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E-Professionalism in Undergraduate Nursing Students

By

Jessica Chu

A Thesis
Submitted to the Faculty of Graduate Studies
through the Faculty of Nursing
in Partial Fulfillment of the Requirements for
the Degree of Master of Science in Nursing
at the University of Windsor

Windsor, Ontario, Canada

2020

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E-Professionalism in Undergraduate Nursing Students

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January 13 2020

DECLARATION OF ORIGINALITY

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ABSTRACT

Nursing students have been charged criminally or expelled from undergraduate programs for inappropriate social media use. The literature has heavily criticized nursing students for unprofessional use of social media and a lack E-professionalism. The concept of E-professionalism within healthcare is relatively new as more providers use social media, thus it has quickly become an ethical and specialized challenge for nursing. The purpose of this research was to explore E-Professionalism among undergraduate nursing students at a midsize South Western Ontario university. A sample of 136 nursing students participated in this study. Subjects could identify blatant examples of appropriate and inappropriate of social media use but struggled with less obvious violations. Nursing students also lacked the ability to identify regulatory bodies or universities stances on E-professionalism, suggesting that students are learning about E-professionalism outside the academic settings, which may become troublesome when trying to adhere to professional regulations. Changes in current nursing educational practices, surrounding E-professionalism, are suggested and may ultimately contribute to decreased issues with inappropriate social media use for future Registered Nurses.

DEDICATION

I would like to dedicate this thesis to my mother Nancy. You have always supported me endlessly and pushed for me to strive higher. I would also like to dedicate my thesis to my family and friends for their support and patience throughout this journey to achieve this academic goal.

ACKNOWLEDGEMENTS

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LIST OF ABBREVIATIONS/SYMBOLS

CNA: Canadian Nurses Association

CNO: College of Nurses' of Ontario

FoN: Faculty of Nursing

IBM SPSS: IBM Statistical Package for the Social Sciences

NCSBN: National Council of State Board of Nursing

NSES: Nursing Student E-Professionalism Survey

NSESP: Nursing Student E-professionalism Spheres

RN: Registered Nurse

SoN: School of Nursing

SM: Social Media

SMSNCP: Social Media Policies at the School of Nursing and Clinical Placements

SSMPCC: Sphere of Social Media Use in Professional Care Communication

®: copyright

CHAPTER 1

INTRODUCTION

The use of social media (SM) by Registered Nurses (RNs) is an ongoing concern for the profession as it opens new ethical and professional challenges (Canadian Nurses Association [CNA], 2012; Duffy, 2011; Levati, 2014). Traditionally, individuals who exemplified professionalism exhibited the following characteristics: accountability, autonomy, inquiry, collaboration, knowledge based on evidence, innovation, ethics, and values (Registered Nurses Association of Ontario, 2007). These traditional concepts of professionalism are becoming increasingly difficult to maintain with the widespread use of SM (Ellaway, Coral, Topps, & Topps, 2015). E-Professionalism is defined as the behaviour and communications in an online setting, which has resulted from increased use of SM among RNs (Cain, 2008). E-professionalism still encompasses traditional characteristics of professionalism but in an online setting (Cain, 2008). Online settings can include SM, social networking sites, emails and internet discussion groups (Cain, 2008). Maintaining E-professionalism is essential for the nursing profession, in order to uphold the professional image of RNs and nursing students as well as to maintain patient privacy and confidentiality. E-professionalism centres around how the individual's online behaviour and attitude are or are not professional (Cain, 2008; Cain, Scott & Akers, 2009). E-professionalism's impact reaches beyond traditional email etiquette and includes the online persona of an individual and how it impacts their professional life and nursing practice (Kaczmarczyk et al., 2013).

SM is a group of internet-based applications and technologies that allow users to have "real-time" conversations with each other virtually (CNA, 2012). It is defined as the use of online and mobile applications that allow people to share opinions, experiences

and information through images, videos, and written statements (International Nurse Regulator Collaborative, 2016). Social networks are web-based platforms (e.g., Facebook®) that allow users to construct a profile consisting of personal information and commentary (CNA, 2012). The widespread use of SM is well established, implying that it will continue to be integrated into our personal and professional lives (CNA, 2012). Two-thirds of Canadians actively use SM (Statistics Canada, 2012). Similarly, 89.3% of RNs actively use SM (Piscotty, Martindell, & Karim, 2016). Seventy-seven percent of healthcare profession students, including nursing students, report having an active Facebook® account (Giordano & Giordano, 2011).

Background and Significance of the Problem

SM is a powerful tool that can allow nurses to exert influence positively or negatively on the public (Duffy, 2011). It enables nurses to share educational information and research, and network with one another as colleagues within the profession (Canadian Nurses Protective Society, 2012). It can also, unfortunately, open a new stream for breaches of patient confidentiality and professional standards violations (Canadian Nurses Protective Society, 2012; Levati, 2014). Unprofessional use of SM by RNs is common (Aylott, 2011; Levati, 2014) and a growing concern for the nursing profession. RNs, along with other healthcare professionals, are held to high standards of accountability and trust through their regulatory bodies and are responsible for maintaining an appropriate public professional image (Canadian Nurses Protective Society, 2012; College of Nurses of Ontario [CNO], 2014). The CNO (2017) states that individual RNs are responsible for self-regulation. As such they are obliged to understand and follow what is considered professional conduct in all aspects of their lives.

RNs, governed by these professional conduct rules, need to take into account that this extends to their personal use of SM. Adherence to these rules has spawned a new form of professionalism, called online or E-Professionalism. As stated previously, E-professionalism is the behaviour and communications in an online setting, which results from the increased use of SM among RNs (Cain, 2008). Academia must ensure that students moving into the workforce are aware of potential issues with current SM use and guide students to make changes to inappropriate use before they transition to professional settings (Kaczmarczyk et al., 2013). Knowledge of E-professionalism is required so that students can begin to change their online identities to minimize risk of sanctions for inappropriate SM use (Kaczmarczyk et al., 2013).

Recent media reports highlight the timely need for research and policies addressing this topic area. A disciplinary action that was reported on a Saskatchewan RN brought to light the need for research on this topic area. In that case, the RN was charged because she expressed on her personal Facebook® site an opinion about a family member's care at a nursing facility (Canadian Broadcasting Company, 2016). Although she did not work at the facility, the Saskatchewan Registered Nurses Association, by means of their Code of Ethics, charged the RN with professional misconduct (Saskatchewan Registered Nurses' Association, 2016). Professional misconduct or the failure to meet the standards of practice of a profession can occur when a RN is believed to misuse SM (CNO, 2017). This case highlights the potential for personal and professional boundary crossing when using SM.

Confusion abounds over SM use because of the perceived belief that SM is private and separate from professional personas (CNA, 2012; Green, 2017; Marnocha,

Marnocha, & Pillows, 2015). RNs may not be aware of the implications of their personal use of SM and how it can impact on their professionalism. Issues related to integrity, standards of the profession, and overall professional image can occur and negatively impact the nursing profession (Levati, 2014). This is not only an issue for RNs, it also creates problems for nursing students before they start their professional careers. Nursing students who model inappropriate online behaviour may believe that is acceptable and continue this behaviour when they become licensed.

Nursing students have been disciplined for inappropriate SM use as it relates to the violations of their faculty's policies (Marnocha et al., 2015). Common incidents included breaching patient confidentiality, violating professional standards, and posting their school affiliations and clinical placements online (Marnocha et al., 2015).

Marnocha et al. (2015) found that 77% of nursing schools reported incidents of nursing students using SM unprofessionally. There is an increasing number of nursing students being sanctioned or expelled for inappropriate SM use (Westrick, 2016).

For instance, Doyle Byrnes, a nursing student at the Johnson County Community College was expelled for posting a photograph on Facebook® of herself posing with a human placenta (Campbell, 2010). Johnson County Community College School of Nursing disciplined the student because her post lacked professional behaviour and was disruptive to the learning environment (Campbell, 2010). Byrnes filed a lawsuit for leniency, as she anticipated graduation that semester (Campbell, 2010). Byrnes expressed that she was excited to share her learning experience and did not think that others would view the photograph as unprofessional (Campbell, 2010). Byrnes' case is

an example of nursing students who are unaware of their potential misuse of SM and that consequences can be significant.

Nursing students, due to their inexperience with the nurse-patient therapeutic relationship and lack of awareness of professional standards and responsibilities, are vulnerable to SM misuse (Ashton, 2016; Westrick, 2016). Nursing students also use SM to deal with perceived stressors of the program by creating online support groups (Englund, Chappy, Jambunathan, & Gohdes, 2012). Content posted online by nursing students may unknowingly breach patient confidentiality and potentially violate professional standards (Englund et al., 2012). Nursing students using SM may not be aware of the implications their digital footprints can have ethically or professionally (Englund et al., 2012). The behaviour and practices of RNs and nursing students using online social networking sites are largely understudied (Levati, 2014).

Policies and guidance on how to navigate SM in an E-professional manner are vague, outdated, not strict enough, or deemed inadequate to support nursing students (Duffy, 2011). Consequences for violations of SM policies are not apparent in many cases, and need further exploration (Booth, 2015). In the case of Nina Yoder vs. The University of Louisville, Yoder a nursing student at the University was dismissed from the nursing program because of a blog she posted to share her clinical experience (The Sixth Circuit, 2013). The content on the blog was seen as unprofessional and was deemed derogative (The Sixth Circuit, 2013). Her blog post did not explicitly state the patient's name. However, other identifying information such as the patient's demographics, place of employment, and the date the patient was in labour were written in the blog post (The Sixth Circuit, 2013). The School of Nursing at the University of Louisville found Yoder's

blog concerning because it breached patient confidentiality (The Sixth Circuit, 2013). Yoder had signed an honour code, confidentiality agreement, and consent form before starting her placement (The Sixth Circuit, 2013). The School of Nursing expelled Yoder for violating that honour code (The Sixth Circuit, 2013). Yoder expressed she was exercising her First Amendment on Myspace (The Sixth Circuit, 2013). She articulated that the honour code, confidentiality agreement, and consent form were vague (The Sixth Circuit, 2013). Yoder's case is an example that nursing schools need to enhance education for nursing students on E-professionalism throughout their program to assist students in internalizing E-professional values. It would appear that there needs to be more readily available resources for nursing students beyond an institution's SM policy to guide E-professional behaviour and standards. Education around E-professionalism should be introduced at the undergraduate level to ensure that nursing students are aware of the expected behaviour when it comes to using SM while in school and upon graduation (Westrick, 2016).

A gap in the literature exists on how undergraduate nursing students adequately use E-professionalism in their practice. The lack of understanding of E-professionalism in pre-licensure nursing students is an issue since inappropriate use of SM can negatively affect the nursing professionals and impact careers before they have started. One cannot overestimate importance of the use of SM among nursing students, given that 96.9% of nursing students self-reported using Facebook® (Barnable, Cuning, & Parcon, 2017). SM policies in academia and nursing education are still in their infancy and require revisions (Marnocha et al., 2015; Smith & Knudson, 2016). Smith and Knudson (2016) suggested that the increase use of SM in nursing students correlates to increased unethical

practices and behaviour. Nursing educational institutions need to be leaders in initiating clear guidelines for students on proper use of SM to ensure a professional online presence both during school and upon graduation (Booth, 2015).

Purpose of the Study

The purpose of this descriptive cross-sectional quantitative study was to investigate E-professionalism among undergraduate nursing students through years one to four of a baccalaureate nursing program.

Research Questions

The following research questions aided in the exploration of E-professionalism at an undergraduate nursing level:

1. What are the characteristics of social media use among undergraduate nursing students?
2. What factors influence E-professionalism among undergraduate nursing students?
3. To what extent do undergraduate nursing students understand and apply the concept of E-professionalism?

Conceptual Framework

The conceptual framework used to guide this study was the Sphere of Social Media Use in Professional Care Communication (SSMPCC). The SSMPCC framework was developed by Gagnon and Sabus (2015) to illustrate the overlap among societal, organizational, and individual's considerations in professional healthcare SM use. The model includes four spheres which encompass individual's best practice, organizational policy, professional standards, and platform terms of service (see Figure 1). Each sphere represents areas an individual need to be mindful of when using SM, as an individual's

presence on SM is not an isolated entity. The presence on SM is not isolated when a person is a healthcare professional because they are obliged to adhere to their profession's standards of ethical and professional conduct in all interactions in person as well as online (Gagnon & Sabus, 2015).

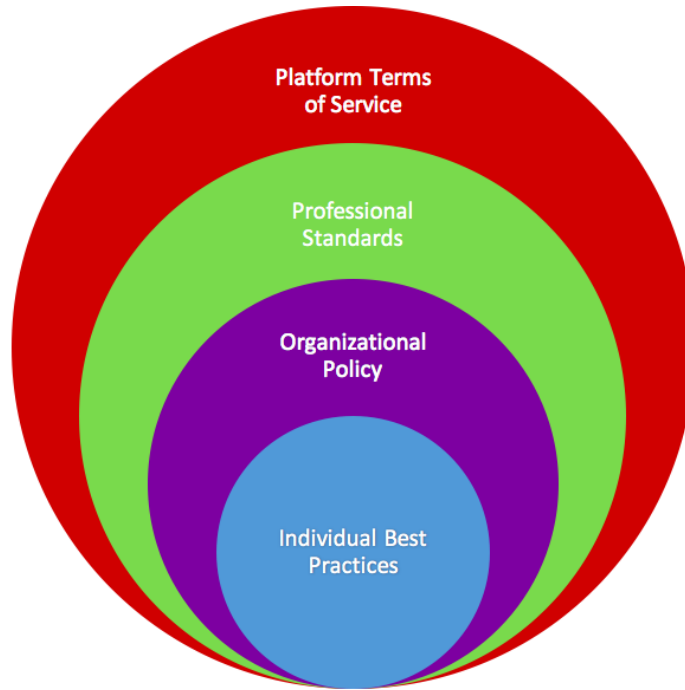


Figure 1. Sphere of Social Media Use in Professional Care Communication by Gagnon and Sabus (2015)

Spheres of the Social Media Use in Professional Healthcare Communication

As evident in Figure 1, the model has four spheres: individual best practices, organizational policy, professional standards, and platform terms of service. Each sphere influences the other because they are overlapped and nested (Gagnon & Sabus, 2015). The nesting of the spheres can be referred to as a Russian Doll model, where each sphere fits into the other to create a larger sphere. For instance, a healthcare professional's individual practices are influenced by organizational policy, professional standards, and

platform terms of service. Therefore, one sphere is not isolated because of the inclusion into a larger context. The nested spheres together represent an overall guide for a healthcare professional's communication when using SM (Gagnon & Sabus, 2015).

