.9%, with Appropriate Private (20.8%) and Inappropriate Private (7.8%) coming in third and fourth, respectively.

High

Low   Privacy Concern   High
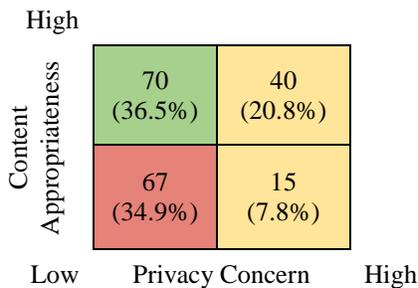
Figure 3: Typology of Twitter Users

DISCUSSION

A review of the results shows that, for both Facebook and Twitter users, the posting paradox continues to be an issue. Both groups reported that they were the least comfortable with employers viewing their accounts. This implies that the students believe their accounts contain content that could be viewed as inappropriate by a potential employer. At the same time, a significant percentage of both groups allowed unrestricted, or minimally restricted, access to their accounts. Thirteen percent of Facebook users and 71% of Twitter users had no privacy restrictions. Clearly, many students continue to post inappropriate content while making that content available without restriction.

The relationship between posting behavior and the paradox becomes more pronounced when viewed through the lens of the typology. As stated previously, the posting paradox is not present in all student accounts. In fact, it could be argued that the Appropriate Public quadrant represents posting behavior that is the antithesis of the posting paradox. A review of the matrices shows that 13.3% of Facebook users and 36.5% of Twitter users were classified as Appropriate Public. These students are posting content that they believe is appropriate for employers while making their content available to everyone. In essence, their posting behavior is ideal from a recruiting standpoint. Unfortunately, 7.1% of Facebook users and 34.9% of Twitter users were classified as Inappropriate Public. These students are exhibiting posting behavior most closely associated with the posting paradox because their posts are inappropriate and there are no restrictions on who can view them. These are the students who would most likely experience negative employment outcomes following a review of their social media content.

While the Appropriate Public and Inappropriate Public categories represent the two extremes of the posting behavior spectrum, 79.6% of Facebook users and 28.6% of Twitter users fall somewhere in between. Of these, 53.7% of Facebook users and 20.8% of Twitter users were classified as Appropriate Private, meaning they post appropriate content while restricting access. These restrictions may be hurting the students since they prevent recruiters from viewing the students' positive content. The remaining 25.9% of Facebook users and 7.8% of Twitter users were classified as Inappropriate Private. These students post inappropriate content while restricting who can view it. Although their privacy settings are protecting them, these students are not really benefiting from their social media accounts – at least not as it relates to recruiting.

Using the typology in this way, significantly simplifies the spectrum of student posting behavior. Through this simplification, it becomes clear that the majority of students (86.7% of Facebook users, 63.5% of Twitter users) are not using social media in ways that would benefit their employment prospects. While the Inappropriate Public and Inappropriate Private students are obviously hurting themselves by their posting behavior, the Appropriate Private students could also be using social media in a more proactive way. Only the Appropriate Public students are truly getting the most out of their social media presence, and they represent a minority on both sites.

Along with simplifying the posting behavior spectrum, the typology can also be used to change how students view and use social media. When a student completes the survey and sees where they land on the matrix, they may be motivated to change their behavior before it becomes a problem. The typology can also be used by researchers to investigate specific user groups in order to better understand the motivations behind their online behavior. This improved understanding should lead to the development of targeted interventions to help reduce the prevalence of the posting paradox.

FUTURE RESEARCH

While this paper has demonstrated that the typology proposed by Miller and Melton (2106) can be successfully used to classify student social media users, it has also highlighted some limitations that should be addressed in future research. For one, the use of a 2x2 matrix may not provide the level of granularity necessary to fully describe student posting behavior. This is especially true for content appropriateness since the current matrix is limited to appropriate and inappropriate. Although it may be easy to say that certain content is clearly appropriate or clearly inappropriate, other content might not fit neatly into either category. As an example, some recruiters might find posts about contentious political issues to be appropriate while others might not. In this case, a middle category of "questionable" might be needed. Even for privacy concern, the use of two categories (public and private) may not always be sufficient. As described above, Facebook allows for a range of privacy settings (friends only, friends of friends, friends and networks, everyone). While it might be easy to classify "friends only" as private and "everyone" as public, how should "friends of friends" and "friends and networks" be classified? Again, this case might call for the creation of a middle category called "semi-private". Future research should examine the matrix to see if these, or other, additional categories would be beneficial.

CONCLUSION

This study began with the premise that some students are experiencing negative employment outcomes due to the posting paradox. In order to help these students modify their posting behavior it is first necessary to understand which students are at

risk and to what degree. The results presents in this paper show that students can indeed be classified using the proposed typology. This represents a significant step toward developing interventions to help students better manage their social media accounts.

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