ELSEVIED

Contents lists available at ScienceDirect

Journal of Professional Nursing



Social media use and cybercivility guidelines in U.S. nursing schools: A review of websites



Jennie C. De Gagne ^a, Sandra S. Yamane ^b, Jamie L. Conklin ^c, Jianhong Chang ^d, Hee Sun Kang ^{e,*}

- ^a Associate Professor, School of Nursing, Duke University, Durham, NC, USA
- ^b Post-graduate student, School of Nursing, Duke University, Durham, NC, USA
- ^c Research and Education Librarian, Duke University Medical Center Library, Durham, NC, USA
- d Statitistician, School of Nursing, Duke University, Durham, NC, USA
- e Professor, Red Cross College of Nursing, Chung-Ang University, Seoul, South Korea

ARTICLE INFO

Article history: Received 15 December 2016 Revised 16 June 2017 Accepted 12 July 2017

Keywords: Cybercivility Distance learning Email Incivility Nursing education Social medium

ABSTRACT

This research analyzes to what extent U.S. nursing schools use social media, their policies or guidelines on cybercivility in social media, online classrooms, and email correspondence, and whether these protocols are readily available to students. This website-based study employs a descriptive, cross-sectional, non-experimental search design. Data were collected in nursing schools offering master's programs (n=197) and online graduate programs in master's degree (n=110) listed in the 2017 edition of *U.S. News and World Report*. School ranking was positively correlated with the total number of social networking sites being used in the schools, but not with the presence of cybercivility guidelines. About a third of the nursing schools in the sample had policies/guidelines concerning social media, while fewer than 10% had policies/guidelines about online classroom conduct (n=14) or email use (n=16). Key features of these protocols were professionalism, expected behaviors, and consequences. Establishing and implementing policies and guidelines regarding cybercivility is a vital step to promote a culture of civility online. It is especially important to do so in nursing schools where standards should reflect the values of the profession.

 $\hbox{@ 2017}$ Elsevier Inc. All rights reserved.

Introduction

The rise of social media is radically and rapidly changing the way individuals communicate, learn, and network. Email has become one of the most commonly used modes of communication in business and academic settings—for requesting information, interacting with instructors, and applying for jobs. Digital technology helps students overcome geographic and financial barriers to education, to take classes remotely, and to communicate with professors and peers without ever meeting any of them face to face. Despite the significance of cybercivility as a foundational virtue in the online environment, little is known about the extent to which U.S. nursing schools use social media and whether cybercivility guidelines are available on websites of nursing schools for their students.

The purpose of this research is to analyze to what extent U.S. nursing schools are using social media platforms and to determine whether explicit policies or guidelines regarding cybercivility in social media, online classrooms, and email correspondence are available to students in

E-mail addresses: jennie.degagne@duke.edu (J.C. De Gagne), sandra.yamane@duke.edu (S.S. Yamane), jamie.conklin@duke.edu (J.L. Conklin), jianhong.chang@duke.edu (J. Chang), goodcare@cau.ac.kr (H.S. Kang).

these programs. Schools were chosen from a *U.S. News and World Report* (U.S. News Best Schools, 2016) publication that ranked master's and online graduate programs in master's degree. This study specifically examines the relationships between the ranking of schools' graduate programs and (a) the number of SNSs being used by these schools as well as (b) the presence of protocols for social media, online classroom conduct, and email use. We also document key features of the policies and guidelines in selected programs in order to inform nurse educators and administrators about how best to maintain a culture of cybercivility in nursing education and practice.

Review of the literature

According to a newly released survey of social media usage in the United States, 90% of young adults use social networking sites (SNSs), and individuals with higher levels of education lead its adoption rate (Perrin, 2015). As such, educational institutions increasingly use the Internet to facilitate communication, to teach, for publicity, and for marketing. However, despite the universally recognized benefits of the Internet, new challenges for users in cyber environments have emerged, of particular concern *cyberincivility* (De Gagne, Choi, Ledbetter, Kang, & Clark, 2016). Defined as the disrespectful, insensitive, or disruptive behavior of a user in cyberspace, cyberincivility is a pervasive and rampant issue that negatively affects one's personal, professional, social, and

^{*} Corresponding author at: Red Cross College of Nursing, Chung-Ang University, 84 Heukseok-Rd, Dongjak-Gu, Seoul 156-756, South Korea.

educational well-being (De Gagne, Choi et al., 2016). This phenomenon is evident daily on Twitter, Facebook, and blogs, as well as in online forums, email, texts, and instant messages (De Gagne, Choi et al., 2016).

Incivility in society is not just a mere perception but a harsh reality offline as well as online. According to a nationwide poll of 1000 American adults, 70% believe that the Internet encourages uncivil behavior and that incivility in everyday life has risen to crisis levels (Leslie, 2013). The findings also reveal that Americans encounter incivility on average 17.1 times a week, or 2.4 times a day; almost equally offline (8.5 encounters/week) and online (8.6 encounters/week) (Leslie, 2013). In workplace settings, frequent rude or discourteous emails are associated with lower levels of mental, emotional, and social energy, poorer task performance, increased negative mood, and decreased positive mood, as well as lower levels of engagement (Giumetti et al., 2013).