The platform terms of service sphere include healthcare professionals who use SM sites (Gagnon & Sabus, 2015). When the healthcare professional uses a SM site, he or she agrees to a legal statement to adhere to the terms of service of the site (Gagnon & Sabus, 2015). The terms of service on SM sites include: privacy, security, safety, intellectual property rights, content limitations, user identity, and age requirements (Gagnon & Sabus, 2015). Healthcare professionals who quickly agree to the terms of service without reading them may unintentionally violate SM platform terms (Gagnon & Sabus, 2015). Violation of terms of service on SM sites can include removal of content, account suspension, or prosecution (Gagnon & Sabus, 2015). It is imperative that healthcare professionals understand the terms of service and dynamics within SM sites (Gagnon & Sabus, 2015).

Professional standard is the second sphere, which includes the professional standards from the regulatory body the healthcare professional is a part of (Gagnon & Sabus, 2015). All healthcare professionals are obliged to adhere to their profession's ethical and professional conduct in all settings (Gagnon & Sabus, 2015). Settings can be face-to-face interactions or online. A profession's guiding standards or principles on the use of SM emphasize protecting patient privacy and confidentiality within an online context (Gagnon & Sabus, 2015). The professional standard sphere is nested within the platform terms of service sphere because SM is an online setting, which the healthcare

professional agrees to using. The healthcare professional's SM use must also follow their regulatory board ethical and professional conduct (Gagnon & Sabus, 2015).

Organizational policy is the third sphere, and it includes healthcare organizations (Gagnon & Sabus, 2015). Healthcare organizations adopt SM policies to guide employees on the personal and professional use of SM (Gagnon & Sabus, 2015).

Organizational policies are created to support the positive reputation of the organization, and to maintain privacy and productivity (Gagnon & Sabus, 2015). These policies emerge to follow existing legal and ethical guidelines regarding patient confidentiality and privacy (Gagnon & Sabus, 2015). Healthcare organization policies coincide with professional standards in areas like patient confidentiality and privacy to help guide a healthcare professional's use of SM (Gagnon & Sabus, 2015). Healthcare professionals who use SM at work or have affiliations linked to their employment must ensure SM use is compliant with organizational policies and professional standards (Gagnon & Sabus, 2015). Overall, SM use by healthcare professionals must follow their organizational policies in addition to professional standards set out by regulatory bodies.

Individual best practice is the fourth sphere, and it refers to individual's personal use of SM (Gagnon & Sabus, 2015). This sphere is recognized as the foundation of professional SM use because healthcare professionals who exhibit poor individual practice on SM can create violations of professional standards and organizational policies (Gagnon & Sabus, 2015).

This sphere is nested within the three other spheres as healthcare professionals use SM and agrees to the platform terms of service. When the healthcare professional has poor individual best practice of SM use, he or she may post or share information on SM

that violates the professional standards of the regulatory body they belong to, and/or their organization's SM policy. Healthcare professionals who use SM and violate the professional standards and/or organizational policies can end up with disciplinary action by their regulatory board, suspension of license, revocation of license, termination of employment, or suffer other legal consequences.

Modified Spheres of Social Media Use in Professional Healthcare Communication

The SSMPCC framework was modified to guide this study in adherence with the school's SM policy and College of Nurse of Ontario (CNO) standards of practice to focus on its use with undergraduate nursing students at the school. The modified SSMPCC model will be called Nursing Student E-professionalism Spheres (NSESP). The following spheres will be used in this study: individual best practices, organizational policy and professional standards, and platforms terms of service (See Figure 2). The NSESP will consist of four overlapping spheres to guide nursing students to apply E-professionalism in their practice and to examine if they can self-identify appropriate E-professionalism when using SM. In between the three spheres are two-way arrows representing how the spheres overlap one another and that they are not isolated entities.

The terms of service sphere remain the same except it focuses on nursing student's agreement to the terms of service of the SM site such as signing up for a Facebook® account. The professional standards sphere from the SSMPCC model was modified to only include the professional standards of the College of Nurses of Ontario (PSCNO) sphere in the NSESP model. The PSCNO sphere will include the professional standards and conduct set out by CNO. The organizational policy sphere from the SSMPCC model in the NSESP model was renamed Social Media Policies at the School

of Nursing and Clinical Placements (SMSNCP). The SMSNCP includes the school's SM policy, the school's Student Code of Conduct and the student's current clinical placement policies (SMSNCP). For both the PSCNO and SMSNCP spheres, an exploration of the literature will examine if nursing students understand these policies and if they understand how to apply them to their SM use. Both PSCNO and SMSNCP spheres will examine if nursing students can effectively apply E-professionalism by identifying basic concepts of E-professionalism and inappropriate SM use. The individual best practice sphere from the SSMPCC model will be modified to nursing student SM use in the NSESP model. This sphere will include the characteristics of nursing students who use SM and how often. A one-way arrow can be viewed in the modified model to provide more detail of the characteristics of nursing students who use SM.

The three spheres in the NSESP model will overlap and nest together. For instance, nursing students who misuse SM, have a poor foundation of E-professionalism. Inappropriate SM use and a lack of E-professionalism can lead to nursing students unintentionally or intentionally, violating their clinical or community placement SM guidelines, the school's SM policy, the school's Student Code of Conduct as well as the CNO professional standards.

The overlapping of spheres can also occur in a top-down approach. For example, a lack of E-professionalism standards from the CNO will affect the nursing institution's ability to create appropriate E-professionalism policies. Nursing institutions and healthcare organizations may not be able to develop appropriate E-professionalism policies because there are no specific E-professionalism standards set out by the CNO to adhere to. When nursing institutions do not have clear E-professionalism policies,

nursing students may become misguided with their SM use, leading to violations of professional misconduct, and breaches of patient confidentiality and privacy.

**Characteristics of Nursing Students
Who Use Social Media**

- Age
- Year of Study
- Reason for Social Media Use
 - Personal
 - Professional/
Academic
 - Peer Support
 - Networking

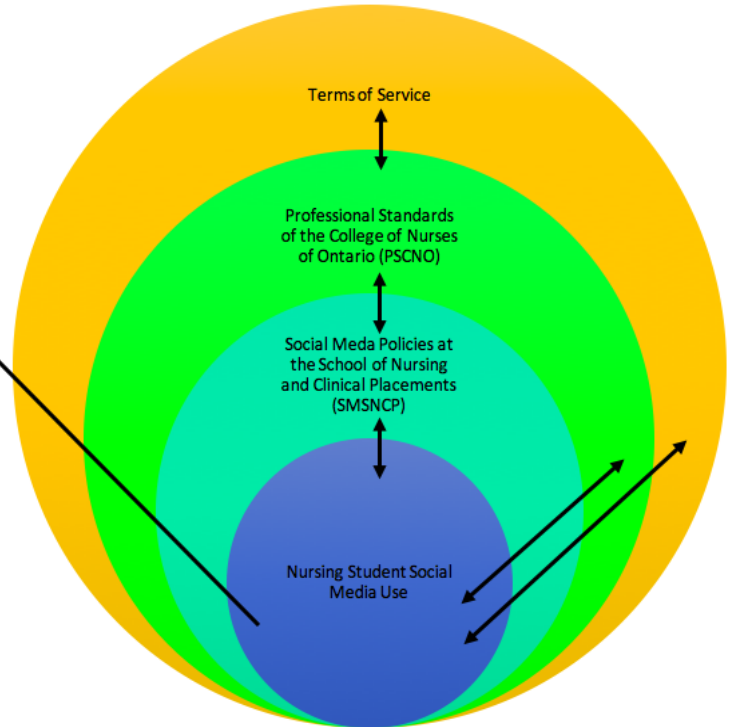


Figure 2. Nursing Student E-Professionalism Spheres modified from Spheres of social media use in professional healthcare communication adapted from Gagnon & Sabus (2015)

CHAPTER 2

LITERATURE REVIEW

The concept of E-professionalism in healthcare is relatively new, brought about by the use of SM by healthcare professionals, and is quickly becoming a unique ethical and professional challenge for nursing (CNA, 2012). SM use continues to increase rapidly, while E-professionalism education, policies, and standards remain in a primitive stage of development (Ellaway et al., 2015). Currently, nursing students are not held accountable by regulatory bodies such as CNO (Westrick, 2016). However, they are expected to abide by the Code of Ethics of the CNA (2017a), and not threaten patient privacy and confidentiality through inappropriate use of SM sites. No research studies specific to this population and E-professionalism could be located at the time of this literature review. Lack of E-professionalism research, standards, policies and education is a concern for nurse educators as nursing students may be at risk for negatively representing themselves and the nursing profession on SM even before they start their RN careers.

Search Strategy

The findings of this literature review were discovered during an extensive search of: Cumulative Index of Nursing and Allied Health, Medline via OVID, ProQuest, and Google Scholar electronic databases. The initial search with the following keywords ‘nursing students’ and ‘eprofessionalism’ yielded three articles. The search was then expanded and included ‘nurses’ and ‘social media,’ which located another 46 articles. Other disciplines were subsequently searched (e.g., medicine and pharmacy) to elicit additional studies related to E-professionalism in professional education programs.

Keywords used independently or as a combination included: social media, professionalism, E-professionalism, online, digital, undergraduate, nursing students, nurse, registered nurse, education, media, public perception, Facebook®, Twitter®, Instagram®, Snapchat®. The search was limited to articles written in English. Policies of nursing regulatory and professional body sites were also included. Lastly, reference lists of relevant articles via ancestry searching was done in order to attempt to locate all relevant articles. A final sample of 27 studies were designated for review, with only one systematic review meeting the criteria for inclusion.

E-Professionalism Background and Development

E-Professionalism is an emerging field of study established to review the increased uptake of SM and address concerns of inappropriate use by healthcare professionals (Fenwick, 2013; Kaczmarczyk et al., 2013). The lack of known boundaries between what is considered professional and personal when using SM, has also led to the concept of E-professionalism in healthcare (Cain, 2008). E-professionalism encompasses social networking sites, emails, web pages, and other electronic mediums in which healthcare professionals participate (Cain, 2008). Key concepts of E-professionalism include understanding and differentiating between appropriate and inappropriate uses of SM, and how to use privacy settings on social networking sites (Duke et al., 2017).

Fenwick and Edwards (2016) argue that the majority of research in areas related to E-professionalism is limited in professional education programs. SM continues to advance, but E-professionalism education for healthcare professionals has fallen behind in reflecting its broadened use (Fenwick & Edwards, 2016). Students in healthcare-related fields are in a unique position for SM misuse since they care directly for patients

and have access to their information (Cain et al., 2009). Professional healthcare students may also not fully understand the implications of how online use can potentially impact integrity, or professional and academic standards (Cain et al., 2009).

Cain (2008) recommends that academia increase awareness and then educate students on E-professionalism. Potential issues such as privacy, safety and professional reputation must be at the forefront of this movement (Cain, 2008; Cain et al., 2009). Kaczmarczyk et al. (2013) support that E-professionalism in medical education incorporate professional identity formation (e.g., online persona) and focus on the development of professional values when using online platforms. E-professionalism education ought to include explicit criteria as to what is unprofessional online behaviour (Kaczmarczyk et al., 2013). Example images or post of what are acceptable or unacceptable in SM use should be included to allow students to have the opportunity to identify potential issues surrounding online posts (Kaczmarczyk et al., 2013). It is apparent that E-professionalism education is lacking at the undergraduate level and a strategy to increase awareness and improve E-professional behaviour is required (Cain et al., 2009).

Prescott, Wilson and Becket (2013) found that pharmacy students were more aware of their online behaviour compared to nursing students. This finding was further supported in the nursing literature, where appropriate SM use is challenging, and E-professionalism training within undergraduate nursing programs is lacking, and in need of further improvement and implementation (Booth et al., 2015; Marnocha et al., 2017). Conversely, the majority of E-professionalism studies in nursing have focused on RNs, leaving nursing students understudied. One potential result of unprofessional online

behaviour by nursing students, could be shrinking clinical placement sites and/or a loss of public trust (Westrick, 2016).

To prepare nursing students to use SM responsibly upon licensure, nurse educators need to be proactive and include E-professionalism in the undergraduate nursing curriculum (Marnocha et al., 2015; Westrick, 2016). Promoting awareness and understanding of E-professionalism regarding appropriate use of SM is a starting point for nursing educators (Duke et al., 2017; Gunberg Ross & Myers, 2017). It is imperative that E-professionalism education is started during pre-licensure nursing to ensure that nursing professional standards are upheld upon graduation (Duke et al., 2017).

Social Media

SM is considered the use of Internet-based applications or technology in a “real time” conversation with each other virtually (CNA, 2012). SM is an umbrella term that encompasses both social networking sites (e.g., Facebook®) and microblogging (e.g., Twitter®). SM sites allow users to communicate, play games, share information, explore interests, and form online groups (Green, Wyllie, & Jackson, 2014; Gunberg Ross & Myers, 2017). Microblogging refers to instant messaging or short blogs (e.g., Twitter®) that can be shared in private or publicly (Nations, 2017). SM is widely used by healthcare students, with a reported 77% of healthcare profession students using various applications (Giordano & Giodano, 2011; Smith & Lambert, 2014). Among nursing students, 79% reported spending more than one hour using SM per day (Duke et al., 2017). The most reported types of SM used by nursing students are Facebook®, Twitter®, and YouTube® (Duke et al., 2017; Gunberg Ross & Myers, 2017). Although SM use is emerging in healthcare as a method of communication that is changing how people, including

professionals, share information, it also has the potential to negatively portray professionals (Schmitt, Sims-Giddens, & Booth, 2012).

