Research

The Use of Social Media in Dental Hygiene Programs: A Survey of Program Directors

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Introduction

The use of social media and social networking sites has become increasingly common by the current generation of students.1 Social media is commonly defined as "webbased services that allow individuals to construct a public or semi-public profile and articulate a list of other users with whom they share a connection and view their list of connections within the system."² Colleges and universities are using interactive media and social networking sites to advertise to, engage and recruit students.^{3,4} Higher education institutions use multiple types of interactive media including blogs, LinkedIn, Flickr, Twitter and Facebook to interact with students. These forms of communication are used by colleges and universities because of their ease of use and instant impact on students.1,3

At the same time, more employers are using social networking sites to screen potential candidates for employment, searching for unethical or questionable conduct on social media sites to further evaluate applicants beyond their professional qualifications. Career Builder reports that in 2009, 45% of employers are screening potential candidates using social networking sites.⁵ Based on the limited research available, the same trend is happening in education as colleges and universities are using the Internet and social networking sites as a screening tool. More prospective candidates and students are being evaluated on their digital footprint in addition to traditional criteria. Since many professional programs consider experience, character and professionalism

Abstract

Purpose: The use of social media and social networking sites has become increasingly common by the current generation of students. Colleges and universities are using social media and social networking sites to advertise, engage and recruit prospective students. The purpose of this study was to evaluate how social media is being used in dental hygiene program admissions and policy.

Methods: Researchers developed a survey instrument investigating the use of social media. The survey included questions about demographic information, personal use of social media, program use of social media, social media use in admissions and social media policies. An email was sent to 321 dental hygiene program directors asking them to complete the survey. All participants were provided 4 weeks to complete the survey, and 2 reminder emails were sent.

Results: A total of 155 responses were received (48.3% response rate). While 84% of respondents indicated their program had a web page, only 20% had an official Facebook page for the program and 2% had a Twitter page. Thirty-five percent had a program policy specifically addressing the use of social media and 31% indicated that their university or institution had a policy. Only 4% of programs evaluate a potential student's Internet presence, mostly by searching on Facebook. Statistically significant differences ($p \le 0.05$) were noted between those respondents with more personal social media accounts and those with fewer accounts, as those with more accounts were more likely to evaluate a potential student's Internet presence. Open ended responses included concern about social media issues, but some uncertainty on how to handle social media in the program. The concern for social media and professionalism was evident and more research and discussion in this area is warranted.

Conclusion: Social media is currently being used in a variety of ways in dental hygiene programs, but not in the area of admissions. There is some uncertainty about the role social media should play in a professional environment.

Keywords: social media, technology, policy, professionalism, admissions

This study supports the NDHRA priority area, **Professional Education and Development:** Evaluate the extent to which current dental hygiene curricula prepare dental hygienists to meet the increasingly complex oral health needs of the public. as part of the admissions process, professional schools are seeing an even greater incidence of this type of review. Some schools are even rejecting otherwise qualified applicants based on social media content.^{3,6-9}

A longitudinal study reports that in 2007 and 2008, universities were using social media and the Internet to research potential students.³ A 2011 survey of general college admissions officers identifies an increase in the amount of social media used in the admissions process, as general college admissions officers report using social media 24% of the time when evaluating potential applicants.⁶ Professional schools report even more use, with business schools researching applicants online 27% of the time and law schools using Google to search applicants' Facebook profiles.⁷⁻⁹ These surveys report that these numbers have increased during the period they have been tracking this data.¹⁰

As college admissions and professional programs are increasingly using the Internet and social networking sites in the admissions process, little research has been completed regarding the impact of social media in dental professional schools.¹¹ Although a 2012 article in the Journal of Dental Education called for robust research and action in the area of social media "based on the lack of professional discourse in the dental education literature regarding the use of social media...," a literature search of Pubmed revealed only 1 article discussing using social media in dental hygiene program recruitment.⁴

Dental educators are charged with making students competent in professionalism and ethics per the Commission on Dental Accreditation standards, and as ethical dilemmas arise through the increasing use of social media, it is important to understand how social media in used in dental hygiene admissions.¹² The purpose of this study was to determine how social media is used in dental hygiene program admissions and policy.

Methods and Materials

A descriptive survey research design was employed, and the 27 question survey contained multiple choice and open-ended questions related to the use of social media in the admissions process and social media policies within the program. Validity and readability were established through a peer review by a panel of 6 faculty. The panel received access to the online survey and reported any problems, confusion or clarification of the questions to the researchers. The survey was modified related to those recommendations. The research protocol was submitted to the Institutional Review Board at The Ohio State University and approved with exempt status.