In the online learning environment, uncivil behaviors that interfere with a safe and productive atmosphere may include posting terse responses that do not add substance to the discussion; refusing to participate in required discussions; belittling a classmate or faculty member; making racial, ethnic, sexual, or religious insults; failing to fulfill group responsibilities; breaching confidentiality; cheating on exams or quizzes; and ignoring disruptive behaviors (Clark, Ahten, & Werth, 2012; Clark, Werth, & Ahten, 2012).

Although the literature supports that cyberincivility is rampant and on the rise in our society and that health professions students are also negatively affected by this phenomenon (De Gagne, Choi et al., 2016), it is not known to what extent nursing schools with masters' degree programs use social media and to what extent these schools provide cybercivility policies on their public websites. Thus, this study would fill the information gap in the literature and trigger more research concerning cybercivility policies/guidelines in nursing schools to promote a culture of civility in nursing practice.

Methods

Design and sample

This study employs a descriptive, cross-sectional, and non-experimental website search design. Data come from nursing schools of master's programs and online graduate programs in master's degree that are listed in the 2017 edition of *U.S. News and World Report*. Based on different nursing programs and specialties, 197 schools of master's programs and 110 schools of online graduate programs in master's degree were ranked in the report (U.S. News Best Schools, 2016). However, due to overlap between the two categories, the final number of school websites reviewed in this study was 230.

Search strategy and data collection

From May through October 2016, three investigators independently reviewed the schools of nursing websites in the sample to identify and record the number and types of SNSs specific to those schools and the presence of protocols on social media, online classroom conduct, and email use. We first noted any social networking site listed on the schools' homepages and then searched for a link to each school's master's or online program student handbook. Using a search box on the websites or a Find tool on web browsers, we looked for terms such as "social media," "social network," "electronic," "email," "online," "virtual," "distant," or "distance" to locate documents. We also browsed the Table of Contents in each student handbook for relevant policies or guidelines. If no student handbook was found, we looked through the school website for the same terms to identify sections and links available to graduate students in their applicable programs. The data collection process was organized using a matrix spreadsheet. To reduce the risk of unusual interpretations or biased decisions, we used investigator triangulation during the data collection and analysis period. The study was determined to be exempt from review by the authors' University Institutional Review Board.

Data analysis and rigor

The sample characteristics of cybercivility guidelines in social media, online classroom conduct, and email use were analyzed by using counts and frequencies. Correlations between the total number of SNSs used by the schools and the school rankings in the report were evaluated using Spearman correlation coefficients due to the non-normal distribution of the ordinal characteristic of the program ranking measures. The mean and standard deviation (SD) of the ranking of master's programs and online programs among schools having cybercivility guidelines or not were calculated. Logistic regression models were used to evaluate the association between schools' program ranking and the presence of cybercivility protocols. The Statistical Analysis System, Version 9.4 (SAS Institute Inc., Cary, NC) was used for all statistical analyses, and assumptions for parametric statistics were examined.

The qualitative data analysis identified common elements of existing policies and guidelines and provided an overall picture of how U.S. nursing schools are governing the conduct of students in virtual environments. To accomplish this goal, the data analysis was performed at the individual and group level. We assessed each policy and agreed on whether it was to be included in the data analysis. To be included in the data analysis, each document must have been specified as a "policy," "guidelines," or the like, and it should have provided at least one comprehensive set of recommendations or rules for behavior in cyberspace. Protocols on social media, online classrooms, and email were separated into three folders, and then each investigator read the policies and guidelines and noted meaningful and recurrent information. The investigators' tabulations were then combined, and conclusions were drawn for final interpretation and resolution of any questions or disagreements. Categories were added to provide more detail, and all data were reanalyzed and verified.

Findings

Sample characteristics

The most common SNSs used in the 197 master's nursing programs ranked were Facebook (58.9%), followed by Twitter (50.8%), YouTube (26.9%), LinkedIn (21.3%), Instagram (15.7%), Flickr (7.1%), Nurses Lounge (6.1%), Pinterest (5.9%), Google + (4.6%), Vimeo (1.5%), Tumblr (1.0%), and SmugMug (0.5%). About a third of the programs had social media protocols, while fewer than 10% had policies or guidelines for online classroom conduct (n=14) or email (n=16). The distribution of SNSs being used in the schools and the presence of cybercivility guidelines for the 110 online graduate programs in master's degree were similar to those for master's programs (see Table 1).

The total number of SNSs being used in the schools was moderately but significantly correlated with the rankings of both master's (p < 0.0001) and online graduate program (p < 0.0001). The higher the program's rank, the greater the number of SNSs used. This correlation was stronger in the master's programs ($\rho = -0.54$) than in the online graduate programs in master's degree ($\rho = -0.37$).

Associations between the school's program ranking and the presence of each cybercivility guideline are presented in Table 2 for means and odds ratios (ORs). As shown, logistic regression analyses revealed that the presence of guidelines for social media, online classroom conduct, and email use was not significantly associated with program rankings.

