



Using Community Website as an Informal Learning Environment among Malaysian Pharmacy Students

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Received April 17, 2015; Revised April 24, 2015; Accepted May 08, 2015

Abstract Objective: This study was conducted to analyse students' insight on informal learning by means of social networks and community websites. **Methods:** Survey forms were distributed to all 360 students of Kulliyah of Pharmacy of IIUM. Data analysis has been done using IBM SPSS software 20, and descriptive statistics were used to study the demographic characteristics of the students in relation to their use of social networking sites (SNSs). **Results:** 240 students were answered. The results revealed that the highest rating with mean (SD) = 4.53 (0.63) were related to accessing course notes and other teaching materials. Most students agreed that SNSs were helpful to their courses, mean (SD) = 4.18 (0.73). **Conclusion:** The findings of the study indicate that pharmacy students at IIUM use SNSs and other community websites as tools for academic purposes.

Keywords: student, network, SNS, teaching material, Malaysia

Cite This Article: Omer Qutaiba B. Al-Lela, Ramadan M. Al-Kalmi, Ramez M. Alkoudmani, Ammar Ihsan Awadh, Shazia Qasim Jamshed, and Abdul Kareem Al-Shami, "Using Community Website as an Informal Learning Environment among Malaysian Pharmacy Students." *American Journal of Educational Research*, vol. 3, no. 5 (2015): 658-661. doi: 10.12691/education-3-5-20.

1. Introduction

The phenomenon of social networking sites (SNSs) nowadays has becoming popular, and frequently used by people either for social interaction or even for educational purposes. [1] The popularity impact of SNSs is due to the services provided including social interaction, personal and professional networking as well as business. The news and information seems to be spread widely among the users regardless of time, places, and condition. Indeed, SNSs provide active learning among students to access the information posted by friends or even shared with other faculty members. However, the risk of combining social media and health profession education are being discussed regarding no standard guidelines implemented to interact with students on SNSs. In fact, some institutions are considering the implementation of policies in social networking use [1].

Despite becoming beneficial to students, these emerging SNSs may offer advantages among educators as teaching tools. Teachers could use SNSs to post new notes and information which could be left during learning session. They also can update the continuous assessment like quizzes, presentation, and research to the students. [2] In other words, no time constraints regarding access to SNSs and that enable additional learning and discussion outside formal class. Besides, Jeff. C et al, (2011) showed that extracurricular programs can also be implemented by

teachers as a strategy for introducing management, business and leadership skills among students through social networking group. This can prepare pharmacy graduates to become more professional in their skills and knowledge regarding patient care issues. Social networking sites were chosen as delivery media because of academic nature, content of discussion, and for creating informal learning environment [2].

The trend of using SNSs as effective tools for learning had already been studied by many researchers who were curious to know the effectiveness of using these tools. [3,4] A study had been done to investigate whether the student is occupied in learning from SNSs or not. [5] One particular study among medical students indicates that the trend of using SNS comes from the purpose of using it to focus on topics which are applicable for medical study. Peer learning is becoming much more convenient, and also the quality and misuse of information also can be minimized. [4] The use of SNSs as learning tools is not without disadvantages though. There are some challenges that had been experienced by students, such as the distraction to socialize more than academic activity and the problematic issue on how to control the student activity of using these tools by educators or the university staff members [4,6].

The aim of this study is to determine demographic data, computer skills, types of internet connection and the preferred time to access to SNSs, and to evaluate the opinion and uses of SNSs for academic purposes had been asked.

2. Methodology

A prospective cross-sectional design was used in this study. The questionnaire was originally developed in the English language to maintain the consistency of the questions adapted from the references [1,7]. The final questionnaire was subsequently discussed among three specialist academic pharmacists who are experts in this field and who judged the face and content validity of the questionnaire. Validated questionnaire was designed to gather data about IIUM undergraduate pharmacy students' acquaintance with Internet and SNSs as well as their opinions on using these sites as academic tools. Convenient sample was used. A total of 360 hard copy questionnaires were distributed to pharmacy students from year one to year four and 2 to 3 students were assigned to distribute questionnaires to each year. The questionnaire was distributed to students in the lecture halls and auditorium around the Kulliyah of Pharmacy building (IIUM). The survey was held on Tuesday. To ensure an adequate response rate, assigned students reminded subjects to answer the questionnaire about two hours later. The questionnaire consisted of four elements: 1-Students' demographic and individual characteristics such as gender, age, academic year, place of origin and computer skills. 2-Their use of Internet and SNSs such as preferred time to be online. 3-Their likelihood of participation in academic activities through SNSs. 4-Their opinions on SNSs as academic tools. The questionnaire included 5-point Likert scale items regarding students' opinion and preferences concerning multiple aspects of SNSs as academic tools. Collected data were transferred into IBM SPSS 20 software. This study used frequencies and percentages for qualitative data, and mean and standard deviation for quantitative data.