Advantages of Social Media

SM has grown in popularity by touting itself as offering many benefits to its users including instant and convenient communication between people (National Council of State Board of Nursing [NCSBN], 2011). It also provides opportunities for nurses and nursing students to share educational information, share research and network with one another as colleagues within the profession (Canadian Nurses Protective Society, 2012). In nursing education, SM is a valuable learning tool as it allows for sharing of ideas beyond the traditional classroom setting that is engaging and innovative (Englund et al., 2012; Gunberg Ross & Myers, 2017; Marnocha et al., 2015; Schmitt et al., 2012).

Disadvantages of Social Media

SM has its drawbacks. Information that is posted on the Internet through SM sites is permanent and can leave a lifelong digital footprint (Englund et al., 2012; Infolaw, 2010). Many postings cannot be permanently deleted as posted information can be replicated or shared by others before deletion takes place and the information can also be accessed or posted to new mediums in unintended modified versions (Bagley & DiGiacinto, 2014). SM is used in a digital environment that is borderless and can be accessed by the public despite individuals using privacy settings on their accounts (Bagley & DiGiacinto, 2014). The public nature of SM can lead to a lack of privacy, which can open a new stream for breaches of patient confidentiality and professional standard violations (Canadian Nurses Protective Society, 2012; Levati, 2014). This is concerning for the nursing profession because nurses and nursing students who use SM

may unknowingly violate professional standards set out by their regulatory boards. If the information posted by RNs or nursing students contain patient sensitive information it can lead to patients being harmed (e.g., reputation and violation of privacy) as their information could remain permanently online (Levati, 2014).

Types of Social Media Used by Nursing Students

Facebook

Facebook® is a social network that allows students to connect with one another online by constructing online profiles (Cain, 2008; Green et al., 2014). Through these profiles, users can display information such as their education affiliation, interest, employment and contact information. Information that is publicly visible is dependent on the user's privacy settings (Cain, 2008; Green et al., 2014). Privacy settings allow a user to make their profile public or private, and it can limit the type of users (e.g., friends, colleagues, groups) who can view certain parts of the profile (Green et al., 2014).

Facebook®, as the most popular social networking tool, is preferred by the majority of college students including nursing students (Barnable et al., 2017; Cain, 2008; Frazier, Culley, Hein, Williams, & Tavakoli, 2014; Englund et al., 2012; Nyangeni, du Rand, & van Rooyen, 2015). Barnable et al. (2017) reported that 96.9% of nursing students had an active Facebook® account, and 74.2% of nursing students reported using Facebook® multiple times during the day.

Although Facebook® is popular among college students and younger generations, it is susceptible to privacy and safety concerns (Cain, 2008). A systematic review by Smith and Lambert (2014) suggests a disconnect exists on how Facebook® was intended to be used (e.g., recreational use) and how it is actually being used for professional and

other purposes. This disconnect may partially explain the blurred boundaries of personal and professional lives on SM (CNA, 2012). Students who post on Facebook® may perceive their post as innocuous, but others including colleagues, faculty, and the public may perceive it differently (Cain, 2008). This is a concern for nursing educators as posts made by nursing students could violate school policies as well as patient privacy laws (Frazier et al., 2014).

Twitter

Twitter® is a microblogging site that allows users to send “tweets” of up to 140 characters long (Gagnon, 2015; Nyangeni et al., 2015). Users publicize their tweets when posts include the ‘@’ character and hashtags using (#) character (Gagnon, 2015). Twitter® allows for persons interested in a tweet on certain topics to follow the originator(s) and everything they tweet thereafter. The open nature of Twitter® can also allow for informal learning and has been used as a useful educational tool (Gagnon, 2015; Price, Devis, LeMoine, Crouch, South, & Hossain, 2018). For example, a group of physical therapy students in a professionalism course had asynchronous discussion related to the course material on Twitter® (Gagnon, 2015). The students reported increased engagement in the class material when adding Twitter® to the course (Gagnon, 2015).

Twitter® is also used by nursing students and in nursing education (Booth, 2015; Englund et al., 2012; Price et al., 2018). Booth (2015) analyzed 36 tweets written by nursing students, related to opinions regarding the nursing education the students were receiving. Nursing student tweets included: stress about the nursing education process, vulgar or derogative statements on nursing education, the excitement regarding nursing

education, humorous situations experienced in nursing education, and questions related to the nursing education process (Booth, 2015). These findings suggested that nursing students use Twitter® concurrently within their nursing education (Booth, 2015). Nursing students also need to be aware and understand that their tweets can have unintended consequences professionally and/or academically (Booth, 2015).

Other Types of Social Media Platforms

There are other types of SM platforms that are newly developed and are being used by young adults including nursing students. Twenty-one percent of Canadians use Snapchat®, and 39% of Snapchat® users are between the ages of 18 – 34 years (McKinnon, 2017). Likewise, Instagram® is gaining popularity as 34% of Canadians have an Instagram® account, and 60% of users are between the ages of 18 – 34 years (McKinnon, 2017). Scholarly literature surrounding nursing students or registered nurses using Snapchat® and Instagram®, or addressing E-professionalism was not found.

Snapchat® is a SM platform that shares images and videos privately or publicly (Snapchat, 2018). Snapchat® encourages users to use their camera on their digital device to share in the moment experiences and for self-expression through filters (Snapchat, 2018). Users can share their “snap” to their friends from one to ten seconds, and the “snap” will disappear afterwards (Snapchat, 2018). Users can also share stories with their friends or publicly which remain active for 24 hours (Snapchat, 2018). Nursing students need to be cautious of their Snapchat® use because sharing videos or images through snaps or stories can still be replicated through screen capture and shared with others (Magid, 2013). Snaps that are sent to other users that are meant to disappear can still reappear through third-party apps (Magid, 2013).

Instagram® is a photo and video sharing application that allows users to communicate with followers or other users on Instagram® through comments and likes (Instagram, n.d.). Photos or videos by the user can be found by others through hashtags (e.g., #nursing) (Instagram, n.d.). Creating an Instagram® account that is private limits visibility to the public, however current followers on the account can copy posts on a private account and share them (Instagram, n.d.). Nursing students need to be cautious of what they share on their Instagram® accounts because it can be shared publicly through the hashtags used or copied by others.

Social Media Use by Nursing Students

Ongoing SM use by nursing students is emerging in the research literature (Barnable et al., 2017; Duke et al., 2017; Englund, 2012). Frazier et al. (2014) reported that 90% of nursing students use SM. Nursing students are reported to be using SM for personal, academic and professional purposes (Barnable et al., 2017; Duke et al., 2017; Englund, 2012; Morley, 2014; Nyangeni, du Rand, & van Rooyen, 2015). Nursing students also use SM to foster networks within the profession, share experiences, information, and form peer support groups (Duke et al., 2017; Englund, 2012; Levati, 2014). Nursing students additionally prefer to use SM as a method of communication between peers and faculty (Morley, 2014). These positive uses of SM highlight the benefits, such as sharing educational information, research, and as a platform to network with others professionally (Canadian Nurses Protective Society, 2012).

Nursing students also use SM platforms like Facebook® to form support groups to deal with perceived stressors of the nursing program (e.g., increased workload) and to discuss academic concerns and experiences (Barnable et al., 2017; Duke et al., 2017;

Tower, Blacklock, Watson, Heffernan, & Tronoff, 2015). Nursing students believe that using SM helped them increase their awareness of nursing-related issues and build confidence when exploring ideas with one another (Price et al., 2018). Online support groups allow nursing students to freely interact with one another and build self-efficacy regardless of the distance between participants (Tower et al., 2015).

The Duke et al. (2017) study of nursing students and faculty, reported that 79% of nursing students used SM for more than one hour per day ($p < 0.00$), compared to the faculty (37.9%). They identified that nursing students used SM for learning, personal, and professional use (Duke et al., 2017). Ninety-six percent of nursing students reported using SM to discuss academic problems that they were having in the nursing program (Duke et al., 2017). However, nursing students also reported that SM was distracting to their studies and had concerns about SM use related to privacy and E-professionalism (Duke et al., 2017). These findings suggest that more research is needed to address E-professionalism and SM utilization by nursing students (Duke et al., 2017).

Similarly, Barnable et al. (2017) findings were congruent in that nursing students are actively using SM. They reported that 96.9% of nursing students actively use Facebook® (Barnable et al., 2017). Nursing students, in Barnable et al.'s (2017) study also reported using Facebook® to discuss academic activities related to class assignments and course announcements.

Nursing students have also used SM positively in an educationally supportive environment. Nursing students use SM to form support groups and build self-efficacy to increase academic success (Tower et al., 2015). SM platforms, such as Facebook®, are used as a peer learning tool to manage confusion and seek clarification on topics, to de-

stress, to share information, and to build a sense of a community (Tower et al., 2015). SM platforms or online tools were also found to be a valuable tool to engage nursing students in peer learning (Tower et al., 2015).

Behaviour

Nursing students have the right to freedom of speech, but they must be mindful of legal and ethical obligations set by their regulatory bodies to protect patient information and to ensure confidentiality (CNA, 2012; Westrick, 2016). Frazier et al. (2014) found that nursing students believed that their posts on SM were private matters as long as it did not violate patient privacy and confidentiality laws. This was also supported by Prescott et al. (2013), in that nursing students believe that their SM accounts were separate from their professional life. There was a mixed consensus among nursing, pharmacy, and social work students as to whether professional programmes' students should be held to a higher standard of professionalism when using SM (Prescott et al., 2013).

Nyangeni et al. (2015) found that many nursing students posted inappropriate photos of patients online when those captured an exciting clinical moment. Nursing students also reported taking photos of patient genitalia and sharing them with peers to teach about sexually transmitted infections (Nyangeni et al., 2015). Nursing students reported that they could not miss the opportunity to share something they learned with their peers, and wanted to be the first to post about it which gave them an increased sense of satisfaction (Nyangeni et al., 2015).

Age

SM use is a significant part of the lives of millennial students, including nursing students (Henderson & Dahnke, 2015). The National League for Nursing (2014),

reported that 82% of nursing students are under the age of 30 and thus are classified as millennials (Cable News Network, 2017). Duffy (2011) found that the majority of RNs who had been disciplined for unprofessional online use were of a younger age. Younger nurses have grown up using SM, and many perceive their online profiles to be private and separate from their professional life (Duffy, 2011; Prescott et al., 2013). This is concerning for nurse educators as millennial nursing students have been using SM for personal purposes long before they established their professional identity which can lead to the development of an unprofessional online persona (Kaczmarczyk et al., 2013; Marnocha et al., 2017). Prescott et al. (2013) found that professional students who were older than the age of 35 were more aware of how their online behaviour impacts on their professionalism versus those under 35 years of age. Smith and Knudson (2016) had similar findings, suggesting that younger age is a factor for inappropriate SM use. Second-semester nursing students demonstrated less unethical behaviour compared to first, third and fourth-semester students; however, of the four cohorts, the second-semester nursing students were the oldest on average in this study (Smith & Knudson, 2016). Millennial nursing students may not understand the concept of professional use of SM and have difficulty identifying appropriate boundaries (Gunberg Ross & Myers, 2017; Johanson, 2012). Gunberg Ross and Myers (2017) argue that nurse educators and institutions need to role model appropriate SM use for undergraduate nursing students. Nurse educators could use examples from younger nurses, who demonstrated the inappropriate use of SM and start E-professionalism education offerings during pre-licensure to mitigate incidents of unprofessional use (Gunberg Ross & Myers, 2017). If nursing students do not learn appropriate professional behaviour in the academic setting,

inappropriate behaviour may continue when they become licensed individuals (Johanson, 2012). Nurse educators need to be proactive to strengthen millennial nursing students' knowledge and understanding of E-professionalism, and guide them on how to use it professionally (Johanson, 2012).

Year of Study

As nursing students progress through their nursing program, SM use differs. Senior nursing students exercised more caution in their SM use; this could be related to approaching graduation and being more concerned about future employment opportunities (Barnable et al., 2017). Senior nursing students also believed that employers should not make hiring decisions based on review of their personal SM accounts (Barnable et al., 2017). Similarly, among medical students, SM use changed as they progressed through residency (Thompson, Dawson, Ferdig, Black, Boyer, Coutts, & Black, 2008). The frequency of use of Facebook® by medical students declined from 64.3% to 12.8% as they approached graduation from residency (Thompson et al., 2008). Likewise, senior pharmacy students did not have as many SM accounts compared to first-year pharmacy students (Hall et al., 2013).

Unprofessional Social Media Use by Nursing Students

Health professional students, including nursing students, may not understand how to use SM academically or professionally (Gagnon, 2015). Unknowingly, nursing students' use of SM can lead to unintended consequences (Gagnon, 2015). This problem is evident in nursing education, where 77% of nursing schools reported experiencing at least one incident of unprofessional content posted by nursing students (Marnocha et al., 2015). Incidents of unprofessional content posted by nursing students can lead to

expulsion from the nursing program and/or civil lawsuits (Duffy, 2011). Although nursing students are reaping benefits from SM use, they are also using it inappropriately and irresponsibly (Barnable et al., 2017; Marnocha et al., 2015; Nyangeni, Du Rand, & Van Rooyen, 2015). The misuse of SM can be attributed to a lack of knowledge or education regarding E-professionalism, and current behaviour expectations of SM use (Frazier et al., 2014). SM use in healthcare itself is not an issue, but how nursing students use it can be an issue (Henderson & Dakhnke, 2015). Inappropriate SM use can also include unprofessional online behaviour.

