

The Patterns of Usage and Perceived Impact of Social Networking Sites on Medical Students' Education

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Abstract

Background: The use of Social Networking Sites (SNSs) is on the rise among today's college students. Instructors are beginning to consider the possible significance and implications of social media for education practice and provision; making it a target for further research.

Aims: To know the patterns of usage and the perceived positive and negative effects of SNSs on students' education.

Methods: A cross-sectional study was conducted at the University of Sharjah using the Quota sampling method to enroll first to third year students in the colleges of Medicine, Dentistry and Pharmacy. Self-administered questionnaires were completed. Data was processed and analyzed using SPSS 22.

Results: A total of 350 students (74% females and 26% males) participated in the study. YouTube ranked top as the SNS used most for educational purposes (52.7%), while Facebook was top choice for non-educational purposes (45.2%). Smartphones were most used to access SNSs (80.3%), which explains why 69.1% had SNSs always running on their devices. Videos (55.3%) and photos (24.3%) were the most preferred media for educational enhancement. Of our total sample, 92.2% thought that SNSs are helpful in studying mainly due to fast access to information (78.6%), easy communication (69.2%) and aiding colleague socialization (45%). Those who disagreed (8%) said that it wastes time (66.7%) and that the information is not always authentic (33.5%).

Conclusion: Many students now depend greatly on SNSs to enhance their learning experience, as they believe that their positive effect on education outweighs the negative. Thus, we suggest implementing SNSs in the educational process to a greater extent.

Keywords: Social networking sites, E-Learning, Medical education, E-Learning perceived impact, Undergraduate medical education.

Introduction

Social Networking sites are web-based systems that allow individuals with similar interests or backgrounds to share personal and professional information through a personal profile page. In the last few years, it was noticed the increasing usage of these websites by students to share knowledge and interact with classmates. Social networking sites, such as Facebook, offer students and professionals the ability to create private groups in which information is shared among colleagues with ease. The diversity of types of media shared on these web based platforms is varied ranging from plain text to pictures and educational videos.

The variety of learning modalities offers a better way to engage all types of learners. The University of Sharjah in Sharjah, UAE has adapted a problem-based curriculum, for the health science majors, in which students are exposed to a clinical scenario and through discussion, learning objectives are generated after which the students can search for information to reach the intended learning outcomes. Each group of students shares the knowledge they gained from their search among their small group and with the rest of the year group at the end of each week. We noticed that some student groups use SNS to communicate and share their study material.

Aim

This study aims to know the patterns of usage and the perceived positive and negative effects of social networking on education,

especially among students studying on the medical campus of the University of Sharjah.

Methods

Data was collected using cross-sectional study design. Self-administered questionnaires distributed among medical, dental and pharmacy students on the medical campus, University of Sharjah. Subjects included in the survey were enrolled students at the University of Sharjah in their first, second or third year studying in the following colleges: Medicine, Dental Surgery, and Pharmacy. All the study subjects have SNS accounts. All students were interviewed using a structured self-completed questionnaire consisting of 27 questions. The questionnaire (Table-1) consisted of five sections: (1) demographic and academic characteristics; (2) type of SNS used by students and means of logging to it; (3) reasons for using SNS academically and non-academically; (4) Perceived impact of SNS on education; (5) knowledge about quality of information found online and privacy setting. The language of instruction at University of Sharjah is English. Therefore, the questionnaire was given in English. All the subjects were interviewed, questions were explained for all the students included in the study; and anonymity was assured. Before the distribution of the questionnaire, the objectives of the study were explained to participants, and they were informed that their participation was voluntary.