3. Results

The total number of students involved in this survey was 240. From 240 students who replied, 38 students were male (15.8%) and 202 were female (84.2%). The year of study distribution of the students involved in this survey is shown in Table 1. Pharmacy students come from various parts of Malaysia representing urban and rural villages. Slightly more than half of respondents (52%) were from urban area and (48%) were from rural area.

Table 1. Demographic data of students (N=240)

| Characteristics | Frequency (n) | (%) |
|---------------------------------|---------------|------|
| Gender | | |
| Male | 38 | 15.8 |
| Female | 202 | 84.2 |
| Year of study | | |
| First year | 61 | 25.4 |
| Second year | 59 | 24.6 |
| Third Year | 61 | 25.4 |
| Fourth year | 59 | 24.6 |
| Demographic Distribution | | |
| Urban | 115 | 48 |
| Rural | 125 | 52 |
| Computer skills | | |
| Novice | 26 | 10.8 |
| Intermediate | 200 | 83.3 |
| Advance | 14 | 5.8 |

Respondents were asked to rate their own Computer skills. The vast majority of students (83.3%) considered their computer skills to be in intermediate level, while (10.8%) considered themselves as to be in novice level and minority of them (5.8%) considered themselves as to be in advance level.

171 students accessed Internet by using Wi-Fi service provided by the university (71.3%), while more than half of them (58.3%) used broadband which provides faster connection. Some students used wireless modem (27.1%) or cell phone (23.3%) so they can access to the internet anytime and from anywhere. The minority of participants used other technologies either WiMAX (7.5%) or Dial-up connection (7.1%). Type of internet connection used is shown in Table 2.

Table 2. Internet connection used (N=240)

| Internet connection used | Frequency (n) | (%) |
|--------------------------|---------------|------|
| Broadband | 140 | 58.3 |
| Dial-up | 17 | 7.1 |
| Wireless Modem | 65 | 27.1 |
| Cell phone | 56 | 23.3 |
| Wi-Fi | 171 | 71.3 |
| WiMAX | 18 | 7.5 |

The vast majority of students (85%) accessed SNSs whenever they had time. However, some students (10.4%) preferred to use SNSs at night including weekend nights. Minority of respondents accessed internet at daytime excluding weekends and or used SNSs only during weekends whenever they can (2.9%, 1.7% respectively). Preferred time to access SNSs is shown in Table 3.

Table 3. Preferred time to access SNSs (N=240)

| Preferred time to access SNSs | Frequency (n) | (%) |
|-----------------------------------|---------------|------|
| Daytime excluding weekends | 7 | 2.9 |
| At night including weekend nights | 25 | 10.4 |
| Only during weekends | 4 | 1.7 |
| Whenever I have time | 204 | 85.0 |

Students were requested to specify their probability of participation in course-related social network activities based on a 5-point Likert scale. From Table 4, it reveals that the access course notes and other teaching materials is more preferable by pharmacy students followed by joining SNS group for students. However, items such as involvement in communication with course coordinators, participation in course-related quizzes, exams and tests and participation in online discussion that included both teachers and students, are scored below the midpoint score of 4 with the latter one shows the lowest rating.

Table 4. Ranked mean (SD) scores of likelihood of participation in course-related social networking activities on a five-point scale (N=240)

| Use of SNS for academic purposes | Mean (SD) |
|---|-------------|
| Access course notes and other materials | 4.53 (0.63) |
| Join a SNS group for students in your courses | 4.48 (0.71) |
| Communicate with other students in my courses | 4.42 (0.70) |
| View course schedule | 4.40 (0.81) |
| Use online discussion that included only other students without teacher | 3.95 (0.92) |
| Use my course-related SNS quizzes, exams and tests | 3.38 (1.02) |
| Communicate with course teachers | 2.95 (0.99) |
| Use online discussion that included both teachers and students | 2.90 (1.02) |

Table 5 shows that most of students gave positive opinions on the usage of social networking as an academic tool. Most of students agreed that social networking can improve communication among students in a course, can be used to help students collaborate in higher education courses and can improve communication between students and teachers. Students also presented positive perceptions of the usefulness of SNSs in their courses. Many students gave the lowest rate as they disagree that social networking would be a distraction in higher education courses and they want to use this site in any of their courses. From the mean value obtained, fewer students were interested in maintaining separate accounts for use in their courses.