Unprofessional online behaviour by nursing students on SM sites include: negative comments about patients, peers and/or clinical placements, the depiction of intoxication, sexually suggestive posts or images, and the use of profanity or discriminatory language (Marnocha et al., 2015). Online unprofessional behaviour by nursing students is concerning because it can also violate patient privacy and confidentiality laws (Barnable et al., 2017; Marnocha et al., 2015). Inappropriate use of SM by nursing students may be attributed to a lack of professional and personal boundaries, unclear or vague SM use policies, lack of education on E-professionalism, poor behaviour of nursing students, and being of a younger age (Ashton, 2016; Aylott, 2011; Barnable et al., 2017; Booth, 2015; Duffy, 2011; Duke et al., 2017; Ferguson et al., 2016; Johanson, 2012; Marnocha et al., 2015; Smith & Knudson, 2016; Westrick, 2016).

Professional and Personal Boundaries

According to Aylott (2011), personal and professional boundaries are being crossed and redefined as technology use increases. The CNA (2012) stressed that SM use can blur professional and private circles, which leads to new ethical challenges for

the nursing profession. Nursing students may unknowingly cross boundaries and violate the nurse-patient therapeutic relationship, for example, by accepting an online request from a patient on Facebook® (Ashton, 2016; Marnocha et al., 2015). Nursing students may experience difficulty maintaining personal and professional boundaries when using SM (Nyangeni et al., 2015) as they have limited experience and practice and may not understand the ramification of their use (Ashton, 2016). Nurse educators can be proactive and educate nursing students on personal and professional boundaries not just in face to face situations but on social media as well.

Unclear or Vague Appropriate Social Media Use Policy

Appropriate SM use policies set out by nursing institutions are needed to promote E-professionalism among nursing students. Seventy percent of nursing schools reported having E-professionalism policies, but there were mixed opinions if the current E-professionalism policies are adequate to support students (Marnocha et al., 2015). Westrick (2016) argued that nursing institutions must have clear SM policies that include appropriate uses of SM and consequences for misuse. This coincides with Kaczmarcyks et al.'s (2013) E-professionalism criteria in medical education, that it should include examples of appropriate and inappropriate use of SM. Consequences of inappropriate SM use can be quite significant leading to potential lawsuits when breaches of patient confidentiality occur (Westrick, 2016). Nursing students within all levels of their education may not be aware of the extent of their professional responsibilities when using SM (Westrick, 2016). A clear policy can assist nursing students and guide them in appropriate SM use. In addition to current nursing policies, nursing institutions also must

strictly enforce these policies with pre-established consequences for nursing students who break the rules (Duffy, 2011).

Lack of Educational Resources

Many nursing students who misuse SM may have done so because they did not receive appropriate E-professionalism education. Price et al. (2018) reported that 41.2% of nursing students did not understand how to use SM appropriately. Westrick (2016) believes that there needs to be an increase in exposure to E-professionalism, a review of myths when using SM, and more demonstrations of good E-professional behaviours. Nursing students are less likely to cross personal and professional boundaries on SM when there are clear guidelines of what is considered professional SM use (Ashton, 2016; Nyangeni et al., 2015). E-professionalism in undergraduate education can guide nursing students on how to make appropriate decisions when using SM and how to act professionally online (Ashton, 2016).

The need for E-professionalism education was evident in a study by Ferguson et al. (2016) which explored first-year nursing students' experience with SM in academia supporting their transition to higher education. Nursing students reported difficulty in mitigating the hazards of SM use. In the focus groups, the students expressed that a Facebook® group was created to debrief and discuss problems during their clinical placements. The students also expressed the importance of using the Facebook® group because it allowed for peer learning and a social support system. However, the lack of knowledge around privacy settings was identified as a concern (Ferguson et al., 2016). Similarly, a study by Frazier et al. (2014) reported that senior nursing students supported the need for a SM policy for professional and ethical use in nursing education to guide

their practice. Undergraduate nursing students may not understand the repercussions that their online posting could have on their professional responsibilities and employment opportunities (Booth, 2015). More research is needed to address the integration of appropriate SM use in nursing education (Booth, 2015).

Professional Nursing Organizations and Regulatory Bodies

Professional nursing organizations and regulatory bodies both provide guidance on SM. Professional nursing organizations promote and advocate for the nursing profession by providing resources and tools for nurses to meet regulatory board requirements for practice (CNA, 2017b). Whereas, regulatory bodies are focused on protecting the public interest by maintaining requirements for practice and licensure (CNA, 2017b).

Inappropriate SM use, intentional or not, can lead to RNs being disciplined by their boards of nursing. Boards of nursing may investigate inappropriate SM use by an individual if it includes unprofessional conduct, mismanagement of patient records, or breach of confidentiality (NCSBN, 2011). If an RN used SM inappropriately and allegations are found to be true, he/she could face a temporary or permanent loss of licensure, a fine, or be sanctioned (NCSBN, 2011). If the inappropriate SM use violated civil or federal laws, the RN could also be sued or face criminal charges (NCSBN, 2011). Although nursing students who misuse SM are not accountable to regulatory boards, they are still expected to follow their professional standards (CNA, 2012; Westrick, 2016).

The CNA (2012) supports the use of SM because it provides opportunities to influence nursing practice and acts as an educational tool. The CNA (2012) supports that SM increases capacity building in nurses and the profession, but there are many areas of

concern that need to be addressed such as patient privacy and confidentiality. The CNA (2012) recommends that nurses, who use SM, take a moment to reflect before posting anything.

The College of Nurses of Ontario (CNO) uses the International Nurse Regulator Collaborative position statement on SM use (International Nurse Regulator Collaborative [INRC] (2016). The CNO (2016) does not have its own position statement and uses the INRC on a ‘for your information’ basis and expressed that members must follow the college’s standards and guidelines. The lack of a formal position statement by the CNO results in an absence of guidance for its member to truly know and understand how to use SM appropriately.

The National Council of State Boards of Nursing (NCSBN) (2011) also perceive SM as a valuable tool when used appropriately to strengthen professional relationships and provide information to healthcare consumers. The NCSBN’s (2011) guide on SM addresses key issues such as: maintaining patient safety and confidentiality, using SM in the workplace, myths and misunderstandings, potential consequences of inappropriate SM use, and how to avoid disclosing patient information. RNs who behave conscientiously in their SM use can successfully enjoy personal and professional benefits without the risk of violating patient privacy and confidentiality (NCSBN, 2011).

University Student Code of Conduct

Currently, at a south-west midsized Ontario university there is no explicit SM use policy or bylaw. There is, however, a student code of conduct that discusses non-academic misconduct. The student code of conduct states that “[students] are expected to practice personal and academic integrity, to take responsibility for their own personal and

academic commitments, and to contribute to the University community, to gain fair, cooperative and honest inquiry and learning” (University of Windsor, 2016). The non-academic rights and responsibilities outlined in the student code of conduct state that all student must treat each other respectfully and there is to be no endangerment or harassment (University of Windsor, 2016). Breaches of non-academic conduct include rule breaking set out by professional bodies if students are a part of a professional program (University of Windsor, 2016). This includes nursing students when they violate their respective nursing regulatory body professional conduct standards. Students who intentionally create situations that endanger or threaten the health or well-being of another on or off campus property, while representing the university, create grounds for charges of non-academic misconduct (University of Windsor, 2016). The lack of an E-professionalism or an appropriate SM use policy is a gap currently at this university.

Faculty of Nursing Social Media Policy

The Faculty of Nursing (FoN) within this south-west university in Ontario has a SM policy for undergraduate and graduate nursing students within their published policies and bylaws. The FoN (2017) SM policy support SM use as an instructional tool on FoN approved platforms such as Blackboard. The FoN (2017) has outlined policies that prohibit SM and use of electronic devices during clinical placement hours. The policy provides guidelines for nursing students on how to use SM when interacting with others such as how to maintain professional behaviour and to be considerate of sensitive information before posting (FoN, 2017). The FoN (2017) SM policy directs students to follow the CNO Standards and Practice guidelines. The policy also addresses

maintaining confidentiality and privacy of clients, nursing students, faculty, and clinical placement agencies (FoN, 2017).

This policy however, lacks a clear description of E-professionalism, and how one's profile can impact on other realms such as professionalism. Blackboard at the FoN is defined as a learning management system used to enhance the learning experience of students, assist instructors to prepare course material, and allows for interaction between instructor and student (University of Windsor, 2017). Based on the given definition of Blackboard, it is not considered a SM platform or social network because it does not allow individuals to have real-time conversations, online profiles, or share experiences (CNA, 2012).

Although there is a SM policy in the FoN, it may not be enough to support E-professional values in nursing students. The policy outlines rules and provides guidance but does not guide nursing students on how to apply E-professional behaviour and internalize it in their practice. It is clear that the policy is outdated and needs to be revised to meet current needs of E-professionalism and support undergraduate nursing students' SM use. For instance, the policy could be revised to include instruction on SM networks use such as Facebook®, Instagram®, Snapchat®, and Twitter®.

Schools of Nursing in Ontario

SM policies in nursing programs in Ontario were searched to determine how many programs had a policy. Seven out of sixteen nursing schools had a SM policy that was accessible online in the public domain. The SM policies that were accessible addressed online professional communication, acceptable SM use and affiliation of the

respective school. The SM policies were located in nursing student handbooks. This highlights a gap that SM policies are lacking in undergraduate nursing education.

Summary of the Literature

Within nursing education, E-professionalism education is lagging compared to the exponential use of SM (Fenwick & Edwards, 2016). SM use among undergraduate nursing students is prevalent and must be addressed within the context of undergraduate education programs (Duke et al., 2017; Barnable et al., 2017; Englund et al., 2012). The majority of nursing students who are millennials grew up with SM, which could explain the increased use of SM in this student population (Gunberg Ross & Myers, 2017; Smith & Knudson, 2016). Although nursing students are using SM to describe their experience and to connect with peers, nursing students are not always careful in their usage and as a result are breaking professional rules around use (Duke et al., 2017; Englund et al., 2012; Marnocha et al., 2015). SM use by nursing students has been shown to, intentionally or not, breach patient privacy and confidentiality (Barnable et al., 2017; Englund et al., 2012; Westrick, 2016). Students' unprofessional SM use may be attributed to a lack of educational resources for nursing students to learn about E-professionalism (Booth, 2015; Frazier et al., 2016). There is also a lack of policies and guidance as to how nursing students should use SM and which rules to follow (Duffy, 2011; Marnocha et al., 2015; Westrick, 2016). Nursing students are in a unique position as professional students and need E-professionalism education because they care directly for patients and have access to sensitive information (Cain et al., 2009). If patient information is shared online, it can lead to patient harm (e.g., reputation and violation of privacy) as information posted online can be replicated and cannot be permanently deleted (Bagley & DiGiacinto, 2014;

Levati, 2014). It is imperative that E-professionalism education start in pre-licensure to encourage students to model appropriate SM use and E-professionalism behaviours and attitudes upon graduation.

CHAPTER 3

RESEARCH DESIGN

A cross-sectional quantitative descriptive design was used to investigate E-professionalism among undergraduate nursing students at a midsize southwestern Ontario university. The design elicited results to describe the current state of undergraduate nursing students' understanding and application of E-professionalism (Groves, Burns, & Gray, 2012). The purpose of this descriptive study was to investigate E-professionalism among undergraduate nursing students through years one to four of a baccalaureate nursing program. This study added to the scant literature on this topic area and addressed the following research questions:

1. What are the characteristics of social media use among undergraduate nursing students?
2. What factors influence E-professionalism among undergraduate nursing students?
3. To what extent do undergraduate nursing students understand and apply the concept of E-professionalism?

Sample and Setting

The target population was baccalaureate nursing students in years one through four who were currently registered in the nursing program. Based on the Fall 2017 semester enrollment, 890 undergraduate students were registered at the Faculty of Nursing (Anne Dennahower (Undergraduate Secretary), personal communication, April 19, 2018). A priori power analysis was conducted using the G*Power 3.1 to compute the required sample size for the proposed statistical tests (Faul, Erdfelder, Buchner, & Lang, 2009). A sample size of 138 participants was required for this study. It was calculated

with a medium effect size of 0.3 and a power of 0.8. Convenience sampling was employed to recruit participants until the desired sample size was achieved (Groves et al., 2012). Convenience sampling was used because of its accessibility to the required sample needed to answer the research questions, and appropriateness for cross sectional studies (Groves et al., 2012). Participants met the inclusion criteria if they were full time or part-time nursing students enrolled at the Faculty of Nursing, in the Fall 2018 semester.

Ethical Considerations

Prior to obtaining data and analysis, ethics approval was obtained from the University of Windsor Research Ethics Board (REB). The undergraduate secretary from the Faculty of Nursing sent a scripted email to all undergraduate nursing students to invite them to participate in the study by completing an anonymous survey. The survey was deployed using Qualtrics®, which is an experience management platform that optimizes research (Qualtrics®, n.d.). An anonymous hyperlink was embedded in the emails to ensure that no identifying information was collected through this process. Electronic consent was obtained prior to participants starting the survey. Participants clicked on the email link, which opened an introduction page about the study, and a hyperlink to print and review the consent form. The online consent form included the purpose of the study, benefits, advantages of the study and the option to withdraw from the survey at any time by exiting the survey or closing their browser (see Appendix A). The online consent form included mitigation strategies to reduce psychological harm from answering potentially sensitive questions on SM use.

The data obtained from Qualtrics® were encrypted and saved on a secure server to ensure confidentiality. To prevent participants from taking the survey more than once, a ballot box stuffing option was deployed (Qualtrics®, n.d.). Data were only accessed by the principal investigator, thesis supervisor and committee to conduct data analysis as required. A draw to win one of four \$25.00 Amazon gift cards was provided as an incentive for nursing students to participate. Entry in the draw was not connected to the participants' responses.