The sample population included dental hygiene directors of all accredited entry level dental hygiene programs in the U.S. listed on the American Dental Hygienists' Association website. A total of 321 email addresses were used. Researchers sent an initial email to program directors with a cover letter and a link to the electronic survey. Qualtrics software (Provo, Utah) was used to administer the survey. Reminder emails were sent to all program directors 1 week after the initial email and again 2 weeks after the initial email. Respondents had 4 weeks to respond to the survey. All answers were submitted confidentially and identifying data were removed prior to analysis. An exploratory analysis including measures of central tendencies, descriptive frequencies, t-tests, Chi-squared tests and correlations examining different group variables were completed using SPSS 20 (Chicago, Ill). Qualitative data was summarized and reported.

Results

A total of 155 surveys were completed, with a response rate of 48.3%. Since not all respondents answered every question, the number of responses to each question varies. Demographic information about survey respondents were collected (Table I). Demographic information about the programs the survey respondents represent were also collected (Table II).

Admissions

Most survey respondents (n=101, 70.6%) reported being very involved in the program's admission process. Most commonly, respondents reported that the GPA of pre-requisite courses was used as criteria for evaluating applicants to the program (n=102, 67.1%). Ninety-eight programs (64.5%) also use overall GPA and science GPA in admission criteria. Other criteria were also reported, including standardized test scores, interviews, personal statements, references and other criteria (Table III). Only a small number of programs (n=6,4.2%) evaluate a potential student's Internet presence. Of the 6 respondents that indicated this, all of them use social networking sites to evaluate Internet presence. In addition to social networking sites, 3 use Google or other search engines. Of these respondents, 4 indicated that the information found on social networking sites has some influence on admissions decisions. Statistically significant differences ($p \le 0.05$) were noted between

Table I: Demographics of Survey Respondents

	n (%)	
Age		
25 to 34 35 to 44 45 to 54 55 to 64 65 or over	1 (0.7%) 16 (10.5%) 61 (40.1%) 66 (43.4%) 8 (5.3%)	
Gender		
Male Female	12 (8.0%) 138 (92.0%)	
Years as Program Director		
0 to 5 years 5 to 10 years Greater than 10 years	60 (39.5%) 42 (27.6%) 50 (32.9%)	
Personal social media accounts		
Facebook MySpace LinkedIn Twitter Google+ Professional Blog Personal Blog Other None	110 (72.4%) 4 (2.6%) 66 (43.4%) 17 (11.2%) 16 (10.5%) 3 (2.0%) 4 (2.6%) 1 (0.7%) 30 (19.7%)	

those respondents with more personal social media accounts and those with fewer accounts, as those with more accounts were more likely to evaluate a potential student's Internet presence. Of those respondents that do not evaluate Internet presence in applicants, most are not considering adding this to admissions criteria (n=79, 57.2%). Others are considering it (n=54, 39.1%) and a small number (n=5, 3.6%) plan to implement this in the future.

Policy

Most respondents indicated that their program has a code of conduct or professionalism policy for students (n=146, 96.7%), while only 55 (36.2%) have a policy that specifically addresses the use of social media (Table IV). Of those respondents that indicated they do not have a policy specifically addressing the use of social media, over half (n=53, 55.8%) indicated that they are considering implementing a policy that will address social media use.

An open-ended question asking about the social media policy revealed various answers. Fifteen respondents had a clear policy in place, 11 were drafting a policy at the time of the survey, 2 indicated they had nothing official and 1 identified that the code of conduct covers this area.

Respondents were also asked about university or institutional policies related to social media. Forty-

