

# THE DANIEL K. INOUE COLLEGE OF PHARMACY SCRIPTS

## Pharmacy Students' Perspectives of Social Media Usage in Education

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### Background

When first introduced, social media was viewed as a means for personal socializing. As it evolved, the purpose of social media has grown into something much larger, particularly in recent years. It is now common for people to use social media as a source of news, primary communication, place of business, and more. As new social media platforms were introduced, each seemed to serve a niche purpose. For example, Facebook was started to connect socially with friends and family, while LinkedIn serves the purpose of connecting for the purpose of professional networking. Some of these initial purposes remain true, but, for many platforms, the purposes have become more blended. Instagram was initially intended as a venue to share photos, but it has now grown to the point where some people use it as a primary means of communication, to meet new people socially, to stay informed of news updates, and as a place of business. With all these changes and shifts in social media usage, the line between using social media for personal reasons and professional reasons has become blurred.

Most current pharmacy students belong to the Millennial generation, defined as being born between 1981-1996. However, there are also students who are categorized in Generation X (born between 1965-1980), and we will soon see more students categorized as Generation Z (born from 1997 onward).<sup>1</sup> The current generation of students is often characterized by frequent use of social media. Studies sampling pharmacy student populations have reported that 91%-93% of pharmacy students use at least 1 social media platform.<sup>2,3</sup> These estimates are from 2013, so it is likely that this percentage is even higher as social media popularity is constantly growing. Though frequent social media usage may be seen by some as a negative attribute, this generation may also be seen as resourceful in using these platforms to communicate effectively with peers. These students are also commonly described as a collaborative generation that values working in a team, using each other as resources to achieve a common goal.<sup>4</sup>

The use of social media in professional pharmacy programs is not clearly defined and can still be considered a controversial topic. Health professionals are faced with the decision of whether their social media persona should be kept private in their personal life or allowed to overlap with their professional life. One main problem that is faced is whether to have a social media account set as private or public.<sup>5</sup> Previously it was highly emphasized that professionals should have social media accounts set to private. With the shift and changes in social media however, more professionals are having public accounts that highlight both their professional and personal lives. In the professional education field, there is a large interest in learning how social media is impacting the outcomes of our students. A survey of faculty in health education programs reported that 71.3% of respondents believed social media has capacity to positively impact educational practices.<sup>6</sup>

The role of social media in a professional program is not well defined. Social media could increase students' knowledge of health care information due to the ease of communicating with others or viewing up-to-date news. Conversely, social media may be serving as a distraction from studying and thereby having a negative impact on student outcomes. Regardless of the type of effect, most pharmacy students utilize social media in their daily lives for various purposes. It is hypothesized that they are also utilizing social media to supplement their education and have the viewpoint that social media has a professional use. Previous studies have assessed and described pharmacy students' opinions on using social media, with varying results. A study from 2013 reported that 75% of first-year pharmacy students had interest in the possibility of social media being integrated in an educational manner.<sup>2</sup> Another study from 2013 reported that 74% of fourth-year pharmacy students felt the need to edit their social media accounts while applying for jobs, and 96% of fourth-year pharmacy students believed that social media accounts should always be kept private and separate from professional use.<sup>3</sup> These previous studies may not reflect the current perspectives, since social media usage

has rapidly grown causing the scope of social media to expand. Therefore, a survey was administered to gain insight into the current opinions of pharmacy students. The Daniel K. Inouye College of Pharmacy (DKICP) at the University of Hawai‘i at Hilo is the only accredited college of pharmacy in the Pacific Basin. Hawai‘i is in a unique geographical location that is physically isolated from others, therefore it is also of interest to see if there is an increased use of social media in DKICP pharmacy students.

## Methods

This survey was approved by the University of Hawai‘i Institutional Review Board. A voluntary, anonymous survey was emailed to all 318 pharmacy students enrolled in the Pharm.D. program at the DKICP in August 2018, at the start of the fall semester. The survey was administered via SurveyMonkey Inc. ([www.surveymonkey.com](http://www.surveymonkey.com); San Mateo, California) and consisted of 16 questions developed to assess opinions on various facets of using social media in professional education programs. Survey participation was not incentivized. There was no prior discussion with any pharmacy students regarding using social media in this professional program. In addition to demographic information, the survey questions were designed to assess four main areas regarding social media usage: 1) types and frequency of social media usage, 2) purposes of social media usage, 3) professionalism concerns of social media usage, and 4) educational purposes of social media usage. These four areas were selected because the author was interested in how students viewed social media in these facets. Original survey questions were developed by the author and no survey validation was completed prior.