Data Collection

Data collection took place during the Fall 2018 semester to maximize response rates. The Faculty of Nursing undergraduate secretary sent a scripted email to all undergraduate nursing students currently enrolled, asking them to participate in the study. The email included a cover letter with a link to the survey and consent for participating in the study. In the scripted email, there was an anonymous link for participants to click if they wanted to participate. The hyperlink was used to distribute the survey to anyone who clicked on it, but no identifying information (e.g., name, email or IP address) was collected (Qualtrics®, n.d.). The principal investigator received permission from the professors of selected core courses (e.g., Introduction to Nursing, Episodic Nursing Care, Complex Health and Leadership) from each year of nursing to visit their classes. During the class visit nursing students were informed of the study and how to participate by clicking the link provided in the email sent by the undergraduate secretary. The purpose of the principal investigator's visit to the nursing classes was to answer any questions participants may have and encourage participation. Participants may receive an

abundance of emails, so putting a face to the study may have also helped increase participation.

Reminders and incentives were used to increase response rate. Incentives are effective in recruiting and retaining participants (Groves et al., 2012). Participants had the option of entering a draw to win one of four \$25.00 Amazon gift cards. The Faculty of Nursing undergraduate secretary also sent one reminder email, at week two following deployment, to all undergraduate nursing students to remind them to participate in the study. The principal investigator also revisited nursing classes (Introduction to Nursing and Episodic Nursing Care) from the first two years of the nursing program to garner more participation from those years.

Instrument

The Nursing Student E-Professionalism Survey (NSES) was adapted from Duke et al. (2017), Chretien et al. (2010), and Cain (2009). Permission was received to adapt their surveys (see Appendix B). The survey by Duke et al. (2017) was reviewed for content validity by an expert in the field and was previously piloted. The survey by Chretien et al. (2010) was tested by three high level medical education administrators and reviewed and approved by the Committee on Student Affairs. The survey by Cain (2009) was previously piloted in a study of pharmacy students and reviewed by three pharmacy faculty members at different institutions for face validity. The reliability and validity of the three studies were not reported.

These surveys were modified to be more applicable to an undergraduate nursing student population (see Appendix C). This adapted survey included standard demographic data, such as: age, gender, year of study, employment status, numbers of

hours worked per week, and type of employment (e.g., healthcare related). The images used in the NSES were obtained from publicly available posts on Instagram®, Twitter®, Facebook® and Google® by searching for key terms together or separately (e.g., “nursing students”, “clinical”, “nursing clinical”, “nursing”, “inappropriate social media use”, and “nurselife”). Identifying information from the photos (e.g., usernames and visible name badges) were removed.

Ten photos were included in the NSES. Participants were asked to assess whether or not the photos were considered appropriate SM use by responding ‘yes’ or ‘no’. Three of the photos (Q28, Q30 and Q36) used in the survey were examples of appropriate SM use. There were three photos (Q33, Q34, and Q35) used in the survey that were examples of blatant inappropriate SM use. The remainder four photos were examples of grey areas of SM use (Q27, Q29, Q31 and Q32). The EPPS included case studies and photos, but lacked internal consistency (Cronbach alpha = 0.57). The EPPS was subsequently trialed with only photos, but it still lacked internal consistency with an alpha 0.38. Two photos (Questions 34 and 35) were removed because they reflected blatant examples of inappropriate SM use. After removal, the EPPS approached internal consistency with an alpha of 0.69. The result was an eight-item E-professionalism Photo Scale (EPPS) that can be used to compare nursing students understanding and application of the concept of E-professionalism.

Data Screening

The data were screened and analyzed using the IBM Statistical Package for the Social Sciences (IBM SPSS) version 25® for Mac. One hundred and seventy nursing students (18% response rate) participated in the study.

Before the data analysis, all data were appropriately screened and cleaned (Groves et al., 2012). Thirty-four surveys were excluded during screening. Two participants asked for their data to be withdrawn after completion, and 32 cases were missing greater than 40% of the items or did not complete the case study section of the survey. After deleting the aforementioned cases, the remaining missing data were found to be of a random nature and less than .05%. Therefore, missing data were replaced through mean substitution (Fox-Wasylyshyn & El-Masri, 2005).

Skewness and kurtosis of interval and ratio level data were assessed for normal distribution (Groves et al., 2012). Most of the data had ordinal variables and the majority of the data were found to be non-normally distributed therefore, non-parametric testing was used. Data were also explored with a histogram and line graph to provide the principal investigator a visual representation of the data.

Data Analysis

The EPPS lacked validation therefore higher level testing such as bivariate or multivariate analysis could not be performed. Descriptive data analysis including frequencies, percentages and median ranks were used. These descriptive tests were used to help gather data to understand the characteristics of the sample and address research questions (Pallant, 2016). Patterns within the descriptive data were assessed to see if participants could answer the EPPS questions correctly (e.g., number of participants who can correctly identify appropriate versus inappropriate examples of E-professionalism).

CHAPTER 4

RESULTS

Sample Characteristics

Sample characteristics (response rate 18%) are reported in Table 1. The majority of participants (87.5 %; $n = 119$) identified as female, with 82% reporting that they were aged between 18 – 25 years ($M = 21.5 \pm 1.02$). Third year nursing students (45.6%; $n = 62$) were the largest group among participants, followed by fourth year (24.3%; $n = 33$), first year (15.4%; $n = 21$), and lastly, second year nursing students (14.7%; $n = 20$).

The majority of the sample (72%; $n = 99$) reported that they were employed, with 64.7% reporting working part time, and 8% being employed full-time. On average, participants reported that they worked 16.4 ± 8.2 hours per week. Thirty-six percent of the employed participants ($n = 36$) reported working in healthcare related jobs, followed by food services (22%; $n = 22$) and retail sales (21%; $n = 21$). Half of the employed participants (50%; $n = 51$) reported learning about E-Professionalism at their current place of employment. More than half (60%; $n = 59$) of those employed reported that their place of employment had a policy on E-professionalism.

Social Media Self-Reported Use

Approximately 98% ($n = 133$) of the sample reported using SM (see Table 2). Undergraduate nursing students reported using SM primarily for personal (98.5%; $n = 134$), academic (72%; $n = 98$), and professional use (25%; $n = 34$). Over half of the students (59.4%; $n = 79$) who use SM, reported that they had have not read the terms of service agreement on SM platforms. The majority of all participants (87.5%; $n = 119$)

reported that they strongly disagreed or disagreed with the statement that they could publish whatever they wanted on SM if privacy settings were configured appropriately.

The most frequently reported social networking sites (See Appendix D) based on daily use were Instagram® (51.5%; $n = 70$), followed by Snapchat® (50.7%; $n = 69$), YouTube® (39%; $n = 53$) and Facebook® (38.2%; $n = 52$). Among participants who used SM platforms more than five times a day, Snapchat® (36.7%; $n = 50$) and Instagram® (36%; $n = 49$) were used with the highest frequency. Facebook® (26.5%; $n = 36$) was the most commonly reported SM platform used on a weekly basis.

E-Professionalism Policy/ Standards and Responsible Use

The majority (73.5%; $n = 100$) of the sample reported being aware of an E-professionalism policy in their undergraduate nursing program (see Table 1). Most participants ($n = 80.9%$) reported that they were aware of a clear SM policy that addressed internet use at their university.

The majority of the participants (84%; $n = 114$) incorrectly selected “all of the above” when asked “Examples of unprofessional social media may include: foul language, sexually explicit images or post, comments that are negative and derogative, etc. Which of the following College of Nurses of Ontario Standards [professional practice, online misconduct, code of ethics, and confidentiality and privacy] specifically address E-Professionalism?”

Most participants (87.5%; $n = 119$) reported that they needed to follow the same professional standards regardless of whether they are using SM for personal or professional purposes. Seventy-two percent ($n = 98$) stated that they either strongly

agreed or agreed that they should be held to a higher standard than others regarding the image they portray on SM.

In general, participants (84.5%; $n = 115$) strongly agreed or agreed that nursing students should be held accountable for unprofessional behaviour that is reported or shared on the student's SM account. Similarly, participants (89.7%; $n = 122$) strongly agreed or agreed that they should be held accountable for any illegal act that was discovered through personal SM postings.

Most nursing students (97%; $n = 132$) strongly agreed or agreed that they were responsible for all information that is posted on SM. One third of participants (33.8%; $n = 46$) reported that they had either posted or were unsure if they had posted information on SM that they would not want a prospective employer or a university faculty member to see. Less than half of participants (41.9%; $n = 57$) were aware of a situation where a nursing student had been disciplined by their undergraduate nursing program because of unprofessional SM posting(s).

E-Professionalism Photo Scale

The final EPPS was scored from 1 through 8 with a score of 8 being the highest rank score a participant could accumulate if they answered all questions from the photos correctly. The median rank in this study was 5.

Case Study Results

In general, participants were able to identify explicit inappropriate examples of SM use; however, they were unable to correctly select the agencies (e.g., CNO and university policies) whose SM policies/standards would be violated (see Table 3). Few participants correctly identified the listed agencies in case study one and two (0.7% and

12.5%, respectively); whereas, the majority of participants accurately identified the agencies in case study three (80.9%; $n = 110$) and four (86.8%; $n = 118$). Overall, less than half of participants (45.2%; $n = 62$) correctly identified agencies. This indicates that participants were unable to correctly identify agencies whose policies/standards would be violated by inappropriate SM use.

E-Professionalism Photos

Three photos (Q28, Q30 and Q36) in the EPPS were examples of appropriate SM use (See Appendix E). The majority of participants were able to correctly identify examples of appropriate SM use (85.3%, 67.6%, and 85.3%, respectively) (see Table 3). Three photos (Q33, Q34, and Q35) in the EPPS were examples of blatant inappropriate SM use (See Appendix E). Participants were able identify clear examples of inappropriate SM use (89%, 97.1%, and 94.1%, respectively) (see Table 4).

The remaining four photos (Q27, Q29, Q31, and Q32) in the EPPS were considered grey areas of SM Use (Appendix E). These were images or posts that were not blatant examples of appropriate or inappropriate use. Participants were challenged to correctly identify subtle examples of inappropriate SM use portrayed in photos 1 (Q27) and 6 (Q32) (27.2% and 30.1%, respectively) (see Table 3). However, participants were able to identify photos 3 (Q29) and 5 (Q31) correctly (72.8% and 81.6% respectively).

In general, the majority of participants were able to identify appropriate examples of SM use (79.4%; $n = 108$) and blatant examples of inappropriate SM use (93.4%; $n = 127$) correctly. Over half of participants (52.9%; $n = 72$) could not correctly identify grey area photos of SM use.

Table 1. Demographics Undergraduate Nursing Student Participants (N=136)

Characteristics	n	%
Gender		
Female	119	87.5
Male	15	11
Prefer not to Answer	2	1.5
Age (years)		
Under 18	5	3.7
18 -20	62	45.6
21 -25	50	36.8
26-30	10	7.4
31-35	4	2.9
36 years or greater	5	3.7
Year of Nursing Program		
1	21	15.4
2	20	14.7
3	62	45.6
4	33	24.3
Prior Program		
Yes	42	30.9
No	94	69.1
Employment		
Full Time	11	8.1
Part time	88	64.7
Not Employed	37	27.2
Area of Employment		
Healthcare	36	36
Retail	21	21
Food Services	22	22
General Labour	6	4.4
General Business	6	4.4
Other	20	14.7
Learned E-Professionalism at Work		
Yes	50	51
No	48	49
E-Professionalism Policy at Work		
Yes	59	60.2
No	39	39.8
Learned E-Professionalism in Clinical Courses		
Yes	121	89
No	15	11

Table 2: Social Media Use, Terms of Service and Privacy Settings

Variable	n	%
Social Media Use		
Yes	133	97.8
No	3	2.2
Reason for Social Media Use		
Personal	134	98.5
Academic	98	72.1
Professional	34	25
Read the Terms of Service (out of 133)		
Yes	6	4.5
No	79	59.4
Sometimes	48	36.1
Use Platform after Reading the Terms of Service		
Yes	20	15.3
No	111	84.7
Can publish whatever on social media if privacy settings are properly configured		
Strongly Agree	2	1.5
Agree	4	2.9
Neither Agree or Disagree	11	8.1
Disagree	60	44.1
Strongly Disagree	59	43.4
Aware of a situation where a nursing student had been disciplined by their undergraduate nursing program because of unprofessional		58.1
Yes	57	41.9
No	79	58.1

Table 3: Case Studies

Case Studies	Correct Answer	Participant Selected (n/ %)		Frequency of individuals who selected the following agencies (n/%)
		Yes	No	
Case Study One				
Q17. "... by liking this post is this considered inappropriate social media use?"	Yes	116 (85.3)	20 (14.7)	---
Q 18. "Is the comment you left considered inappropriate social media use?"	Yes	114 (83.8)	22 (16.2)	---
Q19. "... would any of these agencies find this situation a problem? Select all that apply."				
a. College of Nurses of Ontario	---	---	---	20 (14.7)
b. University Policies	---	---	---	12 (8.8)
c. Faculty of Nursing Policies	---	---	---	31 (22.8)
d. All of the Above	---	---	---	96 (70.6)
e. None	Yes	---	---	1 (0.7)
Case Study Two				
Q20. "... I would accept the friend request on Facebook from Jim."	No	1 (0.7)	135 (99.3)	---
Q21. "... accept the Facebook friend request from Jim after I complete my clinical rotation."	No	20 (14.7)	116 (85.3)	---
Q22. "... would any of these agencies find this situation a problem? Select all that apply."				