Table II: Demographics of Dental Hygiene Programs

	n (%)			
Degree awarded				
Certificate/Diploma Associate Degree Bachelor Degree Master Degree	6 (3.9%) 120 (79.0%) 35 (23.0%) 16 (10.5%)			
Type of institution				
Community College 4-year college or university Technical college Other	92 (60.9%) 40 (26.5%) 9 (6.0%) 10 (6.6%)			
College or University has a DDS or DMD program				
Yes No	19 (12.6%) 131 (87.3%)			
Type of Admissions				
Competitive Non-competitive Other	128 (84.8%) 22 (14.6%) 1 (0.66%)			
Program social media				
Web page Official Facebook Page Unofficial Facebook Page Official Twitter Page Unofficial Twitter Page Other official social media page Other Unofficial social media page No social media page	$\begin{array}{c} 128 \ (84.2\%) \\ 30 \ (19.7\%) \\ 32 \ (21.0\%) \\ 4 \ (2.6\%) \\ 0 \ (0\%) \\ 14 \ (9.2\%) \\ 1 \ (0.66\%) \\ 31 \ (20.4\%) \end{array}$			

eight (32.4%) responded that their university or institution has a social media policy, with 54.2% (n=26) of these respondents indicating that they also had a social media policy specific to the dental hygiene program in addition to the general university or institution social media policy. Of these affirmative responses, 52.1% (n=25) were community colleges, 25.0% (n=12) were four-year colleges or universities, and 22.9% (n=11) described themselves as other. The remainder indicated that they do not have one or do not know of one (Table IV). An open-ended question asking about the social media policy of the university or institution revealed somewhat similar results to the previous open-ended question about the policy. Nine had a clear policy in place, 1 was drafting a policy, 1 indicated the professionalism code for students covered this area and 1 was not sure of the contents of the policy.

Violations of a social media policy or violations of other policies through social media were also reported. Most often violations were committed by students and were in the area of unprofessional comments to or about the school, faculty, staff or other students (Table V). The violation classified as "other" indicated academic dishonesty to describe

Table III: Reported Admission Criteria

	n (%)	
Overall GPA	98 (64.5%)	
Science GPA	98 (64.5%)	
GPA of pre-requisite courses	102 (67.1%)	
Standardired test scores	76 (50.0%)	
Interviews	45(29.6%)	
Personal Statement/Es- say	40 (26.3%)	
References	30 (19.7%)	
Other	30 (19.7%)	

Table IV: Reported Policy Information

	n (%)		
Professionali{m policy or code of conduct (n=151)			
Yes No	146 (96.7%) 5 (3.3%)		
Program policy addressing social media (n=152)			
Yes No I don't know	55 (36.2%) 96 (63.2%) 1 (0.7%)		
University or institutional social media policy (n=148)			
Yes No I don't know	48 (32.4%) 46 (31.1%) 54 (36.5%)		

the violation. Of the 6 reported faculty violations, 83.3% (n=5) occurred at community colleges, and the other one occurred at an institution which described itself as other. Of the respondents reporting student violations, 12 (54.6%) were community colleges, 5 (22.7%) were four-year colleges or universities, and 5 (22.7%) described themselves as other types of institutions.

Finally, an open-ended question let respondents provide any other comments about the topic of social media in dental hygiene programs and admissions. These comments were varied and particular themes were difficult to find. Most commonly, respondents wrote about negative feelings or bad experiences related to social media. Four respondents indicated that they address the issue once students are admitted to the program, while 2 indicated that they talk about social media presence during the interview process. Two respondents felt that the code of conduct in their program addresses the issue of social media professionalism. Three respondents commented that their institution has restrictions related to the use of social media and therefore they cannot make decisions related to this area. Three respondents indicated that they are struggling with this issue and are in the process of addressing it in various ways. Three more indicated they had no interest in social media and its use in admissions and within a dental hygiene program.

Discussion

Admission

Only 4.2% (n=6) of dental hygiene programs reported using a potential student's Internet presence as criteria for admission. When researching a student's internet presence, all 6 used a social networking site, and 3 additionally used Google or

another search engine. Dental hygiene does not utilize social networking sites in the admissions process as much as undergraduate admissions, where 24% of colleges report using it.6 This is also less than in other professional fields such as business, law and graduate programs.7-10 This difference could be a unique characteristic of health profession admissions, as a literature review yielded no results for the use of social media in admissions in any health-related field. With the increased use of social media in the admissions process in other fields,¹⁰ it is interesting to note that most dental hygiene program directors (57.2%) are not considering adding an Internet presence critique to their evaluation for admission. It should be noted that some (39.1%) are considering it, and an even smaller group (3.6%) plan to implement it in the future. It is not likely that unfamiliarity with social networking sites is the reason for the low use of social media sites, as 72.4% of respondents reported having a personal Facebook account. In contrast, only 19.7% of programs reported having an official Facebook page for their program. This data seems to imply that dental hygiene programs are struggling with moving social networking into a professional environment.