For the area regarding types and frequency of social media usage, students were questioned about which social media platforms they are registered for, including Facebook, Instagram, Snapchat, and Twitter. These four platforms were selected for inclusion from anecdotal experience that these were the highest utilized platforms by the target demographic. Students were then asked how frequently they engaged with each registered platform. In the topic area of purposes of social media usage, students were asked whether they use social media to connect and network with classmates, other non-classmate pharmacy students, or licensed pharmacists. They were also asked if they use social media to view pharmacy-related news or for educational purposes. Regarding professionalism concerns, students were presented with various statements and asked to rank their agreement based on a 5-point Likert scale from strongly disagree to strongly agree. These statements addressed concerns regarding social media in the classroom or workplace, privacy concerns, and social media as a distraction. In the last area of educational purposes of social media usage, students were asked if they use any social media platforms for educational reasons, if

they believe it can be utilized as an effective learning tool, and if they were interested in a social media account that would be dedicated to clinical pharmacy pearls. A clinical pearl is a term used in medicine to describe a piece of information that can be applied in various patient-care scenarios to help handle clinical problems or situations. Of note, there were no open-ended response questions in this survey. After all data was gathered, descriptive analysis techniques were used to analyze results. Results were assessed collectively without subgroup analysis.

## Results

A total of 145 pharmacy students completed the survey, with a response rate of 46%, and an even distribution among first-year through fourth-year students. Most students (86%) were of the millennial generation, with an average age of 27 years. Table 1 describes the full demographic characteristics of the pharmacy student respondents.

Only four students (3%) reported not using any social media platforms, two of which are categorized as belonging to the Generation X, representing 25% of respondents in that generation. The most popular social media platform was Instagram, with 77% of students reportedly using Instagram at least once daily, followed closely by Facebook with 75% of students using the platform at least once daily (Figure 1). As anticipated, 88% of respondents agreed or strongly agreed that their usage of social media was helpful in connecting to other pharmacy students. The most common reason for using social media was to connect with classmates (88%) and with upperclassmen (79%). Other reasons for using social media included to view pharmacy-related news and education, as well as networking with practicing pharmacists and students from other colleges (Figure 2).

Baseline Characteristic	No. (%)
<b>School Year</b>	
P1 (First-Year)	38 (26%)
P2 (Second-Year)	30 (21%)
P3 (Third-Year)	40 (28%)
P4 (fourth-Year)	37 (26%)
<b>Age in Years, Average (Range)</b>	27 (20-51)
Generation X: Born 1965-1980	8 (6%)
Millennials: Born 1981-1996	125 (86%)
Generation Z: Born 1996 Onward	12 (8%)
<b>Female Gender</b>	97 (67%)
<b>Hawai‘i State Resident</b>	76 (52%)