● College of Nurses of Ontario	---	---	17 (12.5)
● University Policies	---	---	6 (4.4)
● Faculty of Nursing Policies	---	---	19 (14)
● All of the Above	---	---	93 (68.4)
● None	Yes	---	17 (12.5)

Case Study Three

Q23. "...It is appropriate from Julie to post her daily life online."	No	7 (5.1)	129 (94.9)	---
Q24. "... would any of these agencies find this situation a problem? Select all that apply."				
● College of Nurses of Ontario	---	---	16 (11.8)	
● University Policies	---	---	5 (3.7)	
● Faculty of Nursing Policies	---	---	17 (12.5)	
● All of the Above	Yes	---	119 (80.9)	
● None	---	---	5 (3.7)	

Correct Answer

Participant Selected (n/ %)

Frequency of individuals who selected the following agencies (n/%)

Case Study Four

Q25. "...It is appropriate for Jen to share her clinical experience on Twitter."	---	Strongly Agree	7 (5.1)	---
	---	Agree	2 (1.5)	---
	---	Neither Agree or Disagree	3 (2.2)	---

	---	Disagree	20 (14.7)	---
	---	Strongly Disagree	104 (76.5)	---
Q26. "... Would any of these agencies find this situation a problem? Select all that apply."				
• College of Nurses of Ontario	---	---	---	10 (7.4)
• University Policies	---	---	---	2 (1.5)
• Faculty of Nursing Policies	---	---	---	9 (6.6)
• All of the Above	Yes	---	---	118 (86.8)
• None	---	---	---	6 (4.4)

**Bolded text is the correct answer for the agencies*

Table 4: *E-Professionalism Photo Results*

Photo	Mean	Correct Answer	Participant selected (n/%)	
			Appropriate	Inappropriate
<i>1 (Q27)</i>	<i>1.27</i>	<i>Inappropriate</i>	99 (72.8)	37 (27.2)
2 (Q28)	1.15	Appropriate	116 (85.3)	20 (14.7)
<i>3 (Q29)</i>	<i>1.73</i>	<i>Inappropriate</i>	37 (27.2)	99 (72.8)
4 (Q30)	1.32	Appropriate	92 (67.6)	44 (32.4)
<i>5 (Q31)</i>	<i>1.82</i>	<i>Inappropriate</i>	25 (18.4)	111 (81.6)
<i>6 (Q32)</i>	<i>1.30</i>	<i>Inappropriate</i>	95 (69.9)	41 (30.1)
7 (Q33)	1.89	Inappropriate	15 (11)	121 (89)
8 (Q34)	1.97	Inappropriate	4 (2.9)	132 (97.1)
9 (Q35)	1.94	Inappropriate	8 (5.9)	128 (94.1)
10 (Q36)	1.15	Appropriate	116 (85.3)	20 (14.7)

**Italicized text are the grey area photos*

CHAPTER 5

DISCUSSION

This cross-sectional quantitative descriptive study investigated E-professionalism among undergraduate nursing students at a midsize southwestern Ontario university. E-professionalism is a relatively new concept that requires attention from academia to ensure that students are representing themselves and the nursing profession appropriately on SM. E-Professionalism is defined as the behaviour and communications in an online setting, which has resulted from increased use of SM among RNs (Cain, 2008). This study is important because it highlights that SM use by nursing students continues to increase and they are learning about E-professionalism in and outside of the academic setting. Academia needs to step up on developing policies and educational strategies that will support student's ability to navigate the grey areas of SM to prevent them from getting into trouble (e.g., professional misconduct). This chapter interprets the findings within the conceptual model, and offers implications for nursing education and nursing practice.

Relevance of the Nursing Student E-Professionalism Spheres Model

At the time this study was conducted, no models on SM use and undergraduate nursing students were found. Concepts from the Spheres of Social Media Use in Professional Healthcare Communication (Gagnon & Sabus, 2015) were revised to suit the study and renamed Nursing Student E-Professionalism Spheres (NSES) to focus on the use of SM by undergraduate nursing students. The NSES guided this study (See Figure 2), and its usefulness to the study is described in the subsequent sections.

Platform Terms of Service

The model emphasizes that nursing students need to understand the terms of service and dynamics within SM sites to avoid unintentional violations (Gagnon & Sabus, 2015). Terms of service agreements can include privacy, security, content limitation, and user identity (Gagon & Sabus, 2015). Over half of the study participants reported that they did not read the terms of service agreement set out by SM platforms that they were using. Among those who read, only 15% decided not to use that SM platform after reading the requirements of the service agreement. This is problematic as students who do not read the terms of service agreement may unintentionally violate the terms, leading to the removal of content, account suspension, or even prosecution (Gagnon & Sabus, 2015). Therefore, nursing students could get into serious trouble even before they begin their careers as RNs.

Professional Standards of the College of Nurses of Ontario (PSCNO)

The PSCNO sphere addressed the professional standards and conduct set out by the CNO. The purpose of this sphere was to determine if nursing students knew what the CNO standards meant and if they could apply them to current SM use. Although nursing students, who misuse SM, are not accountable to regulatory boards, they are still expected to follow professional standards as set out by these organizations (CNA, 2012; Westrick, 2016).

The majority of participants reported that they were aware that they had to follow the same professional standards regardless if they were using SM for personal or professional purposes. These results differ from the literature which reports that nursing students perceive that personal posts on SM are separate from their professional identity

(Frazier et al., 2014; Prescott et al., 2013). In Duke and colleagues' (2017) study, almost half of nursing students disagreed that they should be required to follow professional standards if using SM for personal purposes.

Generally, participants were in agreement that they should be held to a higher professional standard than non-professional students regarding the image they portray on SM. This suggests that nursing students are aware of their unique position of being in a professional program and that they have responsibilities to the nursing profession when using SM. However, our results were reported with lower frequency than those of Marnocha et al. (2017) wherein almost all nursing students (97.2%) agreed that they should be held to a higher standard of professionalism when using SM. Although participants in this study are aware of their unique position, the lower agreement rate suggests the need for enhanced E-professionalism education for nursing students.

Participants were asked to select CNO standards (professional practice, online misconduct, code of ethics, and confidentiality) that specifically apply to E-professionalism. The majority of participants (84%) incorrectly selected "all the above" from the listed standards. Given that there are no current standards that specifically address E-professionalism, and no participants selected "none", this suggests that nursing students are not aware of CNO policies related to SM. The CNO (2016) at the time of this study also did not have its own formal SM use position statement on SM use but did use the INRC (2016) position statement as a "for your information" basis. The CNO at the time of the study also did not have an E-professionalism policy. A new CNO policy could guide nursing students on expected E-professional behaviours for Registered Nurses, and therefore potentially prevent incidents of inappropriate SM use as students.

An improved policy on E-professionalism by the CNO on how to navigate the grey areas of SM instead listing resources as “for your information” basis is needed.

Social Media Policies at the School of Nursing and Clinical Placements (SMSNCP)

The SMSNCP sphere addressed the participant’s understanding and application of their nursing program’s SM policy, the institution’s code of conduct, and the clinical placement policies when using SM. Although almost three-quarters of participants reported being aware of an E-professionalism policy in their undergraduate nursing program, one did not exist at the time of the data collection for this study. Rather, the nursing program has a SM policy but it does not specifically address E-professionalism. E-professionalism incorporated into the SM policy would add information on accountability, autonomy, innovation, ethics and values, so students can uphold their professional image (RNAO, 2007). Policies that provide clear E-professionalism guidance can support nursing students to appropriately use SM and mitigate hazards by stating clear expectations of appropriate SM use, examples of inappropriate and appropriate SM use, and privacy settings use (Ashton, 2016; Ferguson et al., 2016; Westrick, 2016).

The majority of participants reported learning about E-professionalism in their clinical placements or during regular in class courses. This is interesting because the students’ nursing program was lacking guidelines on E-professionalism education in current required courses at the time of this study. This may indicate that participants are receiving E-professionalism education informally (e.g., Internet or peers) which may not be aligned with CNO guidelines. Regardless, learning about E-professionalism from informal sources (e.g., SM) can be seen as beneficial because it allows students to engage with one another, share resources and reflect on their practice (Ross & Cross, 2019).

Nursing Student Social Media Use

The Nursing Student Social Media Use sphere focused on the characteristics of nursing students who use SM. Nearly all participants reported using SM for personal reasons. Duke et al. (2016) reported 96.5% of nursing students used SM for personal reasons. Personal use of SM among nursing students remains the central purpose as nursing students have grown up using SM for personal purposes long before their professional identities were established (Kaczmarczyk et al., 2013; Marnocha et al., 2017; Ross & Myers, 2017; Smith & Knudson, 2016). This revelation may be problematic for nurse educators when attempting to instruct students on how to separate the personal from the professional when using SM.

The most frequently used social networking sites were Instagram®, Snapchat® and Facebook®. This is similar to the findings of other researchers (Duke et al., 2017; Ross & Myers, 2017). A new finding of the current study was that Snapchat® and Instagram® are SM platforms are most frequently used among nursing students. This variation in SM platform use are likely related to changing trends in SM platform popularity over the past two years. Snapchat® and Instagram® are emerging SM platforms because the images and posts can disappear after a certain period of time when opened (e.g., 10 seconds) and may be appealing to nursing students because posts are viewed as not being permanent.

The literature heavily criticized nursing students as millennials and their young age would be a factor for inappropriate SM use (Gunberg Ross & Myers, 2017; Johanson, 2012; Smith & Knudson, 2016). However, age was not a factor in this study to influence E-professionalism practices and understanding. The difference in our findings could be

related to the increase exposure of nurses getting in trouble for inappropriate SM use and informal education of E-professionalism. In addition, year of study was not a factor on E-professionalism in this study. However, a majority of participants were third year nursing students so results may not be representative of every year of the program. More research is needed to determine if age and year of study is a factor on E-professionalism.

In the literature search at the time, employment was not looked as a characteristic for nursing students who use SM. In this study, a majority of participants are employed and are working nearly 16 hours a week on average. A further investigation is needed to see if the number of hours worked affects a student's E-professionalism. More research is also needed to determine if participants are actually learning about E-professionalisms at their place of work or confusing it with their mandatory clinical placements. This can be clarified in future studies by adding in brackets "not your clinical placement" to question 45 in the survey.

Most participants reported that they strongly agreed or agreed that they were responsible for all information posted on SM, and that they should be held accountable for unprofessional behaviour that is reported or shared, and for any an illegal act that is discovered through SM postings. However, one-third of participants reported that they posted, or were unsure if they had posted, information on SM that they would not want a prospective employer or a nursing faculty member to see. Our findings are substantially lower than Duke et al. (2017) who reported that 100% of nursing students reported that they had posted information on SM that they would not want a prospective employer or faculty to see. The difference from the literature could be related to the increased attention of SM use by nurses in the media (e.g., Carolyn Strom), when this study was

conducted. Carolyn Strom was the RN who was charged with professional misconduct over a Facebook post about a family member's care at a nursing facility (Canadian Broadcasting Company, 2016; Saskatchewan Registered Nurses' Association, 2016). Further, the participants may be informally learning of E-professionalism thought multiple pathways, such as through clinical placement orientation, peers, and employment policies.

Consistent with Duke et al. (2017), the majority of participants in this study were aware that that they should not publish whatever they want on SM even if privacy settings are configured appropriately. This suggests that students are aware that SM post are still public despite having strict privacy settings. An awareness by nursing students that SM posts could be shared by people and that they may be viewable by unintended audiences by sharing the post or taking screen shots is encouraging. However, the desired frequency of knowledge among students on this aspect of SM use should be at 100%. This indicates that further education about SM use and E-professionalism is required.

Methodological Insights

The NSES included survey question, case studies and photographs to help reveal the current state of the undergraduate nursing student's understanding and application of E-professionalism. The NSES also help addressed the research questions for this study. Together, these methods generated interesting insights about nursing student of SM use and E-professionalism learning gap that is present.

Case Studies

Four case scenarios tested the participant's understanding and application of E-professionalism. The case studies were developed based on the International Nurse Regulator Collaborative (2014) SM expectation, a position statement to which the CNO subscribes. The case studies assessed the participant's knowledge and understanding of patient privacy and confidentiality, an integral part of E-professionalism. As outlined by the International Nurse Regulator Collaborative (2014), privacy and confidentiality are an expectation of SM users. The case studies also examined professional image and boundaries (e.g., accepting friend requests) when using SM. In order to maintain professional boundaries, the International Nurse Regulator Collaborative (2014) discourages nurses from accepting a patient friend request on their personal SM accounts.

In the first case study, participants were asked if liking and commenting on a post on Facebook® was considered inappropriate SM use. The participant's like and comment on a peer's Facebook® post was in this case inappropriate SM use because engaging in someone else's post that is inappropriate is no different from posting it yourself (International Nurse Regulator Collaborative, 2014). In the second case scenario, nearly all participants stated they would not accept a friend request from a patient and were asked a follow-up question if it was appropriate to accept the friend request from the same patient after their clinical rotation was completed. Rejecting the friend request in both questions was the correct answer. In the third scenario, nearly all participants responded correctly stating that it was inappropriate for the nursing student depicted to post her daily life online. The majority of participants, in case study four, selected

strongly disagree or disagree that the experience given about your daily life was appropriate to post online. Selecting strongly disagree was the correct response.

In general, participants were able to identify obvious examples of inappropriate SM use. However, they consistently struggled to identify the correct agencies whose policies/guidelines would be breached in the case scenarios presented. This suggests that more education and awareness of agency and regulatory body guidelines on SM is needed within the nursing undergraduate curriculum.

E-Professionalism Photos

Ten nursing-related photos were used to elicit perspective of appropriate or inappropriate SM use (see Appendix E). The photos ranged from appropriate, near appropriate, to inappropriate examples of SM. Generally, participants were able to identify obvious examples of appropriate or inappropriate SM use. However, participants struggled with SM examples of subtle inappropriate E-professionalism. Very few participants were able to correctly identify all photo examples of E-professionalism correctly. Examples of inappropriate E-professionalism that were not obvious, such as visible name badges (photo 1 and 5), had mixed results. This finding suggests that more visual representations of what E-Professionalism looks like may be required to assist nursing students to mitigate subtle examples of inappropriate SM use.

Photos 2, 4 and 10 (Figures 1-3) were obvious examples of appropriate SM use and a majority of participants were able to answer them correctly. Photo 4 was an exception in that less participants were able to answer it correctly. We believe that it was because the photo included a filter (glasses). Some may have taken the cartoon glasses as inappropriate. Examples of appropriate SM use included posts that are professional,

positive, patient free, and where privacy was maintained (International Nurse Regulator Collaborative, 2014).