Key features of cybercivility guidelines

Social media

Of the 230 school websites reviewed, 80 (34.8%) programs had social media or SNSs use policies or guidelines. Maintaining confidentiality or

Table 1Use of social networking sites and presence of cybercivility guidelines in nursing programs

	Master's Programs $(n = 197)$		Online Graduate Programs (n = 110)		Total (n = 230)	
	n	(%)	n	(%)	n	(%)
Social networking sit	es					
Facebook	116	(58.88)	60	(54.55)	123	(53.48)
Twitter	100	(50.76)	50	(45.45)	103	(44.78)
YouTube	53	(26.90)	23	(20.91)	53	(23.04)
LinkedIn	42	(21.32)	20	(18.18)	42	(18.26)
Instagram	31	(15.74)	14	(12.73)	31	(13.48)
Flickr	14	(7.11)	8	(7.27)	14	(6.09)
Nurses Lounge	12	(6.09)	7	(6.36)	12	(5.22)
Pinterest	11	(5.58)	6	(5.45)	11	(4.78)
Google +	9	(4.57)	4	(3.64)	9	(3.91)
Vimeo	3	(1.52)	3	(2.73)	3	(1.30)
Tumblr	2	(1.02)	1	(0.91)	2	(0.87)
SmugMug	1	(0.51)	1	(0.91)	1	(0.43)
Cybercivility guidelin	ies					
Social media	67	(34.01)	45	(40.91)	80	(34.78)
Online classroom	14	(7.11)	12	(10.91)	17	(7.39)
Email	16	(8.12)	10	(9.09)	19	(8.26)

privacy was mentioned frequently in policy statements, safety tips, and agreements. Titles of social media policies/guidelines were not identical but similar as in "social media guidelines," "social networking policy and guidelines," "use of technology and social media," "use of electronic media," "digital media policy," and "expected behavior on social media sites." Of these policies/guidelines, references specific to Health Insurance Portability and Accountability Act (HIPAA) compliance occurred in 66.3% (n=53) of the documents. HIPAA compliance was addressed with phrases such as "patient privacy," "patient confidentiality," or "privacy breach."

References related to professionalism, ethics, and civility (62.5%, n=50) was another predominant feature of the social media policies/guidelines examined. Some of them referred to any postings that might be unlawful or in violation of any federal laws, state laws, copyright protection, or any infringement on intellectual property. Professionalism was most often referred to in phrases such as "professional conduct," "professional behavior," "professional reputation," "respect," and "professionalism." The "ethical component of professionalism" and the "obligation to maintain patient privacy" were also found.

The next feature most often cited was civility or lack thereof and more specifically forbidden behaviors (61.3%, n=49). Such behaviors included posting material that could be obscene (e.g., pornographic), inappropriate (e.g., derogatory language), offensive (e.g., slurs), disruptive, bullying, disrespectful, unethical, harassing, or insulting. Following forbidden behaviors, 53.8% (n=43) of the policies/guidelines contained a warning that postings are public and forever, and that any inappropriate conduct mentioned could be viewed by potential employers, future patients, or future institutions of higher learning.

The social media policies/guidelines were presented in a variety of formats and varied in length from a link to a reference (e.g., American Nurses Association [ANA], National Council of State Boards of Nursing [NCSBN], school policy, school code of conduct) to very detailed and lengthy descriptions. The more descriptive protocols provided definitions of social media and listed specific sites such as Facebook, LinkedIn, Snapchat, as well as user-created webpages (e.g., Wikipedia), personal blogs (e.g., WordPress), forums (e.g., Google Groups, ALLnurses.com), and content communities (e.g., YouTube). Some protocols gave guidelines for the use of social media for official school business, and many recommended that students include a disclaimer that the views and opinions presented on social media are their own.

Reference to the ANA (2016) and NCSBN (2011) recommendations for social media use (42.5% [n=34] and 36.3% [n=29], respectively) ranged from links to their websites to copying and pasting verbatim content from the recommendations into the program policies/guidelines. Examples of common statements on the websites included: "The College of Nursing adheres to the ANA Principles for Social Networking" and "Students may consult the NCSBN's A Nurse's Guide to the use of Social Media.". Even when not cited or referenced, the influence of these organizations was evident. One unique intervention was a pledge for nursing students to sign stating that they will not violate the social media policy.

The need to set professional boundaries, specifically to avoid developing relationships with patients outside the healthcare setting, was found in 32.5% (n=26) of the social media policies/guidelines. Other key themes and topics included the expectation to report violations, use of privacy settings, lists of contact persons or email addresses for reporting or questions, and references to the National Student Nurses' Association (NSNA, n.d.) recommendations for social media usage (see Fig. 1).

Online classroom conduct

Of the 230 school websites examined, 17 (7.4%) had policies/guidelines regarding the conduct and expectations of students in the online learning environment. The guidelines covered activities such as chat rooms, discussion boards, wikis, blogs, synchronous virtual classroom sessions, live chats, and informal course forums. The titles of the protocols varied widely as well as the length and content of the descriptions that ranged from one-paragraph statements to detailed rules and instructions.

As shown in Fig. 2, disruptive behaviors (82.4%, n=14) were discussed most frequently, but many guidelines also described positive online behaviors in addition to negative conduct. Negative behaviors listed in the documents addressed aggressive comments, use of capital letters, threats, insults, and personal attacks. Unique to the online learning environment, 58.8% (n=10) of the guidelines delineated expectations of students' participation, preparedness, and interactions with peers and faculty.

