

Health Professions Students Academic and Personal Motivations for Using Social Media

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Abstract

As 72% of online adults are using social media, it is vital for health professions schools and institutions to understand and adapt to the online needs of health professions students (HPS). This research was designed to examine how HPS are utilizing the Internet and online activity, specifically focusing on social media, and to determine HPS' motivations for using social media. In 2012, 4,370 health professions students from the Texas Tech University Health Sciences Center participated in an institutional review board (IRB) approved online survey. Of those contacted, 187 completed the survey, ranging in age from 20 to 56. Completing the survey was voluntary and anonymous. Applying the uses and gratifications theoretical framework, the authors quantitatively analyzed whether HPS' motivations for online interaction through social media are academic, personal, or a combination.

Analysis revealed HPS were motivated by convenience of information, social entertainment, and professional development. The findings indicated that Facebook was the most commonly used social media outlet both academically and personally. Yet, this study also indicates that HPS have little interest in interacting with clients online for fear of violating patient privacy and liability as the primary deterrents. This study offers insight into HPS' motivations behind and use of social media. The increased use of online interaction through social media websites is impacting health professions education. Future research needs to compare health professionals' and students' use, frequency, and motivations for utilizing social media websites to communicate and interact with patients and the medical community.

Key words: Health professions students, social media education, uses and gratifications theory, online professionalism, and patient interaction

Introduction

The way individuals exchange and obtain information is changing as the Internet continues to become more pervasive. Currently, 85% of American adults have access to the Internet and 67% of them use social media (Duggan & Brenner, 2013). For the purposes of this study, social media was defined as "electronic tools that enhance communication, support collaboration, and allow users across the globe to generate and share content" (Thielst, 2010, p1). Through social media websites (i.e., Facebook, Twitter, YouTube, Google+, LinkedIn, etc.), individuals now have the ability to actively consume and contribute to media from various platforms. As the number of individuals joining social media websites continues to rapidly increase, it is estimated over three billion social media accounts will exist by 2015 (Fisher, 2013).

Health professions students (HPS) are increasingly utilizing social media as it continues to grow into a worldwide communication tool. A generation of young health professionals is transferring their personal use of social media into their professional lives (Smith, 2011). For the purpose

of this study, the term academic was defined as utilizing social media to obtain and communicate information pertaining to the health care field in general or specific courses. Examples of academic could include using Facebook or Twitter to organize service learning projects, class reminders, or share class content (Junco, Heiberger, & Loken, 2010). This academic use evolves as HPS advance in their careers to include professionalism online. However, a lack of distinction between academic and personal social media usage has resulted in several reports of improper online activity such as disclosure of patient information, disseminating incorrect health information, and posting of unprofessional content about the user and/or the users health organization. Therefore, it is necessary for health organizations and schools to examine HPS' social media activity in order to determine trends, which in turn indicates the educational methods needed to address appropriate online activity.

The first goal of this study was to examine how HPS are utilizing the Internet and online activities, specifically focusing on particular social media websites. The second goal of this study was to determine HPS' motivations for using social media and whether it is consistent with previous research. This research applies uses and gratifications (U&G) theory of motivation as a

framework to analyze an individual's motivations for social media use and the desired gratifications sought from this online interaction.

Context

The Role of Social Media in Health

Social media sites make it easier for individuals to seek health information and form connections with others in the health care industry, such as patients, providers and students. Recent data from Pew Internet & American Life project reported that 72% of online adults are using social media (Fox, 2011). In fact, a study indicated that 15% of users have obtained health information from social media websites (Smith, 2011). Previous research found new media technologies, such as the Internet and social media websites, serve a dual-purpose of directly involving the patients in their health care while simultaneously providing online platforms for seeking health information (Shaw & Johnson, 2011). The role of social media as a tool to obtain and discuss health care topics continues to grow in prominence. As such, research is needed to determine how receptive the next generation of health care professionals views this communication tool.

Types of social media

There are a variety of social media outlets, but for the present purposes of this study only common and highly utilized social media were considered. Facebook, while originally designed to connect college-aged people, is a social media website that updates others on a person's status or personal information (Cain, Romanelli, & Fox, 2010). Twitter, founded by Jack Dorsey, is a social media website that describes itself as an information network designed to connect users in real-time to the latest stories, ideas, opinions and news based on what users find interesting (Twitter, 2013). Google+, launched in 2011, is a social media website that connects users through features such as status updates, networking circles, hangouts on air, and video chats (Google+, n.d.). LinkedIn, established in 2003, is a social media website designed as a business model to connect professionals for networking and information sharing (Mashable, 2013). Finally, YouTube, created in 2005, is a social media website designed to allow users to upload and view video content ranging from beginner to professional (YouTube, n.d.).