Question	
What's your gender?	Male: 26.5% Female: 73.5%
Which major are you enrolled in?	(1) Medicine 33.5% (2) Dentistry 33.2% (3) Pharmacy 33.33%
Which year are you currently in?	(1) 1 st Year 33.5% (2) 2 nd Year 33.5% (3) 3 rd Year 32.7%
Why do you usually use social networks?	(1) To connect with friends and family 89% (2) To enrich your educational process 58.4% (3) To meet new people 20.1% (4) To stay updated with local and global news 46%
Which of the following social networks do you use?	(1) Facebook 93.5% (2) LinkedIn 5.1% (3) Twitter 56.9% (4) YouTube 87.9% (5) Google+ 40.3% (6) Instagram 62%
How often do you access your social networks?	(1) Always running on my device 69.1% (2) 1-5 logins per day 24.9% (3) Less than 1 login per day 5.9%
What type of device do you use most to check your social networks?	(1) Smart phones 80.3% (2) Tablet 8.5% (3) Laptop 23.4% (4) PC 2.5%
What type of videos do you prefer most when using social networks for educational purposes?	(1) Text 32.7% (2) Photos 24.3% (3) Pod casts 8.1% (4) Videos 55.3%
What do you use your social networks account for?	(1) Mainly to post information 7.3% (2) Mainly to view what others are posting 32.1% (3) Both 60.6%

What kind of effect do you think social network sites have on teaching and learning?	(1) Negative 7% (2) Positive 88% (3) No effect 4.8%
What kind of effect do you think social network sites have on grades and performance?	(1) Negative 24.9% (2) Positive 45.6% (3) No effect 29.5%
What role do you think social networking will have in the future of education?	(1) Increasing role 92.7% (2) Decreasing role 3.9% (3) No role 3.4%
Are you aware of the fact that not all information found online is authentic?	(1) Yes 88.8% (2) No 11.2%
Are you aware of your privacy options on social networks?	(1) Yes 92.2% (2) No 7.8%
Do you believe that social networks could be addictive?	(1) Yes 91.3% (2) No 8.7%

Table 1: Knowledge and perceived impact of SNS on education question air with percentages for each answer.

Statistical Methods

Results presented as numbers and percentages with the Confidence Interval (CI) at 95%. The significance of the association between qualitative variables of interest was analyzed using chi square test (χ^2), as indicated. To focus on subjects' opinions, the five-point Likert scale of limitations, satisfaction and opinions were collapsed into three categories (agree on/satisfied, neutral and disagree/unsatisfied). All tests were bilateral, and a p-value of 0.05 used as the limit of statistical significance. Statistical analysis was performed using the IBM Scientific Package of Social Sciences "SPSS" V.22 (SPSS, Chicago, IL, USA).

Results

Female participants comprise 73.5% of our sample, and the male participants make up 26.5% of the sample. Of our sample 33.5% study medicine, while 33.2% study dentistry and 33.3% are pharmacy students. 33.5% of our sample is currently in their first year, 33.5% and 32.7% are second and third-year students, respectively.

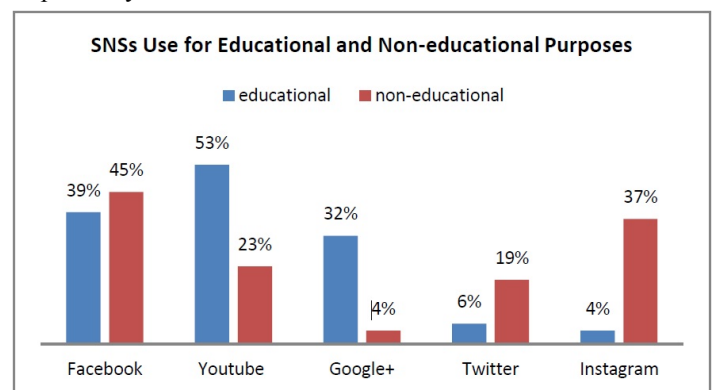


Figure 1: The preferred SNS used for educational and non-educational purposes by students in the medical campus.

When asked about the reasons for using SNS, 89% of our sample stated that they use SNS to connect with friends and family, 64% use SNS to stay up to date with local and global news, 58.4% use them to enrich the educational process and 20.1% to meet new people. The majority of students used Facebook (93.5 %) followed by YouTube (87.9%), Instagram (62%), Twitter (56.9%), Google + (40.3%) and finally, LinkedIn (5.1%) (Figure 1).

When asked about the frequency of logging to SNS, 69.1% of the participants indicated that the social networking sites were always running on their devices, 24.9% had 1-5 logins per day and 5.9% viewed them less frequently. Ranking first regarding the most used method to check SNSs were smart phones (80.3%) followed by laptops (23.4%), Tablets (8.5%) and PCs (2.5%) (Figure 2). Most of our study participants prefer using videos and texts when interacting with other SNS members (Figure 3). In regards to student interaction on SNS 60.6 % of our sample use SNS for both posting information and viewing what others are posting. Students who only view what others are posting were 32.1 %, and subtle percentages use them only for posting information (7.3 %).