Similar to these findings, upholding professionalism (58.8%, n=10) was often used interchangeably with "ethics" or "civility." Professionalism included phrases about demonstrating respectful, courteous, non-

Table 2Association of cybercivility guidelines with school ranking in master's and online graduate programs.

		Policies or guidelines						
Cybercivility guidelines		Yes		No				
		Mean (SD)	n	Mean (SD)	n	OR	95% CI	p
Social media	Master's program ranking	93.82 (58.09)	67	98.34 (55.63)	130	0.999	0.993-1.004	0.5934
	Online graduate program ranking	53.87 (29.60)	45	54.20 (33.36)	65	1.000	0.988-1.012	0.9566
Online classroom	Master's program ranking	89.71 (67.05)	14	97.34 (55.65)	183	0.998	0.988-1.007	0.6252
	Online graduate program ranking	59.17 (34.07)	12	53.44 (31.56)	98	1.006	0.987-1.025	0.5544
Email	Master's program ranking	99.19 (66.90)	16	96.59 (55.56)	181	1.001	0.992-1.010	0.8595
	Online graduate program ranking	48.80 (32.11)	10	54.59 (31.81)	100	0.994	0.974-1.015	0.5817

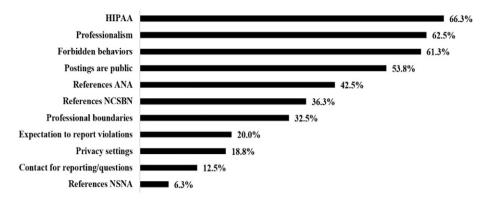


Fig. 1. Key features found in social media policies (n = 80).

judgmental, civil, and open-minded behaviors. Adhering to the rules of "net etiquette" or "netiquette" (41.2%, n=7) was referenced in guidelines for online classroom conduct. While there was no standardized definition of netiquette used in the codes of conduct, descriptions ranged from respecting diversity of opinion to the presentation of one's online persona. Terms and phrases associated with netiquette in the online learning environment included active participation, collaboration, presentation of self, and relevance to context, purpose, and topic.

Unique to this cyber environment was the description of the settings of online synchronous sessions as well as expectations during online activities (41.2%, n = 7). Such activities ranged from online discussion forums, wikis, chats, and/or blogs to virtual meetings and synchronous online classes. In these guidelines, students were advised regarding conditions under which meetings should occur (e.g., appropriate dress, control of ambient noise levels, and net manners during live chats or live classroom times). Consequences for breaches of online classroom norms and expectations were also found (35.3%, n = 6). Linking online violations to current student codes of conduct, these protocols stated that repercussions carried the same penalty in a virtual environment that they would in a regular classroom. Faculty expectations such as being prepared, being available, providing timely feedback, and responding to emails within a specific time frame, were also included in some guidelines (29.4%, n = 5). References to HIPAA were found in 66.3% of social media policies/guidelines, but mentioned in only 23.5% (n = 4) of the online conduct protocols.

Email use

Nineteen (8.3%) of the 230 websites presented protocols on electronic communication. Sometimes, these were contained within the social media or online conduct sections of school of nursing handbooks. The descriptions varied widely in their titles, lengths, and content. Some sample titles were "Behavioral Expectations for Electronic Communication," "Student E-Mail Group Guidelines," and "Electronic Mail and Etiquette."

The majority of electronic communication protocols (84.2%, n = 16) stated best practices for netiquette, namely to be clear and concise,

proofread messages, and maintain a professional tone. Many also advised the use of features specific to email content—a meaningful subject line, an appropriate salutation, and a closing with a signature. Twelve guidelines (63.2%) provided specific behaviors either to be avoided (e.g., disrespectful messages, typing in all capitals) or limited (e.g., abusing emoticons). Nearly half of the guidelines recommended students use caution (47.4%, n=9) so as not to share private information, reply to recipients who do not need the information, or miscommunicate due to the loss of tone and nonverbal signals. Nine protocols (47.4%) stated consequences for infractions frequently equivalent to student conduct policies/guidelines. Four (21.2%) prescribed a "cooling off" period before responding to an email that caused a negative emotion (see Fig. 3).

Discussion

A recent Pew survey, based on telephone interviews with U.S. adults who say they use the Internet or email, Facebook was the most popular social media site, followed by Twitter, Instagram, Pinterest, and LinkedIn (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015). Our study had similar findings; the most frequently used SNSs among the schools were Facebook, Twitter, YouTube, LinkedIn, and Instagram, Another finding was that the schools' ranking was positively correlated with the total number of SNSs being used in the schools, but not with the presence of cybercivility policies/guidelines. The U.S. News and World Report questionnaire specifically asked about three social media channels: Facebook, Twitter, and LinkedIn (M. Evans, personal communication, November 17, 2016). Yet, when the weighing of their scores are concerned, the metrics fall into four broad categories: quality assessment, program student selectivity and program size, faculty resources, and research activity. Although the use or non-use of social media is not entered into the ranking metric, social media contribute to the image of a school and may influence the peer assessment portion of the survey (M. Evans, personal communication, November 17, 2016). As such, our results indicate that the number of SNSs being used in

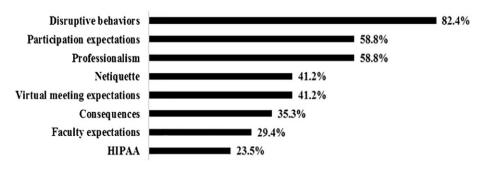


Fig. 2. Key features found in online classroom guidelines (n = 17).