Social media among health professions students

The current generation of HPS provides a unique opportunity to leverage their knowledge and use of social media websites. Giordano and Giordano examined social media websites used by HPS and found that Facebook was utilized more frequently than other websites such as Twitter and LinkedIn (2011). Results from this study also revealed that as the age of the students increased (those 25 and

older), the amount of Facebook usage decreased.

Although a high rate of HPS use social media websites before entering school their usage often blurs the line between personal and professional portrayals on social media websites (Kind, Grenrich, Sodhi, & Chretien, 2010). HPS have reported a willingness to edit their social media profiles to represent themselves as more professional, acknowledging a need to separate their personal online presence from their professional presence. Yet, an examination of pharmacy students' Facebook activity revealed high social media usage with a lack of comprehension of professional issues that arise from certain posts (Cain, Scott, & Akers, 2009). In fact, in a survey conducted by Osman, Wardle, and Caesar (2012), 88% of medical students reported seeing their colleagues engaging in unprofessional behavior online. Methods for reducing this perception of professionalism include editing photos, increasing privacy settings, and performing Google searches on themselves (Lie, Trial, Schaff, & Wallace, 2013).

The use of social media in health professions education

Technological advancements create an opportunity for health professions educators to incorporate social media into the classroom. Incorporating social media into health professions education could lend an advantage to connecting students both in and outside of the classroom; yet, it is clear that the proper use of social media may pose a compromise to both academic and personal communication (Farnan, Higa, Paro, Reddy, Humphrey, & Arora, 2010). One limitation is that health professions educators offer little guidance for HPS on the proper use of social media websites. While a majority of United States (US) medical schools have a social media presence, most do not have policies addressing proper online usage and behaviors for students to follow (Kind, et al., 2010). US medical schools lack of policies could lead to inappropriate use by students of the institution. Learning HPS' motivations for using social media, academic or personal, offers medical schools, organizations and institutions an outline for creating online policies. In addition, understanding how HPS use social media allows health care organizations and schools to better educate, connect with, and research future health professionals (Giordano & Giordano, 2011). Over 700 US hospitals use social media and the number of hospitals utilizing social media websites increased from 10 to 762 during 2006 to 2010 (Ressler & Glazer, 2011).

The role and use of social media in health professions education is not only increasing, but HPS in these institutions are already advanced and knowledgeable users of these technologies. However, the problem is that little research examines HPS' use of social media. HPS were raised connecting with others through social media websites (Wagner, 2009). Yet, little research has been done attempting to understand the motivations HPS have in using social media. Therefore, this study set out to examine and assess whether HPS motivations for using social media are academic, personal, or a combination. The analysis was framed around the following questions:

Research Question One (RQ1a): Which social

media websites do HPS use academically and personally?

Research Question One (RQ1b): How frequently do HPS contribute to social media?

Research Question Two (RQ2): What motivates HPS to use social media?

Research Question Three (RQ3): Are HPS interested in using social media to interact with those they serve?

Research Question Four (RQ4): What factors are most likely to deter HPS from using social media to communicate with those they serve?

Research Question Five (RQ5): What issues do HPS believe discourages those they serve from accessing health information online?

Method

Uses and Gratifications (U&G)

This study's questions were underwritten by U&G. U&G is a theoretical framework that focuses on evaluating how individuals use media to satisfy both social and psychological needs and wants (Rubin, 2009). Rubin (2009, p167) argued that U&G theory is grounded in five assumptions:

- 1) "communication behavior, including media selection and use, is goal-directed, purposive, and motivated;"
- 2) "people take the initiative in selecting and using communication vehicles to satisfy felt needs or desires;"
- 3) "a host of social and psychological factors mediate people's communication behavior;"
- 4) "media compete with other forms of communication (i.e., functional alternatives) for selection, attention, and use to gratify our needs or wants;" and
- 5) "people are typically more influential than the media in the relationship, but not always."