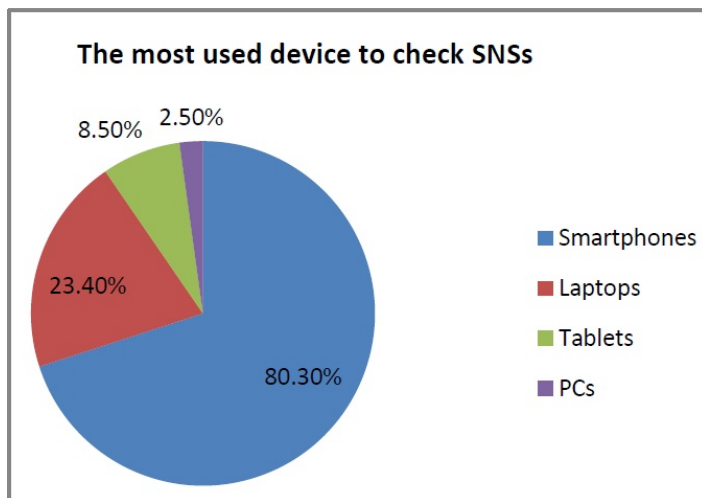


Figure 2: The preferred gadgets by students in the medical campus to access SNS.

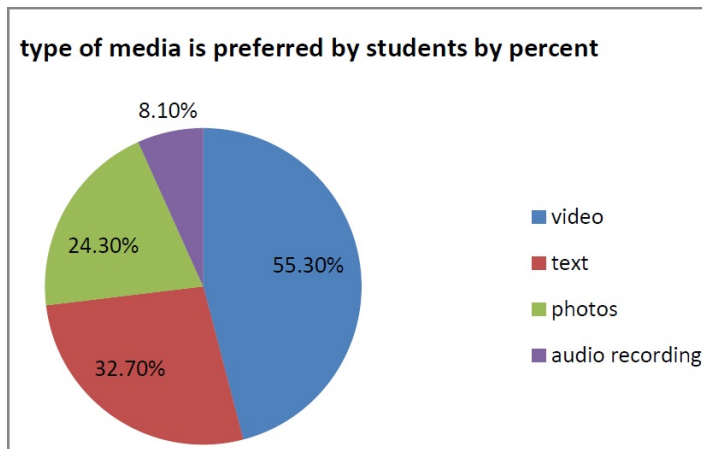


Figure 3: The preferred type of media used for educational purposes in SNS.

When asked about the effect of SNSs on education, 88.1% of

the sample said that they have a positive impact on teaching and learning while 45.6% stated that they had a positive effect on grades and performance. 90 – 95.4% agreed that SNSs have an increasing role in the future of education (Figures 4 & 5).

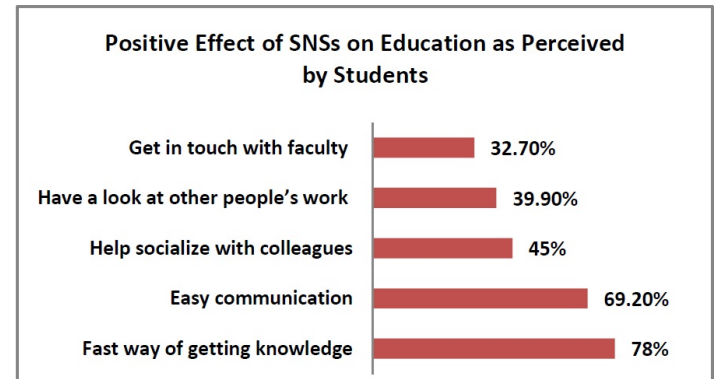


Figure 4: Student perception of positive impact of SNS on education.