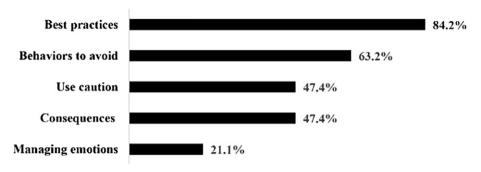


Fig. 3. Key features found in email use guidelines (n = 19).

the programs may affect their rankings, but the ranking of the programs is not a predictor of established policies/guidelines for SNSs use.

It is worth noting that most schools in our study did not have policies/guidelines that explicitly address the conduct in social media, online classrooms, and email correspondence in their master's and online graduate programs in master's degree. This suggests that nursing schools need to play a more active role in developing and implementing policies/guidelines to maintain professionalism and foster civility in online environments. Some schools may need support in developing and implementing these protocols.

The key features of the policies/guidelines reviewed in this study were professionalism and expected behaviors. This is in line with the significance of professional accountability and civility (Harris, 2011) at a time when unprofessional conduct is increasingly common among students due to the growing use of social media and Internet (Marnocha, Marnocha, & Pilliow, 2015; Nyangeni, du Rand, & van Rooyen, 2015). The core values of health professions are reflected in codes of ethics and professional standards and provide a foundation for promoting online professionalism. In our study, HIPAA and professional organizations, including ANA, NCSBN, and NSNA, were cited or referenced in policies/guidelines for social media use or online education for patient safety and information privacy.

Breaches in confidentiality can damage the patient as well as the reputation of the profession and the organization. Violations of this kind break many ethical and legal regulations (Henderson & Dahnke, 2015) that could cost an institution the public's trust. Nurses and other healthcare professionals who have intentionally or unintentionally violated a patient's privacy have been dismissed from clinical sites and had their licenses revoked (Spector & Kappel, 2012). Although policies/guidelines have been published that directly address patient privacy and confidentiality, violations continue to occur. For example, in a recent survey of 293 schools of nursing, 77% of deans and directors stated that they had witnessed or been made aware of unprofessional online content within the past year. Surprisingly, 19% of the incidents were related to postings with patient photographs, patient information, comments about patients, or describing patient interactions (Marnocha et al., 2015). The case of a student's dismissal from a nursing program for inappropriately posting a pregnant woman's delivery information on the Internet (Westrick, 2016) is another example of threats to patient confidentiality. In line with the previous studies, our findings support that social media or Internet use policies/guidelines need to specify what types of professional regulations apply in addition to the HIPAA regulations that all healthcare professionals need to follow to protect patients' privacy.

As for online behaviors included in the policies/guidelines reviewed in this study, expected behaviors were stated as forbidden behaviors, disruptive behaviors, or behaviors to avoid. Similar to our study, forbidden and inappropriate online behaviors were also addressed in guidelines for medical students (Kind, Genrich, Sodhi, & Chretien, 2010). Traditional professional values that include clinical competence, integrity, patient confidentiality, social justice, humanism, and civility are the foundation of a profession and the reason for public trust and the social

contract (Chretien & Tuck, 2015; De Gagne, Yamane, & Conklin, 2016). However, there is no single definition of unprofessional or inappropriate behavior. Indeed, violations of privacy and illegal activities are understood universally, but otherwise, there are no agreed upon definition (Chretien & Tuck, 2015). Our study raises the question of possible evolutionary definitions of digital professionalism given the rise of social media and other global trends in higher education. Are these older norms of professionalism falling to the wayside or can they be applied virtually? Despite such challenges and questions, policies/guidelines related to technology use are expected to include explicit statements about the unacceptability of posting patient information (Frazier, Culley, Hein, Williams, & Tavakoli, 2014). However, Junco (2011) recommended that social media policies adopt a "magnanimous rather than a draconian tone." Thus, healthcare professionals and educators need to maintain accountability in the digital environment (Ellaway, Coral, Topps, & Topps, 2015).

The findings of this study indicate that the majority of social media (62.5%), online classroom conduct (58.8%), and email (84.2%) policies/ guidelines addressed professionalism, ethics, or civility directly. At least one school of nursing included a statement of civility for students to sign, which further encourages professional behavior (Clark, Ahten et al., 2012). Perhaps the act of providing a policy itself promotes civil behavior without having to explicitly state that students need to act in a civil and professional manner. Another possibility of missing direct statements about professionalism or civility is that students are assumed to apply existing professional codes of conduct to the online environment. Although the ANA (2016) reminds nursing students and nurses that "standards of professionalism are the same online as in any other circumstance," policies should emphasize appropriate behaviors necessary to maintain professionalism and ethics within nursing practice (Spector & Kappel, 2012). Even if the policies/guidelines themselves might act as exemplars of professional communication, addressing specific and representative behaviors while setting boundaries for uncivil behaviors in policies/guidelines could help to clearly communicate expected behaviors to students. Furthermore, articulating acceptable or avoidable behaviors in the course syllabus could be an additional way to bolster students' sensitivity to civil cyber behaviors (Anselmi, Glasgow, & Gambescia, 2014; De Gagne, Choi et al., 2016; Galbraith & Jones, 2010).