The role of social networking in the admissions process is also subject to legal and ethical considerations. There is an increasing body of case law and literature related to employment applicant evaluation through social networking sites, but little related to the use of social media in admission of students.¹³ This uncertainty about how to properly use social media in the admissions process creates a barrier to implementing this type of evaluation in a dental hygiene program. Further research and discussion should explore the legal and ethical issues of using social media in admissions and best practices on implementing it as part of admission criteria.

Table V: Number of Violations of Social Media Policy or Other Policies Through Social Media

Description of Violation	Faculty	Student
HIPAA/Patient Privacy Violations	0	4
Personal conduct issues (i.e. vulgar language, inap- propriate photographs)	1	12
Unprofessional comments to or about the school, faculty, staff, or other students	5	13
Illegal activity (i.e. underage drinking, drug abuse)	0	2
Discriminatory remarks (i.e. racism, sexism)	0	1
Other	0	1

Policies

Fifty-five respondents (36.2%) indicated they have a policy that specifically addresses the use of social media. This is a much higher amount than a 2010 study conducted by Kind et al that found only 10.2% of medical schools had a policy that specifically addressed social media.¹⁴ The time difference in data collection may be the reason for such a large difference, as these studies were conducted 2 years apart. Another difference may be attributed to the way data was collected. In our study, the presence of a policy addressing social media was reported by the program directors; conversely in Kind's study the presence of a policy related to social media was determined by searching the medical school's webpage.¹⁴ The data in Kind's study may have left out schools that had these policies but did not publish them on their webpage.

Even though only 36.2% of programs reported having a social media policy, 39 incidents of violating any policy through the use of social media was reported. Not surprisingly, a majority of the violations were by students, but there were also 6 reports of faculty violating policies through the use of social media. Most of the violations related to unprofessional comments about the school, faculty, staff or other students, and the second most common violation involved personal conduct issues. Patient privacy violations were reported 4 times. This data related to violations makes it clear that there is a need to have a discussion about the proper use of social media in a professional environment in dental hygiene programs. Over half of those who currently did not have a policy are considering implementing one. This is promising to see, as allied health education has experienced litigation that has sided both for students and for institutions. But one thing is clear - a well written policy and following due process are essential.¹⁵⁻¹⁷ Creating a social media policy that meets professional and legal standards can be a challenging

process and case law and the literature have not examined this topic to its full extent. A study by Williams et al concluded that the implementation of a social media policy had a significant positive effect on pharmacy student Facebook pages.¹⁸ Future research should include looking at the effect a social media policy has on dental hygiene and dental student's use of social media.

While implementing proper policies is important, it is not the sole solution or strategy to address the issue of social media professionalism. Incorporating social media and digital professionalism into existing ethics and professionalism curriculum is an important step in raising the awareness of using this medium as a dental hygienist. A 2006 study by Kacerik et al showed that a mean of 20 hours of didactic instruction covers ethics in dental hygiene programs.¹⁹ It is essential to begin to incorporate social media professionalism into the ethics and professionalism discussions and content that already exist in dental hygiene education. Future research should look at setting standard content and evaluating outcomes of incorporating social media professionalism into the curriculum.

With a 48.3% response rate, a limitation of this study is that it is unclear as to how the non-respondents are utilizing social media within their dental hygiene programs. Along with the response rate, this study is also limited in that it only addressed dental hygiene programs. It did not address dental, dental assisting or dental laboratory programs. Further investigation into these areas is necessary to provide a consistent message of social media professionalism across the entire dental team. Another limitation is that only a small number of respondents use social media in the admissions process, so comparative analyses were not fruitful. The final limitation surrounds the self-reported nature of this study. Program directors were asked to report the status of their policy and admissions procedures and violations of these policies. With all

self-reported data the validity and accuracy must always be questioned. Self-reports are potentially unreliable because participants may not always report their actual occurrences or may be estimating to the best of their knowledge. Future research should focus on policy guidance, curriculum integration and the effectiveness of both policy and curriculum initiatives. Other investigation should be done on how dental hygiene students utilize social media related to their education.

Conclusion

The results of this study indicate that some dental hygiene programs are utilizing social media through Facebook and Twitter pages. There are very few dental hygiene programs that evaluate applicants by evaluating social media sites. Thirty-six percent of dental hygiene programs have a policy specifically addressing social media and programs report that faculty and students have violated other policies through the use of social media. There is some uncertainty about the role social media should play in a professional environment. Further research and discussion should enhance the role social media should play in professional education.

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