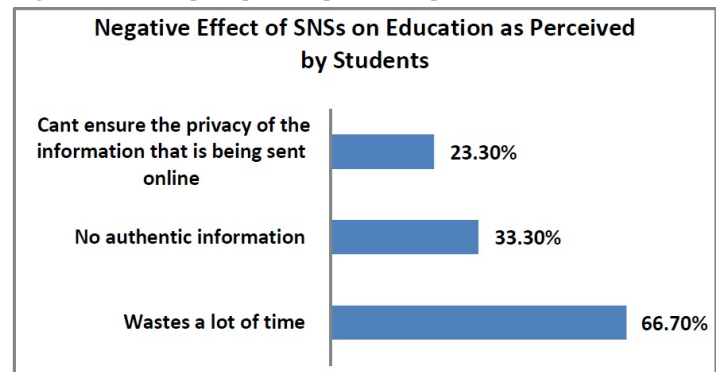


Figure 5: Student perception of negative impact of SNS on education.

The levels of awareness appeared to be very high among the study sample as 88.8% said that they are aware that not all information obtained from SNSs is authentic, and 92.2% were aware of their privacy options. Finally, 91.3% believe that SNSs have the potential to become addictive.

Discussion

The majority of our study participants at 92.2% think that social media is helpful with their studies. 78% accounted that to the fact that it is a fast way to gain knowledge. The reason was “easy communication” at 69.2 %, followed by “helps to socialize with colleagues” at 45%, “having a look at other people’s work” at 39.9% and finally “get in touch with faculty” at 32.7 %. 66.7% of those who don’t think that social media is helpful in studying referred that to the fact that it wastes a lot of time. Other reasons included “no authentic information” and inability to ensure privacy at 33.3 % and 23.3% respectively. This finding is consistent with the finding reported by McAndrew & Johnston that indicated a positive impact of SNS on dental education by connecting people at different locations and eased dissemination of knowledge if it was governed by faculty to ensure the quality of information distributed [1,2].

Students used SNS as a platform to share experience and educational

material among other things. 94 % of our study participants were members of student groups on SNS, 54.4% were part of informal students groups, 37.2% follow official college/university profiles, Ali et al. also noticed this trend [3]. Many articles pointed the fact the most common SNS used for medical education is Facebook, which is not consistent with our results where only 39% of our sample use it for educational purposes in comparison to YouTube, which is used by 53% of our study sample. This could be because YouTube is a video sharing platform and our study ranked videos as the most common media for education [4,5].

Although the use of SNS in education is becoming more prevalent, disadvantages should be taken into consideration. In our study, the perceived negative impact of SNS on education as seen by the students showed that the authenticity of information in SNS is questionable, and 58.3% of the sample said that they trusted information obtained from SNSs only if it came from company official profiles/pages. Another important point is the privacy and protection of personal information.

In response to using multimedia for educational purposes, our study participants responded for using multimedia such as videos stimulated a better perceived educational outcome in comparison to text. This finding is consistent with Mbarika et al. confirmed that learners had a stronger sense of efficacy and perceived skill development when using multimedia versus paper-based tasks [6].

The means of accessing SNS plays a vital role in promoting the usage of SNS in education. Gormley et al. reported that 89.2% (n=240) of their study sample had access to a computer on and off campus and 10% (n=29) who did not have access to a computer were interested in purchasing one to aid with their studies as the primary incentive [7]. Our study showed a different trend where the preferred gadget to access SNS was smart phones at 80%, figure 2.

Conclusion

Internet use is expanding globally. From 2005 to 2013, its use by individuals increased more than 50% and 294% in developed and developing nations, respectively [8]. This led to an increase in E-education and the integration of social networking sites in education.

This article demonstrates the perceived impact of SNS on student education on the medical campus of the University of Sharjah in Sharjah, UAE. Our data indicates that students prefer videos to supplement their education and that YouTube is the most preferred SNS for educational purposes. Upon exploration of the perceived benefits of using SNS in education, the main reasons were related to the ease of getting knowledge and communication with faculty and colleagues.

Limitations of the study

The survey addressed a particular group of students in the University of Sharjah, which may differ from medical students elsewhere. Also, the study is exploratory in nature, and the survey

could have been examined further for reliability and validity. Furthermore, the accuracy of participants in answering some of the survey items is questionable. Also, the questionnaire was new, and it needs to be validated by prior research. In spite of that, the results provided an adequate answer to the research question.

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