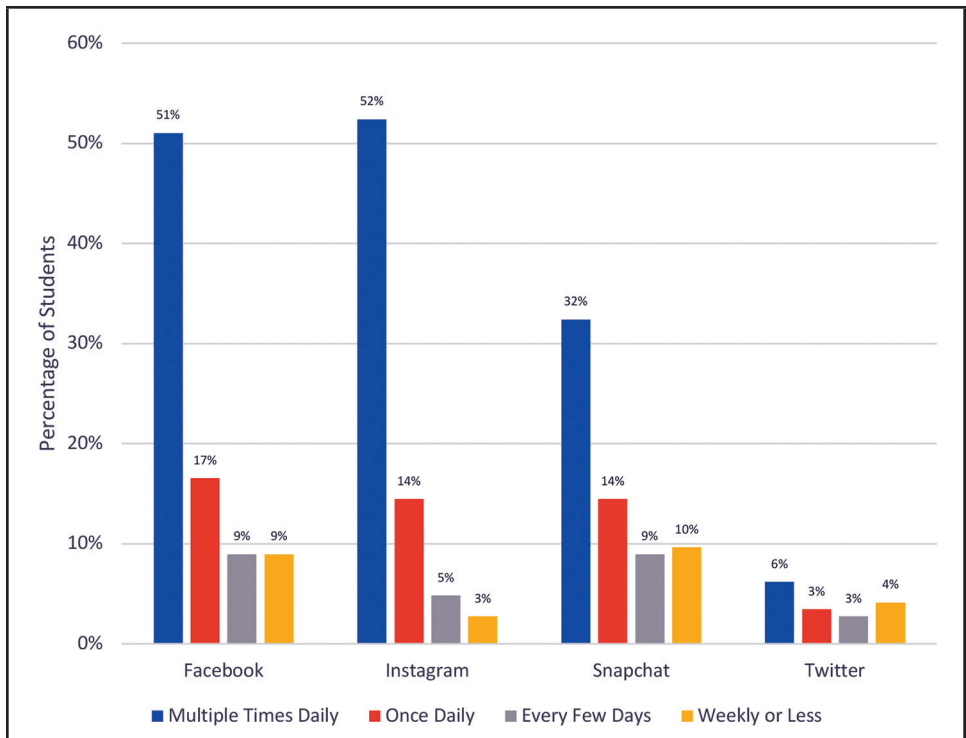


Figure 1: Frequency of Social Media Usage by Type Among DKICP Pharmacy Students

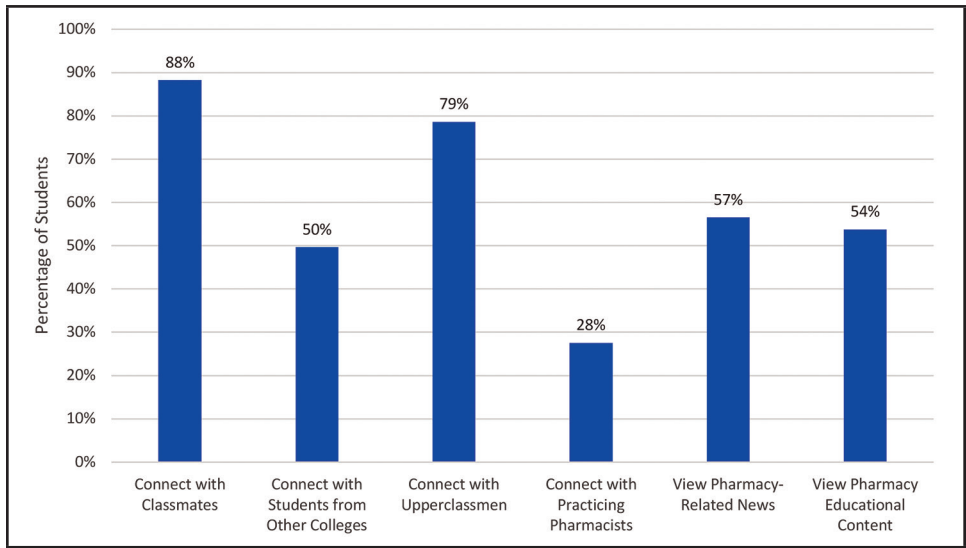


Figure 2. Purposes of Social Media Usage Reported by DKICP Pharmacy Students

The slight majority of respondents (54%) believed that social media distracted them from studying or completing assignments, and 32% of students agreed or strongly agreed that they often read and/or post to social media while in the classroom or while at work. About a quarter of respondents (26%) believed it inappropriate to discuss social media in professional settings, with 13% of respondents believing that social media should only be used for non-professional activities. While only 24% of respondents disguise their social media accounts, 69% believe that social media accounts should be set to private. A slight majority of respondents (54%) reported using social media for educational purposes. A larger number expressed interest in using social media to supplement education, with 69% believing it can be an effective educational tool and 68% reporting being interested in following an account for clinical pharmacy information. Table 2 lists the full results for the areas of professionalism concerns and educational purposes of social media.