U&G in seeking health information

The emergence of online technologies has shifted the uses of media causing it to become interactive in nature. U&G theory has been applied in numerous studies due to the high levels of interactivity that these new media, such as the Internet and social media websites, demand (Ruggiero, 2000). Previous research by Kayahara and Wellman (2007) grouped media gratifications into two categories: process and content. While process gratification was associated with performance of the online activity, content gratification was defined with acquiring information behaviors. There are several gratifications from Internet use including: web searching, acquisition of information, the ability to engage in interpersonal communication, and socialization that motivate user's behaviors (Stafford & Gonier, 2004).

The Internet is also used to facilitate the flow of health information and communication between patients and providers (Hanauer, Diddle, Fortin, & Col, 2004). A recent study analyzing online users'

motivations for seeking health information through Twitter found treatment options, diagnosis of a health condition, and general understanding of a health condition or procedure were most common (De Choudhury, Morris, & White, 2014). Patients are now using social media to research physicians and institutions, while health professionals are using social media to provide health information and connect with other professionals (Lie, et al., 2013; Kind et al., 2010). By relying on the U&G framework, this research is able to examine and assess not only HPS motivations, but also their use of social media in both a personal and academic context.

Sample and Procedure

A survey was composed to answer the above-mentioned research questions and offered to a total of 4,370 HPS from the Texas Tech University Health Sciences Center. In 2012, these respondents were contacted through an email list asking for their participation in an institutional review board (IRB) approved survey pertaining to social media use. Of those contacted (N = 187) responded, resulting in a 4% response rate. Previous research notes that due to concerns of confidentiality and fear of spam, Internet surveys tend to acquire lower response rates (Cook, Heath, Thompson, 2000; Sills, Song, 2002). Also, these respondents are especially difficult to reach due to the nature of the health industry. The sample consisted of 27.5% (47) males and 72.5% (124) females ranging from 20 to 56 with a mean age of 27.78 (SD = 7.34). Of those who responded, 31.9% (55) were medical students, 23.8% (41) were allied health students, 22.1% (38) were nursing students, 20.3% (35) were pharmacy students, and 1.7% (3) were graduate school of biomedical sciences students. Respondents varied in location and the populations they serve as 51.5% were from Lubbock, 15.8% from Amarillo, 7% from Permian Basin, 5.8% from El Paso, 4.7% from Abilene, and 4.1% from Dallas. The educational level of these communities is similar to that of the state, with 79.9% obtaining a high school education or higher and 25.1% obtaining a Bachelor's degree or higher (U.S. Census, 2014). Additionally, the poverty level for these communities is slightly higher than the state average with 20.32% of the population below the poverty line compared to the state average of 17.4% (U.S. Census, 2014).

Measures

Social media usage

Respondents were asked which of the following popular social media websites they used both academically and personally: Facebook, YouTube, LinkedIn, Google+, Twitter, and patient and physician blogs. Academic was viewed as utilizing social media to obtain and communicate information pertaining to the health care field in general or specific courses. Frequency of academic and personal posts was also assessed using a 5-point scale ranging from *never* to *1-2 times a day*.

Motivations for social media usage

Respondents were asked if they agree or disagree with using new media based on 22 motivational factors.

Motivations were assessed using a 5-point scale ranging from *strongly disagree* to *strongly agree*. These items were adapted from previous research examining U&G on various social media (Craig, Campbell, Bichard, Baker, 2013; Papacharissi & Mendelson, 2011; Parmelee & Bichard, 2013; Smock, Ellison, Lampe, & Wohn, 2011).

Online interaction interest

HPS were then asked their interest in interacting with the people they serve online. Items included: prescribe patient education resources, monitor patient health and/or behavior, monitor patient drug adherence remotely, give care advice to many patients simultaneously, grow and/or maintain your practice, give patients discount vouchers and diagnose and/or treat patients. Response options ranged on a 5-point scale from *not interested* to *I already do*.

Online interaction deterrents

Respondents were asked to select all responses (*concerns about liability, concerns about patient privacy, no way to get paid for these activities, lack of time, feel such interaction is inappropriate, just not that interested, the technology is new to me*) that applied to the question, "What are your top concerns that may hold you back from interacting with the people you serve online?"

Perceptions of online health interaction

The item first asked HPS to estimate what percent of people they serve gather at least some health information online, while additional questions addressed the reasons they think some people fail to obtain health information online. Respondents were asked to select reasons from the following list: *no access at home, no access anywhere in the community, no knowledge of use, no trust in the information, no perceived value of that information, and other*.