The majority of schools in this study did not have email guidelines, but the ones that did had the key features of best practices, behaviors to avoid, use of caution, consequences, and management of emotions. Professional and ethical behaviors and the ability to use email properly are required from students and faculty to promote relationships within online learning and teaching contexts. Similar to our findings, other studies also suggest users follow the rules of netiquette in emails by using appropriate salutations and engagement, identifying senders clearly with a closing salutation, proofreading before sending, and avoiding the use of colored backgrounds and difficult-to-read fonts that could cause confusion (Cleary & Freeman, 2005; Granberry, 2007; Resendes, Ramanan, Park, Petrisor, & Bhandari, 2012). Netiquette, a term coined by Virginia Shea in 1994, is a description of proper online

communication that includes the ideological concepts of professionalism as well as operational guidelines (Albion.com & Ross, 2011). Guidance on how to use email professionally and effectively would have a positive impact on students' netiquette, thereby promoting cybercivility.

Other key features that need to be delineated and integrated into the policies/guidelines for social media include outlining the consequences of misconduct and providing contact information for reporting misconduct. Perspectives on inappropriate online behavior and how to handle it might be influenced by human subjectivity and cultural differences (De Gagne, Choi et al., 2016). Not surprisingly, it has been reported that some individuals might not be able to recognize their unprofessional conduct on social media as violations of patient privacy (Rocha & de Castro, 2014). Thus, schools need to have formal policies/guidelines that specifically address the consequences of misuse of social media in order to treat students fairly and consistently when violations occur.

Standardizing regulations has several advantages, such as sharing core values within the nursing profession, clearly establishing expectations and consequences of misuse, and dealing with students' misconduct consistently rather than inconsistently (Westrick, 2016). A study of pharmacists from nine countries reported that some pharmacists preferred SNSs to be unregulated, while most believed that guidance was needed to maintain high professional standards in the online environment (Benetoli, Chen, Schaefer, Chaar, & Aslani, 2016). This suggests that some individuals believe regulations infringe on their rights. Hence, it is important to also address the positive aspects of regulation instead of focusing solely on the consequences of misconduct.

Implications

The findings of this study have several implications. Cyberincivility is of great concern to nursing students and faculty given that students' uncivil behavior interferes with academic achievement, teaching, and the learning process (Clark, Ahten et al., 2012; Ibrahim & Qalawa, 2016). In addition, uncivil behaviors displayed or ignored in nursing education can be brought into nursing practice and affect patient outcomes (Woodworth, 2016). For example, a study of RNs enrolled in master's programs reported a strong relationship between RNs' unethical behaviors and their prior academic misconduct as students (Klainberg et al., 2014). Understandably, students who do not grasp what is ethical, professional, or illegal regarding the virtual environment are more likely to commit violations.

Efforts to prevent cyberincivility involve development of clear policies/guidelines with consequences, formulation of online behavior guidelines for both students and faculty, and education focused on cybercivility (De Gagne, Choi et al., 2016; De Gagne, Yamane et al., 2016). Frazier et al. (2014) revealed that high numbers of students and faculty agreed that schools' social networking policies could provide a better understanding of social networking practices. Our study implies that nursing schools without policies/guidelines need to consider developing them along with fostering online professionalism in the nursing education curriculum (Rocha & de Castro, 2014). Once social media policies/guidelines are in place, they need to be easily accessible to students. Furthermore, it is not enough to simply have a policy; students and faculty need to be aware of it and understand it.

Even with policies or guidelines in place, violations may occur. One reason could be that students and new healthcare professionals are entering clinical environments without formal online professionalism and cyberethics education. In a study of how undergraduates, faculty, and graduate nursing students perceive and use social networking in the nursing profession, half of the nursing students reported that netiquette was not discussed during their curriculum, and only 6% were familiar with the NCSBN's (2011) guideline. Another reason for violations could be a false sense of security and lack of knowledge about Internet privacy. Users may not know that their posts or online conversations can be viewed by others or may not understand privacy settings. It

may also be a misconception that the information is harmless if identifying information is removed or if only the recipient reads the information (Cronquist & Spector, 2011). Integrating the concepts of civility, professionalism, and ethical and safe practice into nursing curricula is suggested to promote cybercivility as a standard in nursing education and practice (Clark, 2016; De Gagne, Choi et al., 2016; De Gagne, Yamane et al., 2016).

Limitations

Several limitations to this study deserve consideration. First, we only included those policies/guidelines that were available online. Despite rigorous searches, we might not have been able to locate some schools' existing policies/guidelines in that some schools may have protocols, policies, and guidelines that are available only on their intranet site thus not available to the public. In addition, it is possible that some schools might have guidelines at the syllabus level or guidelines in the process of being developed. Second, this study focused only on the presence of policies/guidelines, but their qualities were not evaluated; therefore, quality evaluation is needed in future studies. Third, this study checked for the presence of policies/guidelines without considering student access. Fourth, the reasons for schools not having policies/ guidelines regarding cybercivility were not explored in our study; thus, further research should investigate these reasons as well as the barriers to implementing such policies/guidelines. Finally, this study is cross-sectional and correlational in nature. We thus suggest repeated or longitudinal studies to monitor any changes or trends in implementing policies/guidelines for SNSs, online classroom, and email use. Given that cybercivility protocols may help to increase students' awareness of digital professionalism, further studies are needed to examine the effect of cybercivility policies/guidelines on unprofessional conduct. Future research also should focus on how such policies/guidelines are implemented and enforced by nursing schools. Research at the international level is warranted to examine whether any similarities or differences exist in policies/guidelines for social media, online education, and email use across other countries.