Photos 7, 8 and 9 (Figures 4-6) were blatant examples of inappropriate SM use. These photos were considered inappropriate SM use as they reflected a complete disregard for patient privacy by posting patient information without consent, visible use of clear patient identifiers (e.g., name and room number), and lack professionalism was evident. The majority of participants were able to identify them appropriately.

Photos 1, 3, 5, and 6 (Figures 7-10) were grey area photos. The photos used in this section were examples of subtle inappropriate SM use. SM posts in this group included a visible nursing badge (which is considered inappropriate as it can include information such as full name, hospital or school affiliation which violates organizational policies). This was evident in the in photo 1 (Figure 7) and photo 5 (Figure 9). Mixed results were found with participants only correctly identifying photo 5 as inappropriate SM use. Nursing students may not be fully aware that posting their badges online also poses a personal safety concern because names (can be full name) and school affiliation are on the badge, allowing their information to be permanently discoverable on the Internet.

The majority of participants correctly identified that the photo of a nursing student wearing scrubs that reveal the school affiliation could violate school policies (Figure 8) This post was also considered an example of inappropriate SM use because the comment left on the photo could be perceived as innocuous to the poster but offensive to others. The group photo (Figure 10) was answered incorrectly by over two-thirds of the participants. This group photo is considered inappropriate SM use because it was taken in a patient care area with identifiers present in the background and there were visible

nursing badges. Nursing clinical groups often take group photos when completing placements, and they may not realize a harmless group photo could be considered inappropriate SM use.

Half of the employed participants reported learning about E-professionalism at their current place of employment which may have influenced their responses in the photo section of the study. These findings again suggest that participants are learning about E-professionalism outside of academic settings. The ability to identify grey area postings of when SM posts are not clearly right or wrong as appropriate or inappropriate was lacking.

Implications for Nursing Education, Policy and Research

The findings of this study offer four key recommendations for nursing education, policy and research.

Recommendation 1

As users of SM platforms, students must understand that they are always responsible for understanding the term of service agreements even if they do not read them (Gagnon & Sabus, 2015).

Nursing students may be placed at risk for negatively representing themselves and the nursing profession on SM even before they start their RN careers making the expansion of this topic a top priority. The meaning of what is considered within the public domain is changing, since apps like Instagram® include terms of service agreements of who owns the rights to the posted pictures. This highlights the importance of reading the terms of service agreement when signing up for a SM account.

Recommendation 2

Updated SM policies that encompasses E-professionalism are needed in nursing programs, and across regulatory, and professional organizations.

The findings from this study suggest that the majority of nursing students are using SM and many seem to believe that there are resources available around E-professionalism when there are none readily available. This highlights a gap that academia can focus on so that students receive more resources that are useful and aligned with CNO standards regarding E-professionalism. The lack of a formalized E-professionalism policy is evident in other professional programs such as psychology, where only 9.5 % of graduate psychology programs in Canada had a SM policy or guideline (Campbell, Chong, Ewen, Toombs, Tzalazidis, & Maranzan, 2016). The current SM policy at the studied school of nursing did not provide extensive guidance to students on how to use SM. The policy, through revision, could include an E-professionalism definition and examples on how to use SM appropriately, expectation of E-professional use, and enforceable sanctions or penalties for misuse (Campbell et al., 2016). The updated policy expanded to commonly used SM platforms beyond Blackboard such as Facebook®, Instagram®, and Snapchat® is also recommended.

At time that this study was undertaken, there were no available resources from CNO on the topic of E-Professionalism and use of SM. The updated CNO Code of Conduct discusses SM use, topics related to patient privacy and confidentiality, and respecting colleagues on SM (CNO, 2019). The updated CNO Code of Conduct however, does not explicitly include E-professionalism. It is recommended that regulatory bodies also include the definition of E-professionalism in their practice standards. Professional

nursing organizations should also update their SM policies and include E-professionalism as a method to further support nurses in making informed decisions when posting online. Currently, the RNAO and CNA have SM guidelines but do not address E-professionalism.

Recommendation 3

Increased E-professionalism education and including SM in clinical and course work is recommended to ensure that nursing students are receiving proper guidance that it is aligned with program, institutional, and regulatory practices.

At the time of this study there was no formal education course in the undergraduate nursing program from which participants could increase their awareness and understanding of SM use and E-professionalism. Fenwick and Edwards (2016) state that nursing education related to E-professionalism is lagging compared to the exponential use of SM by nursing students. It would appear that nursing students are learning about E-Professionalism outside of the academic setting and potentially what they are learning is unaligned with nursing regulatory guidelines, which may create future issues if unaddressed in nursing programs.

During this study, E-professionalism was defined as the behaviour and communications in an online setting (Cain, 2008). It is recommended to redefine E-professionalism that is more applicable to a nursing population to build a stronger foundation for E-professionalism education. The principal investigator of this study placed professionalism as an umbrella term, where E-professionalism falls under followed by SM use by the healthcare professional. According to the investigator, E-professionalism is the traditional values of professionalism while still following

professional regulatory guidelines when using SM. Whereas SM use is the professional's casual or personal use of it.

Historically academia has focused on what is wrong but does not necessarily teach students correct ways to use SM in a professional manner (Kleppinger & Cain, 2015; Price et al., 2018; Westrick, 2016). In pharmacy education, SM policies have been presented negatively to dictate what SM use students should avoid (Kleppinger & Cain, 2015). Kleppinger and Cain (2015) recommend that E-professionalism education focus on personal digital branding as professionals. Digital branding is an online self-marketing strategy that a person uses to present their professional persona (Kleppinger & Cain, 2015). Formalized E-professionalism education ought to also include supportive focuses on how to use SM appropriately or in a professional way. This may be beneficial allowing nursing students to better identify the grey areas of SM use and ways in which to develop a positive professional persona online. Learning that appropriate SM use can be achieved by blurring out identifiers (e.g., badges or hospital affiliation logos) or taking photos in non-patient care areas would be a great way to reinforce this behaviour in undergraduate nursing students. Nurse educators should also consider using SM in their class discussions with students and include it in school assignments so students can practice how to use SM professionally.

Nursing leaders can also be proactive in demonstrating appropriate E-professionalism and invest in producing a professional persona so these behaviours can be role modelled to nursing students or used as an example of what is appropriate for educational purposes. Promoting E-professionalism in nursing education and practice may prevent future cases of Registered Nurses like Carolyn Strom being fined and

charged with professional misconduct (Saskatchewan Registered Nurses' Association, 2016). Robust E-professionalism education may give students the tools to navigate and engage in SM professionally and avoid committing professional misconduct.

Recommendation 4

Future research is needed to understand E-Professionalism among nursing students.

Because the findings suggest that students may be learning about E-professionalism informally, future studies should look at where nursing students are learning about E-professionalism to have a better understanding of what and how this is occurring, and the relevance of this knowledge to nursing practice. Qualitative or mixed method designs may elicit hidden results and ensure a better understanding of nursing student SM use and their relationship to E-professionalism. A follow-up question at the end of the survey to ask nursing students if their outlook on E-professionalism changed after participating in the study could have been included to understand if the study itself elicited a change in behaviour on SM use and E-professionalism. This would be recommended for future studies to see if the EPPS triggered participants to think about their SM use and if the study made a difference in the participant's future SM use.

Nursing student use of newer SM platforms like Snapchat® and Instagram® should be better understood, as should all new platforms that may arise in this digital age. More work is needed on the EPPS to make it a more reliable and robust survey for future studies. Using 'real' images in research is challenging due to varying interpretations of what material is considered in the public domain. Currently, public domain material is that which is not protected through copyright, trademark, or patents that anyone can use

without permission (Stanford University Libraries, 2016). Staging ‘mock’ photos in a modified scale would avoid issues of the changing public domain definition.

Limitations

There are several limitations in this study so the results must be interpreted with caution. This study used a self-reported measure on nursing student’s SM use and E-Professionalism. The final version of the EPPS lacked internal consistency ($\alpha = 0.69$) (Pallant, 2016). The EPPS lacked validation and could not be used for bivariate or multivariate analyses, so research question number two could not be answered. Self-reported measures are an issue as participants may feel they are required to answer one way due to social desirability (Johnson & Fendrich, 2005) versus what is actually reality. This can limit accuracy and honesty when answering the questions because of social desirability. Convenience sampling was also used which limits the external validity of these results (Groves et al., 2013). The sample consisted of nursing students who may have been concerned with answering the questions incorrectly or revealing their SM practise could affect them academically may have altered responses. The sample used reflected only one academic setting making it less generalizable. The sample size of 136 participants did not generate sufficient power to conduct regression analysis as planned, making these results less generalizable. Lastly, the majority of participants were third year nursing students, so the findings may not represent the perspectives of students across all levels of the nursing program.

Conclusion

Nursing students will continue to use SM. The technologies continue to evolve during this digital age. Educational policies on E-professionalism are lagging behind.

Although nursing students may learn about E-professionalism outside of academia, this is problematic because it may not align with regulatory and professional standards. Near-appropriate or grey areas of E-professionalism are difficult for nursing students to interpret, but may result in severe consequences. The promotion of educational strategies to further support students, such as modeling appropriate SM use and E-professionalism behaviours in class and clinical placements is recommended. Formalized E-professionalism education and policies that focus on how to use SM the right way instead of a focus on the wrongdoings is recommended to assist students in making informed decisions when using SM and learning how to consistently demonstrate E-professionalism throughout their nursing careers. It is time for academia to be more proactive and provide formalized education training and guidance on E-professionalism to support nursing student use of SM.

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APPENDICES

Appendix A

Electronic Consent Form



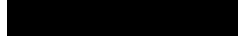
CONSENT TO PARTICIPATE IN RESEARCH

Title of Study: **E-Professionalism of Undergraduate Nursing Students**

You are asked to participate in a research study conducted by **Dr. Laurie Freeman, Dr. Kathy Pfaff and Jessica Chu** from the **Faculty of Nursing** at the University of Windsor. The results from this study will contribute to a thesis for the Masters of Science in Nursing Program.

If you have any questions or concerns about the research, please feel to contact:

Jessica Chu
Principal Investigator



PURPOSE OF THE STUDY

The purpose of this descriptive quantitative study is to investigate E-professionalism among undergraduate nursing students in years one through four of the baccalaureate nursing program at the University of Windsor.

PROCEDURES

If you volunteer to participate in this study, you will be asked to complete a survey on Qualtrics®. A link at the bottom of this consent page will be provided for you to complete the survey. The survey is anonymous, no personal data on you will be collected, and all results from this study will be reported in an aggregate format as to ensure that you cannot be identified by the answers you provide. The survey will take approximately 10 – 15 minutes to complete.

POTENTIAL RISKS AND DISCOMFORTS

There is a potential psychological risk and discomfort from answering the questions in the survey related to nursing student social media use.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

Potential benefits from participating in this study are findings from this study will add to the literature regarding E-professionalism in nursing.

COMPENSATION FOR PARTICIPATION

There is no compensation for participation in this study. You will have a chance to participate in a draw to win one of four \$25.00 Amazon gift cards if you so desire upon completion of the survey.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission.

PARTICIPATION AND WITHDRAWAL

Participants can withdraw from the survey at any time by exiting the browser or clicking the opt-out button on the survey. This study is anonymous, so once answers are submitted, they cannot be removed.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

Research findings will be available in the research summaries once the principal investigator's thesis requirements are completed.

Web address: _____

Date when results are available: _____

SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, publications and in presentations.

RIGHTS OF RESEARCH PARTICIPANTS

If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF RESEARCH PARTICIPANT/LEGAL REPRESENTATIVE

By clicking the agree button, you are consenting to voluntary participation in the

study.

SIGNATURE OF INVESTIGATOR


These are the terms under which I will conduct research.

Signature of Investigator

Date

Appendix B

Permission from Authors to Adapt Survey

Research study inquiry 

Jessica Chu <chu14@uwindsor.ca>
to katherine.chretien

Tue, May 30, 2017, 1:55 AM

Good morning Dr. Chretien,

My name is Jessica. I am a graduate student at the University of Windsor working on my thesis about professionalism in undergraduate nursing students. I came across your study "Online Posting of Unprofessional Content by Medical Students", and was interested in using your survey for my thesis. Thank you for your time and consideration.

Sincerely,
Jessica Chu RN BSN

Chretien, Katherine C <Katherine.Chretien@va.gov>
to me

Tue, May 30, 2017, 10:07 AM

Dear Jessica,
That would be fine. Best of luck to you.

Sincerely,
Katherine

Cain, Jeff Jeff.Cain@uky.edu via uky.onmicrosoft.com
to me


Tue, Jan 23, 2018, 1:00 PM

Jessica,

Attached is the survey we used. Note that I would revise it if I were doing the same research today. You have my permission to adapt it for use for your thesis. Good luck!

Jeff Cain, EdD, MS
Associate Professor
Dept of Pharmacy Practice & Science
University of Kentucky College of Pharmacy
114M Lee T. Todd, Jr. Building
(859) 257-4429

Associate Editor: *Currents in Pharmacy Teaching & Learning*
Editor: [Pulse](#) scholarly blog



valda.duke <valda.duke@mun.ca>
to me ▾

Wed, Feb 7, 2018, 10:03 AM ☆ ↶ ⋮

Hi Jessica

Thank-you for your interest in our research.

Please see the attached adapted tool which was used in our study. We kindly ask that we would be acknowledged in the appropriate manner with its use. In addition please see the original article by Hall, Hanna and Huey who are the original authors of the instrument.

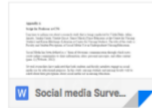
Thanks and good luck with your Masters.