Results

HPS Current Use of Social Media

Data was analyzed using version 20.0 of SPSS (IBM Corp., 2011, Armonk, NY) software. RQ1a examined how HPS currently use social media both academically and personally. Results indicated that a majority of respondents use Facebook and YouTube for both academic and personal use (54.0% (101) and 55.4% (102), respectively). Google+ was also used for both academic and personal use 25.4% (44) of the time. Several students indicated using Facebook, YouTube and Twitter solely for personal reasons (37.4% (70), 25.2% (47), and 23.2% (39), respectively). In addition to the above-mentioned websites, 10.9% (18) students indicated using LinkedIn and 20.1% (33) students indicated using blogs mainly for personal use (Table 1). The social media websites students used primarily for academic use were patient communities (6.1%, 10) and physician communities (9.6%, 16).

Table 1 Health Professions Students' Use of Social Media Websites, Texas Tech University Health Science Center, 2012

	Academic	Personal	Both	Neither
Facebook	1.1%(2)	37.4%(70)	54.0%(101)	7.5%(14)
Twitter	.6%(1)	23.2%(39)	1.8%(3)	74.4%(125)
YouTube	10.9%(20)	25.2%(47)	55.4%(102)	7.6%(14)
LinkedIn	6.7%(11)	10.9%(18)	1.8%(3)	80.6%(133)
Google+	4.6%(8)	16.8%(29)	25.4%(44)	53.2%(92)
Blogs	4.3%(7)	20.1%(33)	6.1%(10)	69.5%(114)
Patient Communities	6.1%(10)	1.8%(3)	3.0%(5)	89.1%(147)
Physician Communities	9.6%(16)	1.8%(3)	3.0%(5)	85.5%(142)
Other	1.4%(2)	5.1%(7)	5.1%(7)	88.4%(122)

Next, RQ1b asked HPS specifically about how often they posted content in social media websites (Table 2). The frequency of personal posts was highest for Facebook. Over 40.2% (74) of those surveyed indicated posting comments on Facebook 1-2 times per day and 25.5% (47) made posts 1-2 times

per week. Personal use of social media was significantly less among all other websites. In fact, over 80% of respondents indicated that they "never" posted on blogs (144), LinkedIn (160), patient communities (170) or physician communities (164).

Table 2 Health Professions Students' Frequency of Social Media Posts for Personal & Academic Communication, Texas Tech University Health Science Center, 2012

Personal	1-2 Times a Day	1-2 Times a Week	1-2 Times a Month	1-2 Times a Year	Never
Facebook	40.2%(74)	25.5%(47)	18.5%(34)	6.0%(11)	9.8%(18)
Twitter	6.7%(12)	6.7%(12)	5.0%(9)	2.8%(5)	78.9%(142)
Blogs	1.1%(2)	4.4%(8)	8.9%(16)	5.6%(10)	80.0%(144)
LinkedIn	0%(0)	1.1%(2)	3.9%(7)	5.6%(10)	89.4%(160)
Patient Communities	0%(0)	.6%(1)	1.1%(2)	3.4%(6)	95.0%(170)
Physician Communities	0%(0)	1.1%(2)	1.1%(2)	6.1%(11)	91.6%(164)

Academic	1-2 Times a Day	1-2 Times a Week	1-2 Times a Month	1-2 Times a Year	Never
Facebook	15.1%(28)	16.8%(31)	16.2%(30)	15.7%(29)	36.2%(67)
Twitter	1.7%(3)	1.1%(2)	2.2%(4)	.6%(1)	94.4%(170)
Blogs	1.7%(3)	1.7%(3)	3.3%(6)	5.0%(9)	88.4%(160)
LinkedIn	0%(0)	.6%(1)	3.9%(7)	4.4%(8)	91.2%(165)
Patient Communities	0%(0)	1.1%(2)	2.2%(4)	3.9%(7)	92.8%(167)
Physician Communities	.6%(1)	2.8%(5)	1.7%(3)	3.3%(6)	91.7%(165)

RQ1b also asked how often HPS posted content on social media websites for academic purposes (Table 2). The frequencies of posts for academic reasons were much less than personal posts. Facebook was also the highest in academic posting, with 63.8% (118) of individuals posting content. The remaining social media websites had less than 12% of individuals' ever posting content. While Twitter was the least academically used social media website (94.4% (170) never used the website), for personal use it was second only to Facebook with 21.1% (38) of individuals personally posting content.