Conclusion

Developing and implementing policies/guidelines on the challenges of ethical, legal, and professional issues in cyberspace can raise awareness of cybercivility among nursing students and faculty. Despite the fact that our study is limited to findings in online handbooks/policies related to each school's websites and that there may be additional policies in each school of nursing that is not reflected in the website, the results of this study indicate that most nursing schools do not have a cybercivility policy that specifically addresses conduct in social media, online classrooms, and email correspondence. Since social media use and unprofessional conduct are on the rise, the availability of such protocols is of paramount importance. In schools where policies/guidelines are implemented, educators need to ensure that students adhere to professional standards and codes of ethics. If a nursing program does not have a cybercivility policy, faculty and administration should strive to develop one incorporating the professional standards of nursing and professional organizations. In addition, expected positive behaviors as well as negative behaviors and their consequences need to be clearly defined. This study provides a basis for understanding the current state of policies/guidelines regarding cybercivility in nursing education and raises awareness of policy development and implementation in nursing education. Nursing education and practice are challenged by the continual emergence of new social network platforms and unexpected behaviors related to social media use and online education. Establishing and updating cybercivility policies/guidelines in nursing schools is a vital step in promoting a culture of civility in nursing practice.

Author contribution

JCD, SSY, JLC, JC, and HSK designed this study and drafted the first version of the manuscript. JCD, SSY, and JC performed the analysis and interpretation of the data. JCD, SSY, JLC, JC, and HSK revised the manuscript collaboratively.

Funding

This research was supported by the Duke University School of Nursing's Institute for Educational Excellence Teaching Fellowship Program in 2015–2017 awarded to Dr. De Gagne. For more information, contact her at jennie.degagne@duke.edu.

Declaration of interest

The authors report no declarations of interest.

Conflict of interest

None of the authors has any actual or potential conflict of interest including any financial, personal, or other relationships with people or organizations that could inappropriately influence or be perceived to influence this work.

References

- Albion.com, & Ross, S. T. (2011). Netiquette. Retrieved December 10, 2016 from http://www.albion.com/netiquette.
- American Nurses Association (2016). Social networking principles toolkit. Retrieved December 7, 2016 from http://www.nursingworld.org.
- Anselmi, K. K., Glasgow, M. E., & Gambescia, S. F. (2014). Using a nursing student conduct committee to foster professionalism among nursing students. *Journal of Professional Nursing*, 30(6), 481–485. http://dx.doi.org/10.1016/j.profnurs.2014.04.002.
- Benetoli, A., Chen, T. F., Schaefer, M., Chaar, B., & Aslani, P. (2016). Pharmacists' perceptions of professionalism on social networking sites. *Research in Social & Administrative Pharmacy*. http://dx.doi.org/10.1016/j.sapharm.2016.05.044 (Epub ahead of print).
- Chretien, K. C., & Tuck, M. G. (2015). Online professionalism: A synthetic review. International Review of Psychiatry, 27(2), 106–117. http://dx.doi.org/10.3109/09540261.2015.1004305.
- Clark, C. M. (2016). An evidence-based approach to integrate civility, professionalism, and ethical practice into nursing curricula. *Nurse Educator*. http://dx.doi.org/10.1097/NNE. 00000000000000331 (Epub ahead of print).
- Clark, C. M., Ahten, S., & Werth, L. (2012). Cyber-bullying and incivility in an online learning environment, part 2: Promoting student success in the virtual classroom. *Nurse Educator*, 37(5), 192–197. http://dx.doi.org/10.1097/NNE.0b013e318262eb2b.
- Clark, C. M., Werth, L., & Ahten, S. (2012). Cyber-bullying and incivility in the online learning environment, part 1: Addressing faculty and student perceptions. *Nurse Educator*, 37(4), 150–156. http://dx.doi.org/10.1097/NNE.0b013e31825a87e5.
- Cleary, M., & Freeman, A. (2005). Email etiquette: Guidelines for mental health nurses. International Journal of Mental Health Nursing, 14(1), 62–65.
- Cronquist, R., & Spector, N. (2011). Nurses and social media: Regulatory concerns and guidelines. *Journal of Nursing Regulation*, 2(3), 37–40. http://dx.doi.org/10.1016/S2155-8256(15)30265-9.
- De Gagne, J. C., Choí, M., Ledbetter, L., Kang, H., & Clark, C. M. (2016). An integrative review of cybercivility in health professions education. *Nurse Educator*, 41(5), 239–245. http://dx.doi.org/10.1097/NNE.000000000000264.
- De Gagne, J. C., Yamane, S. S., & Conklin, J. L. (2016). Evidence-based strategies to create a culture of cybercivility in health professions education. *Nurse Education Today*, 45, 138–141. http://dx.doi.org/10.1016/j.nedt.2016.07.007.