Kindly,

Valda Duke

xxx

Valda **Duke** RNBN MN-NP
Faculty
CNS
100 Forest rd
St John's, NL
709 777-7199
valda.duke@mun.ca



Jessica Chu <chu14@uwindsor.ca>
to m.hall ▾

Tue, Feb 6, 2018, 5:19 PM ☆ ↶ ⋮

Hello Dr. **Hall**

I am requesting permission to use your survey from your study, "Use and Views on Social Networking Sites of Pharmacy Students in the United Kingdom". I am a graduate student at the University of Windsor, currently working on a thesis about e-professionalism of undergraduate nursing students. If permission is granted, could please attach a copy of your survey. Thank you for your time.

Jessica Chu BScN, RN
Masters of Science in Nursing Student
University of Windsor

Maurice Hall <m.hall@qub.ac.uk>
to me ▾

Tue, Feb 6, 2018, 5:38 PM ☆ ↶ ⋮

Hi Jessica,

That's fine -- I wish you well in your research.

Survey attached.

Kind regards,

Maurice

Dr Maurice Hall | Director of Education (BSc Programmes) | Email: m.hall@qub.ac.uk | Telephone: +44 (0) 28 9097 2362



www.qub.ac.uk



Appendix C

Nursing Student E-Professionalism Survey

E-professionalism Survey

Social Media Use

1. Social media is defined as: online and mobile applications that allow people to share opinion, experiences and information and written statements

Based on this given definition of social media, do you use social media?

- Yes
- No (Insert Skip logic for Question 2,3, and 4)

2. Which of the following social media platforms do you use? **Select all that apply.**

	Facebook	Twitter	YouTube	Instagram	Snapchat	Other
I have an account but do not use it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I use it rarely	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I use it daily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I use it \geq than 5 times a day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I use it $<$ than 5 times a day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I use it \geq than 5 times a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I use it $<$ than 5 times a week	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I use it \geq than 5 times a month	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I use it $<$ than 5 times a month	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. All social media platforms that you use have terms of service agreements. Do you read them prior to using the site?
 - Yes
 - No
 - Sometimes

4. After reading the terms of service agreement on the social media platform you were interested in using, have you ever decided not to use that platform?

- Yes
- No

E-Professionalism Awareness:

5. E-Professionalism is defined as the professional behavior and communications in online settings (Cain, 2008). Characteristics of E-professionalism may include: autonomy, ethics, values, trust etc. (Registered Nurses Association of Ontario, 2007)

Are you aware of an E-professionalism policy at the University of Windsor Faculty of Nursing?

- Yes
- No (Skip logic for Questions 2, 3 & 4)

6. As a nursing students, I feel sufficiently aware of the professional behaviour that is expected of me when using social media,

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree

7. Does your Undergraduate Nursing program professionalism have a clear policy that addresses issues of Internet use such as blogs and social networking sites?

- Yes
- No

8. As a nursing student, I need to follow the same professional standards regardless of whether I am using social media for personal or professional purposes?

- Yes
- No
- Unsure

9. Given that the privacy settings are properly configured, is it acceptable to publish whatever you like on social media sites?

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree

10. Students in professional programs, including nursing, should be held to higher standards than others regarding the image they portray on social media.

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree

11. E-Professionalism is defined as the professional behavior and communications in an online setting (Cain, 2008). Characteristics of E-professionalism may include: autonomy, ethics, value, trust etc. (Registered Nurses Association of Ontario, 2007). Examples of unprofessional social media may include: foul language, sexually explicit images or posts, comments that are negative and derogative etc.

Which of the following College of Nurses of Ontario Standards specifically address E-professionalism?

Select all that apply.

- Professional Practice
- Online Misconduct
- Code of Ethics
- Confidentiality & Privacy
- All of the Above
- None

Identification of Inappropriate Social Media Use

12. I am responsible for all information I have posted on social media sites such

as photos and comments.

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree

13. Have you ever posted information such as photos and/or comments that you would not want a prospective employer or member of the university faculty to view?

- Yes
- No
- Unsure

Identification of Inappropriate Social Media Use

14. A nursing student should be held accountable for unprofessional behaviour that is reported or shared on the student's social media account.

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree

15. A nursing student should be held accountable for an illegal act (anything that you are going to be criminally or civilly charged for) that is discovered through social media postings.

- Strongly Agree
- Agree
- Neither Agree Nor Disagree
- Disagree
- Strongly Disagree

16. Are you aware of any situations where nursing students have been disciplined by their Undergraduate Nursing program because of unprofessional social media postings?

- Yes
- No

Application of E-professionalism

The following scenarios may or may be not appropriate according to the College of Nurses of Ontario, educational institution policies and nursing program policies. The researcher is evaluating the clarity and effectiveness of current social media education.

You are nursing student who has a clinical rotation this semester. One of your peers in your clinical group sent you a friend request on Facebook. You accept the friend request and visit your peer's Facebook page. On the peer's Facebook page, you see information posted about the location of your clinical placement and information about a patient that was admitted to the unit with an unusual diagnosis. There were no photos posted and the patient was not identified. Even though, you were the one who did not make the post, you liked the post and commented "Wow, looks like you had a great clinical day".

17. By liking the post, is this considered inappropriate social media use?

- Yes
- No

18. Is the comment you left considered inappropriate social media use?

- Yes
- No

19. Based on the scenario above, which of the following organizations/agencies would consider this social media behaviour inappropriate? Select all that apply.

- College of Nurses of Ontario
- University Policies
- Faculty of Nursing Policies
- None

You are currently on a cardiac rehabilitation unit as a nursing student completing your medical-surgical clinical rotation. You have been caring for a patient named Jim throughout your rotation. You are about to complete your rotation, and Jim has asked you if he could send you a friend request on Facebook.

20. Would you accept the friend request on Facebook from Jim?

- Yes
- No (skip question II below in section 2)

21. If you only accept the friend request from Jim on Facebook after you completed your clinical rotation, is this acceptable?

- Yes
- No

22. Based on the scenario above, which of the following organizations/agencies would consider this social media behaviour inappropriate? Select all that apply.

- College of Nurses of Ontario
- University Policies
- Faculty of Nursing Policies
- None

Julie is an enthusiastic nursing student who documents her life on YouTube. Julie films her classroom interactions that sometimes includes patient information, and conversations she has with peers. Julie posts all her footage of her daily life on YouTube.

23. Is it appropriate for Julie to post her daily life online?

- Yes
- No

24. Based on the scenario above, which of the following organizations/agencies would consider this social media behaviour inappropriate? Select all that apply.

- College of Nurses of Ontario
- University Policies
- Faculty of Nursing Policies
- None

Jen is a third year nursing student who tweets a recent incident in a clinical rotation in the Emergency Department. Jen tweets “The craziest trauma code came in today. The guy was in a MVA with the craziest leg laceration and fracture”. Jen then posts a photo of the patient’s leg injury, and adds another tweet “I learned about fractures and wound care in my medical surgical class, can’t wait to use what I learned”

25. Is it appropriate for Jen to share her clinical experience on Twitter?



I. Do you consider this appropriate use of social media?

- Yes
- No

29. You are about to start your OR placement and you post this photo:



I. Do you consider this appropriate use of social media?

- Yes
- No

30. After your shift on an urology unit, you take a photo and post it on Instagram:

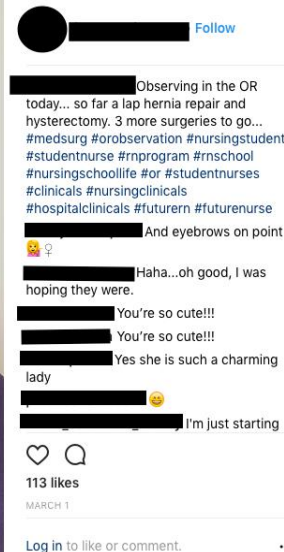


I. Do you consider this appropriate use of social media?

- Yes
- No

31. You are about to start your OR placement and you post this photo:

- Yes
- No



I. Do you consider this appropriate use of social media?

- Yes
- No

32. You have just completed your cardiology rotation, and posted this photo on your social media accounts:



I. Do you consider this appropriate use of social media?

- Yes
- No

33. You are a nursing student who is currently in the OR. You want to share your experience with your friends, so you post this photo on Instagram:



I. Do you consider this appropriate use of social media?

- Yes
- No

34. You are a nursing student who has recently transferred a patient out of the Neuro-ICU. The patient you discharged is known by staff as hard to deal with and a difficult patient. You share your excitement that the patient is finally leaving and share this inside joke with your peers and staff.



I. Do you consider this appropriate use of social media?

- Yes
- No

35. As a nursing student, you are browsing on your Facebook and you come across this post:



I. Do you consider this appropriate use of social media?

- Yes
- No

36. You have completed your cardiology rotation, and posted this photo on your social media accounts:



I. Do you consider this appropriate use of social media?

- Yes
- No

Demographics

37. Why do you use social media? **Select all that apply.**

- Personal use (e.g., recreational)
- Professional (e.g., networking)
- Academic (e.g., to discuss class assignments)

38. Please indicate which year of the nursing program you are currently enrolled in:

- First Year
- Second Year

- Third Year
- Fourth Year

39. Did you start another program prior to starting your nursing studies?

- Yes
- No (Insert Skip logic for question 3)

40. Please select which age range you are in:

- Under 18 years of age
- 18-20
- 21-25
- 26-30
- 31-35
- 36 years or greater

41. Please select which group you most identify with

- Male
- Female
- Other
- Prefer Not to Answer

42. What is your current employment status?

- Fulltime
- Part-time
- I am not currently employed (Insert skip logic for question 8 & 9)

43. Please indicate how many hours you work per week.

44. What area do you currently work in? **Select all that apply.**

- Healthcare (e.g., personal support worker)
- Retail (e.g., sales associated)
- Food services (e.g., server)
- General Labour (e.g., construction)
- General Business (e.g., administrative)
- Other

45. Have you learned about E-professionalism at your current place of employment?

- Yes

- No

46. Does your current place of employment have E-professionalism policies?

- Yes
- No

47. Have you learned about E-professionalism at your clinical placement or clinical course?

- Yes
- No

Appendix D

Frequency Table of Social Media Platform Use

Frequency of Use (n/%)	Social Media Platform (n/ %)							
	Facebook	Twitter	YouTube	Instagram	Snapchat	Other	All	None
I have an account but do not use it	12 (8)	42 (30.8)	21(15.4)	20 (14.7)	9 (6.6)	16 (11.7)	1 (0.7)	74 (54.4)
I use it rarely	29 (21.3)	10 (7.4)	21 (15.4)	4 (2.9)	9 (6.6)	5 (3.7)	0 (0)	74 (54.4)
I use it daily	52 (38.2)	30 (22.1)	53 (39)	70 (51.5)	69 (50.7)	9 (6.6)	1 (0.7)	30 (22.1)
I use it more than 5 times a day	38 (27.9)	24 (17.6)	20 (14.7)	49 (36)	50 (36.7)	8 (5.9)	0 (0)	54 (39.7)
I use it less than 5 times a day	28 (20.6)	18 (13.2)	20 (14.7)	21 (15.4)	22 (16.2)	5 (3.7)	0 (0)	83 (61)
I use it more than 5 times a week	28 (20.6)	12 (8.8)	24 (17.6)	24 (17.6)	23 (16.9)	5 (3.7)	1 (0.7)	94 (69.1)
I use it less than 5 times a week	8 (5.9)	5 (3.7)	10 (7.4)	3 (2.2)	3 (2.2)	0 (0)	0 (0)	115 (84.6)
I use it more than 5 times a month	20 (14.7)	13 (9.6)	19 (14)	20 (14.7)	22 (16.2)	6 (4.4)	4 (2.9)	110 (80.9)
I use it less than 5 times a month	5 (3.7)	6 (4.4)	5 (3.7)	1 (0.7)	2 (1.5)	1 (0.7)	0 (0)	123 (90.4)

Appendix E

Appropriate Social Media Use from E-Professionalism Photo Scale (EPPS)



Figure 1: EPPS Question 28 (photo 2). This was an example of appropriate SM use because the post was professional, positive, patient free, and privacy was maintained (International Nurse Regulator Collaborative).



Figure 2: EPPS Question 30 (photo 4). This photo was an example of appropriate SM use because it was professional, positive, patient free and privacy was maintained.



Figure 3: EPPS Question 36 (photo 10). This is an example of an appropriate group photo of SM use because the photo was taken off the unit, there were no identifiers of the location of the clinical placement or patient information. The badges on the nursing students and school affiliation were blurred.

Blatant Inappropriate Social Media Use from the E-Professionalism Photo Scale (EPPS)



Figure 4: EPPS Question 33 (photo 7). This is an example of inappropriate SM use because it lacks professionalism and includes a patient and other healthcare professionals without their consent. The photo also shows a complete disregard for patient privacy.



Figure 5: EPPS Question 34 (photo 8). This is an example of inappropriate SM use because it lacked professionalism and included part of the patient's name and other patient identifiers (unit and room number).



Figure 6: EPPS Question 35 (photo 9). This photo is an example of inappropriate SM use. The context of the post was unprofessional. This post also showed that nursing students must be cautious of what they post on their personal SM page because they are still obligated to follow the professional standards of their regulatory body.

Grey Area of Social Media Use from E-Professionalism Photo Scale



Figure 7: EPPS Question 27 (photo 1). This was an example of inappropriate SM use because the photo included the nursing student's nursing badge (including nursing school and full name). Nursing students need to be careful when posting online to protect their privacy for their own safety.



Figure 8: EPPS Question 29 (photo 3). This was an example of inappropriate SM use because the public post included personal information (school affiliation and name). The nursing student’s comment on the photo could be perceived as innocuous, but the public may perceive it differently.



Figure 9: EPPS Question 31 (photo 5). This photo was an example of inappropriate SM use because it included the nursing student's full name on her badge and the school affiliation. This poses a safety concern for the nursing student since the post was on the public domain.



Figure 10: EPPS Question 32 (photo 6). This group photo is an example of inappropriate SM use because it is taken on a hospital unit with patient identifier information in the background (whiteboard with patient names) and one of the nursing student's badge is visible. Although these issues are not obvious, they can be zoomed in to reveal information.

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