Motivations for HPS Using Social Media

RQ2 concerns the motivations of HPS using social media. The 22 items measuring motivational variables were subjected to principal components analysis with varimax rotation to extract motivational factors. Eigenvalues of 1.0 or higher were required to retain factors, and items were only assigned to factors if loadings were greater than .50. Seventeen items met this criteria resulting in three factors labeled convenience of information, social entertainment, and professional development. Together, these three factors accounted for 73.3% of the variance in motivations for HPS using social media (Table 3).

Table 3 Motivations for Health Professions Students' to Use Social Media, Texas Tech University Health Science Center, 2012

	1	Factors 2	3
Factor 1: Convenience of Information			
To provide information quickly	.883	.306	.175
To provide information at any time	.890	.272	.176
Because it is easy to provide information	.874	.276	.157
For the wide variety of information I can give	.836	.278	.200
To allow clients to keep up with current events	.650	.019	.315
For providing specific information of interest	.847	.211	.184
To provide links to other information sources	.684	.244	.301
Because information is cheap to obtain	.596	.426	.163
Factor 2: Social Entertainment			
To pass time when I am bored	.150	.862	.089
Because it is entertaining	.236	.914	.059
Because it is fun	.256	.897	.095
To engage in discussion with others	.318	.772	.290
To communicate support for others	.405	.747	.249
Factor 3: Professional Development			
To post my resume and/or other work online	.199	-.096	.765
To help me network with professional contacts	.226	.161	.709
To criticize inaccurate information	.151	.208	.686
To convey who I am to my colleagues and clients	.229	.290	.691
Eigenvalue	8.85	2.11	1.50
Variance Explained	52.07	12.43	8.79

Convenience of information emerged as the first factor, accounting for 52.1% of the variance. Eight items created this factor, with a Cronbach's alpha of .94. These items indicate that the ease to which students can obtain and share information is the primary reason for using social media. Sample items include "to provide information quickly," "to provide information at any time," and "for the wide variety of information I can give." This factor represents the desire to provide information in a way that is convenient for both the students and their clients.

The second motivational factor of social entertainment accounted for 12.4% of the variance. An index of the five items resulted in a Cronbach's alpha of .94. All items of this factor loaded strongly including "because it is fun" and "to communicate support for others." This factor combines a desire for leisurely interaction that is both enjoyable and inclusive.

Professional development emerged as the final factor, accounting for 8.8% of the variance. Four items loaded under this factor, with a Cronbach's alpha of .75. These values indicated networking and conveying information about the student is one of the motivations for using social media, with the most pronounced motivations

being “to post my resume and/or other work online” and “to help me network with professional contacts.” Items under this factor also included “to criticize inaccurate information” and “convey who I am to my colleagues and clients.”

HPS Interest in Online Communication

RQ3 pertained to the interest HPS have in using social media to interact with those they serve. The findings indicate that the majority of HPS are interested in this type of interaction. While less than 2% (2) indicated current use of online communication for this purpose, a majority of students indicated they were “interested” or “very interested” in using social media to grow and/or maintain their practice and prescribe patient education resources (60.7% (105) and 55.5% (96), respectively). Additionally, over 40% of HPS indicated they were “interested” or “very interested” in monitoring patient health and/or behavior (78), monitoring patient drug adherence remotely (83), giving care advice to many patients simultaneously (84), and giving patients discount vouchers (75). In contrast, less than 30% (48) of those surveyed indicated interest in diagnosing and/or treating patients.

Online Communication Deterrents

RQ4 assessed the factors that are most likely to deter HPS from using social media as way to communicate with those they serve. The most significant concerns for those surveyed were about issues of patient privacy and liability. Seventy-seven percent (144) indicated a concern with patient privacy, while 73.8% (138) had concerns about liability. Other factors that created moderate concern included perceptions that it was inappropriate (56.1%, 105), lack of interest (33.2%, 62), and lack of time (31.0%, 58).

RQ5 looked at the specific issues that HPS view as deterrents for those they serve to use social media for health matters. A vast majority (72.2%, 135) of the students surveyed stated their clients lack the knowledge to obtain health information online. Additionally, 70.6% (132) thought that many of their constituents did not have online access in their homes. Nearly 50% of those surveyed (49.2%, 92) perceived their clients as not trusting the information obtained online. In fact, almost thirty-five percent (33.2%, 62) believed that those they served simply did not perceive online health content as valuable information.