- Duggan, M., Ellison, N. B., Lampe, C., Lenhart, A., & Madden, M. (2015, January 9). Social media update 2014. Pew Research Center Retrieved May 7, 2016 from http://www.pewinternet.org/2015/01/09/social-media-update-2014.
- Ellaway, R. H., Coral, J., Topps, D., & Topps, M. (2015). Exploring digital professionalism. Medical Teacher, 37(9), 844–849. http://dx.doi.org/10.3109/0142159x.2015.1044956.
- Frazier, B., Culley, J. M., Hein, L. C., Williams, A., & Tavakoli, A. S. (2014). Social networking policies in nursing education. *CIN Computers Informatics Nursing*, 32(3), 110–117. http://dx.doi.org/10.1097/cin.0000000000000030.
- Galbraith, M. W., & Jones, M. S. (2010). Understanding incivility in online teaching. *Journal of Adult Education*. 39(2), 1–10.
- Giumetti, G. W., Hatfield, A. L., Scisco, J. L., Schroeder, A. N., Muth, E. R., & Kowalski, R. M. (2013). What a rude e-mail! Examining the differential effects of incivility versus support on mood, energy, engagement, and performance in an online context. *Journal of Occupational Health Psychology*, 18(3), 297–309. http://dx.doi.org/10.1037/a0032851
- Granberry, N. (2007). Email—from "to" to "send". American Association of Occupational Health Nurse Journal, 55(3), 127–130.
- Harris, C. T. (2011). Incivility in nursing. *Nursing Bulletin*, 8(1), 16–20 Retrieved December 13, 2016 from https://www.ncbon.com.
- Henderson, M., & Dahnke, M. D. (2015). The ethical use of social media in nursing practice. *Medsurg Nursing*, 24(1), 62–64.
- Ibrahim, S. A. E., & Qalawa, S. A. (2016). Factors affecting nursing students' incivility: As perceived by students and faculty staff. *Nurse Education Today*, 36, 118–123. http:// dx.doi.org/10.1016/j.nedt.2015.08.014.
- Junco, R. (2011). The need for student social media policies. Educause Review, 46(1), 60–61 Retrieved December 10, 2016 from http://er.educause.edu.
- Kind, T., Genrich, G., Sodhi, A., & Chretien, K. C. (2010). Social media policies at US medical schools. *Medical Education Online*, 15, 5324–5332. http://dx.doi.org/10.3402/meo. v15i0.5324.
- Klainberg, M. B., McCrink, A., Eckardt, P., Schecter, R., Bongiorno, A., & Sedhom, L. (2014). Perspectives on academic misconduct: Implications for education and practice. The Journal of the New York State Nurses' Association, 44(1), 11–21.
- Leslie, J. (2013). Civility in America. Weber Shandwick Retrieved May 11, 2016 from http://www.webershandwick.com/uploads/news/files/Civility_in_America_2013_ Exec_Summary.pdf.
- Marnocha, S., Marnocha, M. R., & Pilliow, T. (2015). Unprofessional content posted online among nursing students. *Nurse Educator*, 40(3), 119–123. http://dx.doi.org/10.1097/ nne.000000000000123.
- National Council of State Boards of Nursing (2011). A nurse's guide to the use of social media. Retrieved December 7, 2016 from https://www.ncsbn.org.
- National Student Nurses' Association. (n.d.). Recommendations for: Social media usage and maintaining privacy, confidentiality and professionalism. Retrieved December 14, 2016 from http://www.nsna.org
- Nyangeni, T., du Rand, S., & van Rooyen, D. (2015). Perceptions of nursing students regarding responsible use of social media in the Eastern Cape. *Curationis*, 38(2), e1–9. http://dx.doi.org/10.4102/curationis.v38i2.1496.
- Perrin, A. (2015, October 8). Social media usage: 2005–2015. Pew Research Center Retrieved May 7, 2016 from http://www.pewinternet.org/2015/10/08/2015/Social-Networking-Usage-2005-2015.
- Resendes, S., Ramanan, T., Park, A., Petrisor, B., & Bhandari, M. (2012). Send it: Study of email etiquette and notions from doctors in training. *Journal of Surgical Education*, 69(3), 393–403. http://dx.doi.org/10.1016/j.jsurg.2011.12.002.
- Rocha, P. N., & de Castro, N. A. (2014). Opinions of students from a Brazilian medical school regarding online professionalism. *Journal of General Internal Medicine*, 29(5), 758–764. http://dx.doi.org/10.1007/s11606-013-2748-y.
- Spector, N., & Kappel, D. (2012). Guidelines for using electronic and social media: The regulatory perspective. Online Journal of Issues in Nursing, 17(3). http://dx.doi.org/10.3912/OJIN.Vol17No03Man01 (Manuscript 1).
- U.S. News Best Schools (2016). 2017 best nursing schools rankings. U.S. News & World Report Retrieved April 15, 2016 from http://www.usnews.com.
- Westrick, S. J. (2016). Nursing students' use of electronic and social media: Law, ethics, and e-professionalism. *Nursing Education Perspectives*, 37(1), 16–22.
- Woodworth, J. A. (2016). Promotion of nursing student civility in nursing education: A concept analysis. *Nursing Forum*, 51(3), 196–203. http://dx.doi.org/10.1111/nuf.