## Discussion

The results of this survey demonstrate that current pharmacy students are frequently using social media for a variety of purposes during their professional education. Social media is becoming a standard venue for professional networking. From this survey, 50% of student respondents have used social media to connect with pharmacy students from other colleges. The DKICP is the only college of pharmacy within the Pacific Basin, which may explain why about half of students have used technology to network with students in the US mainland. A study from 2016 reported that 58% of pharmacy students use social media to communicate with classmates, which is a significantly smaller amount than the 88% of respondents from the current study.<sup>7</sup> Although there is only a difference of 3 years' time, there has been a large increase in social media use which may explain why the current findings are significantly higher.<sup>8</sup>

Though there are benefits of using social media, the findings of this study demonstrate that students both acknowledge and are aware of the costs of social media use as well, particularly that it can be a distraction from productive work. An article from 2017 reported that 44.9% of pharmacy students have admitted to using social media while in class or at work.<sup>9</sup> In the current survey it was found that 32% of pharmacy students reported using social media while in class or at work. However, the 2017 article also reported 49.2% of pharmacy students being distracted from work by social media, close to the findings from the current study of 54% of respondents.<sup>9</sup>

Though the purpose of using social media is not entirely connected to education, there are many purposes that relate to the development of a student pharmacist. For example, about half of pharmacy student respondents are already using social media as a supplemental educational tool by using it for pharmacy-related educational purposes. This can be done through a variety of ways, including following professional organizations, companies, or educators who may have social media accounts dedicated to education. Though this was only done by half of the respondents, a larger group (69%) believed social media could be effective for education purposes, and 68% of students expressed interest in engaging with a social media account for clinical pharmacy education. In 2011, a survey of pharmacy preceptors reported that 46% of preceptors were interested in using social media to complete continuing education requirements.<sup>10</sup> Though this interest level is smaller than the current findings, this can be attributed to the change in time and the different opinions of preceptors compared to students. A similar study of medical residents reported that 77% of have used social media for educational purposes, and 85.7% of medical residents believed social media had potential as a medical education tool.<sup>11</sup> This demonstrates that the current generation of healthcare students believe that social media can be used to

Statements	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. Social media is helpful to connect with other pharmacy students	3 (2%)	3 (2%)	12 (8%)	77 (53%)	50 (35%)
2. Social media does not distract me from completing assignments or studying	20 (14%)	58 (40%)	29 (20%)	29 (20%)	9 (6%)
3. I often read and/or post to social media sites while attending class or work	36 (25%)	43 (30%)	19 (13%)	39 (27%)	8 (6%)
4. I often disguise my social media accounts by not using my full name	28 (19%)	52 (36%)	30 (21%)	26 (18%)	9 (6%)
5. Social media accounts should always be set to private	5 (3%)	13 (9%)	27 (19%)	51 (35%)	49 (34%)
6. Discussing social media in the professional setting is inappropriate	10 (7%)	39 (27%)	59 (41%)	28 (19%)	9 (6%)
7. Social media should only be used for non-professional activities	26 (18%)	60 (41%)	40 (28%)	11 (8%)	8 (6%)
8. Social media can be an effective tool for education	2 (1%)	7 (5%)	36 (25%)	70 (48%)	30 (21%)
9. I am interested in a social media account that disseminates clinical pearls	5 (3%)	10 (7%)	31 (21%)	59 (41%)	40 (28%)

supplement the pharmacy school curriculum education. There are many open-access accounts on a variety of social media platforms that can supplement students' knowledge.

The findings from this study bring current perspectives on the ever-changing role of technology and social media in a professional education program. Educators may consider leveraging social media to improve learning outcomes in professional education programs, either in a supplementary manner or as an integrated tool in a curriculum. With the findings that pharmacy students are interested in using social media in an educational manner, future studies should be conducted to assess whether social media usage has an impact on students' performance in the educational system or in clinical practice.

### Conclusion

Current pharmacy students frequently use social media platforms for purposes of networking and education, in addition to personal reasons. With such frequent use, students acknowledge that social media can be a distraction from work or studying, but also has helpful purposes while in pharmacy school. Most learners believe that social media can be leveraged for educational purposes during pharmacy school.

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