Discussion

This research examined HPS’ frequency of using social media websites and their motivations for embracing these websites. The current study expanded previous U&G research by analyzing numerous social media websites, not just Facebook and Twitter, to view motivations for social media use (Craig, Campbell, Bichard & Baker, 2013; Parmelee & Bichard, 2011). Results indicated HPS central motivation for using social media websites is for

convenience of information indicating a trend in young professionals to use this resource to both seek and provide information online. The findings also revealed HPS were using social media websites for both personal and academic communication. Consistent with national findings (Duggan & Smith, 2013), Facebook was the most popular social media outlet. However, usage of Facebook was much higher for the sample (92.5%) than for the national average (71.0%). Additionally, HPS posted content more frequently on Facebook; however, this was typically for personal rather than academic communication. All other social media websites were utilized less frequently, both personally and academically, by HPS. Differences were revealed regarding social media outlets and how it is used. HPS utilized Twitter and YouTube when posting personal content, while patient and professional blogs and LinkedIn were used mainly for academic purposes. Based on these results, HPS rely on a wider range of social media websites for academic communication and fewer websites for personal communication.

The results are important for health professions educators and schools because they indicate a need to modify curricula and teaching practices regarding the use of social media. Health professions educators, schools, and organizations need to encourage students to utilize social media appropriately in the academic context. HPS should be using social media more in the academic context because 85% of US adults use the Internet and 80% of Internet users search for health information online (Seeman, 2008). Based on our findings, HPS utilize Facebook, blogs, and Twitter most for posting academic content. HPS should actively be using social media websites for academic purposes to communicate with publics of the medical community such as their current educational institution, students, patients, outside health organizations and schools, researchers, and health professionals. HPS could utilize these social media websites academically to communicate with these publics by posting content (text, video, or images) about topics such as free health screening events, appropriate health information based on the patient population, or information about health trends and diseases. Moreover, other social media websites such as LinkedIn and Google+ could also be used to acquire and disseminate health information while providing a tool to connect with other professionals in the medical community.

Results revealed HPS are interested in interacting online with those they serve, which is why it is important for health profession education to incorporate the use of these and other social media websites in their curricula. Education on appropriate online behaviors could help alleviate concerns associated with HPS social media use and instead present new opportunities for communicating with patients. For example, Chou, Hunt, Beckjord, Moser, and Hessee (2009) found that social media websites were being utilized among US Internet users for health communication regardless of the users’ education, race/ethnicity, or health care access, suggesting that social media outlets may serve as tools to reach traditionally underserved members of certain populations. While HPS are interested in interacting online with those they serve, concerns regarding patient privacy and liability with online

communication act as deterrents for academic use. Similar concerns were shown in previous research pertaining to health professionals (Craig, et al., 2013). Respondents of this study serve a heterogeneous population varying in demographics (age, race/ethnicity, income), access (to health care), education, diagnosis severity, and more. This diverse clientele substantiates the importance of providing education to HPS on appropriate behaviors for using social media, whether academically or personally. Through proper education of how to utilize social media, health professions schools can help alleviate some of the deterrents associated with using social media academically and personally.

Limitations and Future Research

This research provided an analysis concerning which social media websites are used by HPS to communicate, which furthers previous research. While this is an important first step, it was not without its limitations. One limitation of this study was the small sample size and should be replicated with a larger, more diverse sample across multiple colleges. Another limitation of the study was the reliance on self-reporting measures for social media usage. HPS may have under reported the frequency

of their social media usage, which could be addressed through direct observation.

The current study provides valuable insight into HPS' motivations and behaviors, but additional qualitative research needs to be performed to expand on interest and reasons to interact and communicate with the medical community online. Even though social media is still considered a new Internet tool within the health industry, it is essential that future research analyze how the next generations of health professionals use this tool (Seeman, 2008). Additional research should be conducted to compare health professionals' and students' use, frequency, and motivations for utilizing social media websites to communicate and interact with patients and the medical community. Also, future research should be performed to determine how patients use social media to search for health information and connect with health professionals. Further research should examine patients' opinion of health professionals' and students activities and usage of social media websites. The current research provides a foundation for understanding the ever changing health care community, but additional research is needed to provide a more holistic understanding of how social media is impacting the health industry.

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