Table 5. Ranked mean (SD) scores of opinions on social networking as an academic tool on a five-point scale (N=240)

| Students opinions | Mean (SD) |
|---|-------------|
| I think SNSs can improve communication among students in a course | 4.07 (0.83) |
| I think SNSs can be used to help students collaborate in higher education courses | 4.05 (0.74) |
| I think SNSs can improve communication between students and teachers | 3.69 (0.87) |
| I think SNSs can be useful in my courses | 4.18 (0.73) |
| I would create a separate account in SNS for use in my courses | 3.07 (1.06) |
| I think SNSs would be a distraction in higher education courses | 2.67 (0.99) |
| I do not want to use SNSs in any of my courses | 1.97 (0.85) |

4. Discussion

Most of the students were female; the difference in respondent gender indicates that female students were more than males. Due to this difference, it can be concluded that most probably, female students may had an acceptance in IIUM than male. Gomez et al, (2004) reported that female students were often credited with better academic performance than males. [8] Also found that female outperform in achieving a good degree than male counterparts [9].

In term of computer skills, most of students were in the intermediate level. Both rural and urban students have the same frequency and percentage in IIUM. A study reported that educators and students in both rural and urban areas hold positive attitudes toward computers also stated that both rural and urban students were at the basic awareness level of the computer knowledge [10].

All of the study participants used internet connection in their daily life. The data showed that students preferred to use Wi-Fi to access internet. Most of students chose Wi-Fi to surf internet, because IIUM has provided free Wi-Fi connection to its own students. The Wi-Fi covers almost all of the area in IIUM including students' hostel. This condition gives the students an opportunity to connect internet everywhere and anytime. Besides, the above reason on the Wi-Fi usage supported by other study that reported that the preference to use of Wi-Fi connection instead of other types of internet connection is because the students were not being charged for the usage and assessable easily within the campus. On the other hand, most of the students preferred to use broadband as their internet connection. [11] In addition, broadband

technology is easily available and the service charge is reasonable. Thus, pharmacy students were affordable to use this service and most of those services have been sponsored by Public Service Department of Malaysia [11].

This study has found that all of the study participants who used internet connection were also likely to use social network sites (SNSs). Previous study showed that Bengali students who use the Internet were also likely to use social network sites. [11] The vast majority of pharmacy students preferred to access SNSs whenever they have time. Students mostly use SNSs to access course notes and other educational materials. Same study in Bangladesh stated that the capacity and features offered by SNSs also supported students in their education [11].

There are few steps or actions that can be taken into consideration in order to enhance the usage of these technologies in the learning process. One of the ways that can enhance the usage of social network sites is by supporting mobile learning using smart phones. Mobile technologies that come with enhanced social media will really help students, lecturers and staff members as they engaged in teaching and learning at any time and from anywhere. [12] There is also other reason that prevents the usage of social network by the students especially those issues of trust that is closely related to privacy and security [13].

In general, SNSs provide students' opportunities to become more independent in their study. They can learn by seeking, exploring and testing ideas with others within social network sites beyond the constraints of a classroom. The survey indicated that many students were interested in using social network sites to support their educational goals although there are some differences in students' opinions on academic applications of these sites. Therefore, our goal is achieved and proved that those pharmacy students use SNSs as informal learning for their academic purposes especially courses related to pharmacy requirements.

5. Conclusion

Pharmacy students at IIUM preferred to communicate with their colleagues through SNSs and use SNSs for academic purposes. By using SNSs, pharmacy students could share anything related to their curricula, express their ideas, and clarify on something that being argued or doubted throughout their academic session. SNSs can help pharmacy students in their non-formal learning.

Acknowledgments

We would like to thanks Anis Suraiya, Fahmi Adli, Mohd Firdaus, Mohd Samsul, Nasihah, Noor Adiba, Nor Raihanah, Nur Farhana Hafizah, Nurul Hakimah, and Siti Nuraliaa Awatif for their help in data collection.

Conflicts in Funding

This study is part of the 3rd year students' research and was not supported by any sponsoring body. Therefore, the authors declare that they have no conflicts of interest.

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