

ATTITUDE OF UNDERGRADUATE MEDICAL STUDENTS TOWARDS USING SOCIAL MEDIA FOR LEARNING PURPOSES AT LAHORE MEDICAL & DENTAL COLLEGE, PAKISTAN

Original Research

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ABSTRACT

BACKGROUND: With the advent of the Internet, particularly Web 2.0 technologies, the learning paradigm shifted from a top-down method centered on academicians and knowledge to a networked one. Social media is a broad word that refers to a number of web-based technologies that allow users to contribute, share, and collaborate. They provide innovative and diverse educational opportunities for learning as well as teaching. To keep the pace with the knowledge and information explosion in constantly evolving medical world, the social media keeps its users abreast

OBJECTIVE: To determine the attitude of undergraduate medical students towards using social media for learning purposes.

MATERIALS & METHODS: A descriptive cross-sectional study was conducted opting non-probability convenient sampling. 333 students from Lahore medical & dental college, Lahore participated who had an internet enabled devices and profiles on different social media platforms. Statistical package for social sciences (SPSS) software was used for data entering and analysis. And the attitude was assessed by utilizing a standardized self-reported questionnaire.

RESULTS: The mean \pm SD of age was 21 ± 1.78 . The social media platforms with which the students had the best learning experiences were WhatsApp (64.3%), Instagram (45.9%), Facebook (28.8%), YouTube (21.6%), Wikipedia (19.8%) and Twitter (7.2%). Out of 333 participants, 77.7% (n=259) students had positive attitude and 22.2% (n=74) students had negative attitude towards using social media for learning purposes.

CONCLUSION: Undergraduate students from all medical disciplines reported to have positive attitudes towards use of social media for learning purposes. They find it convenient for academic purposes. The most popular and preferred social media platforms for academic learning were Facebook, WhatsApp, and YouTube.

KEY TERMS: Attitude, Benefits, Learning purposes, Medical students, Social media

INTRODUCTION

With the advent of the Internet, particularly Web 2.0 technologies, the learning paradigm shifted from a top-down method centered on academicians and knowledge to a networked one. Web 2.0 is a broad word that refers to a number of web-based technologies that allow users to contribute, share, and collaborate¹. The European Commission (2008) advised that increased educational technology integration be promoted at all levels of education in order to foster innovation and lifelong learning². It's all about making most of the opportunities offered by these technology tools, which encourage involvement and collaboration³. These virtual applications are distinguished by the way they bring people together with common interests to develop, publish, and share knowledge on a broad or narrow topic⁴. They provide innovative and diverse educational opportunities for learning as well as teaching⁵. Many scholars have given thought to the use of technology to promote learning as an attractive subject of research in this regard, and social media is currently gaining a lot of attention in relation to the educational process of teaching and learning⁶. The social media includes a combination of websites and various applications that delegate the end user the formation and exchange of content and to take part in social networking⁷.

According to the recent statistics of January 2021, the population of Pakistan is 223.0 million. Among them 61.34 million people have access to the internet and about 46 million are the social media users which is equivalent to 20.6% of the total population of Pakistan⁸. Apart from playing a compelling role in every discipline of life, it has provided a scaffold to the students around the globe to learn, exchange knowledge and information, discuss their issues and ambiguities and create new ideas⁹. The most popular social media applications in use today are Facebook followed by youtube, whatsapp, Twitter, Wiki and Blog sites for the communication as well as for the academic purposes¹⁰. These enable the users to make their own profile and get access to different features that they offer. Rather than staying immune to the substantial shift brought about by social networks, the education system, and especially the way education is regarded, should seek to adapt to the changing interests of students inspired by this relevant social phenomenon¹¹. Today's students do not learn in the same way that their predecessors did; they have different needs related to their active role in the learning process, which makes them more autonomous; and the generation of knowledge related to learning is supported by more collaborative-based methodologies and focuses on the social implications of university learning. Therefore, social networks are important friends in the teaching-learning process at university. Prensky stated: Our students cannot be compared to the versions of us when we were little. They have evolved so much that our knowledge and training from 20th century is not able to make them understand our ways and to guide them what is best for them educationally. Students of each generation will be much more advanced and transformed than we ever were.

The newer the generation, the more faster they evolve, the more difficult it is to keep pace with them¹². Although social networking was not designed for learning purposes at first but it has shown to be a valuable tool in the realm of teaching and learning innovative approaches¹³. The trend of social media use has affected various sectors, a tremendous surge has been witnessed in its use among medical students and health care professionals as well. To keep the pace with the knowledge and information explosion in constantly evolving medical world, the social media keeps its users abreast¹⁴. With its emergence, there is no limitation to travel thousands of miles to physically attend journal clubs, conferences, and other designated locations, presenting a new paradigm in teaching-learning activity, face-to-face training with social media seminars, and one-on-one mentorship. It has its drawbacks as well that include the no control and intemperance over the dissemination of fallacious posts¹⁵. Besides its advantages and better performance in academics, there are different trends of its usage among male and female medical students. Female medical students show better performance than male as their primary intent is to use social media for finding friends with similar interests that affects their performance academically¹⁶. However, its addiction and overindulgence decline the academic performance irrespective of the gender¹⁷. There is overwhelming evidence of social media's harmful impact in the literature as well as the impact of smartphone use on academic achievement while interactivity, wider reach, and availability of students online and enabling deeper investigations of subject matter and more robust dialogues outside of the classroom were identified as advantages of using SNSs in institutions, and delivering course information to them online could reduce 'non-academic-activities' and promote educational usage of SNSs¹⁸. Despite these descensions, many educators and researchers are interested in using social networks for learning because it has been demonstrated to be effective¹⁹.

Results elucidated that the students used social media to collaborate and create documents online (e.g., Google Docs) (92.4%), sharing information online (e.g., links to websites, articles) (91.2%), track and manage their academic schedule (88.2%), and building relationships with peers (e.g., Facebook, linkedin) (87.0%). Concluding, as social media has evolved, it's critical to understand what students consider to be important interactions, as well as why they choose to utilize (or not use) such technologies in their own learning. Previous studies have explored the attitudes and perceptions of students using social and despite its popularity, there is minimal evidence about the attitude of its usage for learning purposes among undergraduate students from all medical disciplines. As students at university level use social media on a regular basis, and universities are adopting modern technological approaches to complement modern teaching methods, this research will be of interest to students and educators who want to keep up with modern learning methods and technologies, and understanding the attitudes would provide insight into how new technologies could be integrated into the learning process.

METHODS

A descriptive cross-sectional study was conducted over six months (July–December 2021) at Lahore Medical & Dental College. A non-probability convenient sampling method was used, and the sample size was 333, calculated using Taro Yamane's formula. Inclusion criteria required participants to be undergraduate students from MBBS, BDS, DPT, and D-Pharm programs, with

access to internet-enabled devices and social media profiles. The only exclusion criterion was unwillingness to participate. Data was collected through a self-reported questionnaire covering demographics, social media experience, usage patterns, attitudes, and perceived benefits. The questionnaire's content validity index ensured its suitability, and internal reliability (Cronbach's $\alpha = 0.83$) confirmed consistency. Data analysis was performed using SPSS version 21.0, with results presented through frequency tables, histograms (age), and bar charts (attitude scores). Ethical approval was obtained from the Lahore College of Physical Therapy, and participants' anonymity and confidentiality were maintained through written informed consent.

RESULTS

The study included 333 students with a mean age of 21.3 ± 1.79 years (range: 18-24). The majority were female (80.8%), while 19.2% were male. Most participants were 1st-year students (37.8%), followed by 5th-year (24.6%), and the dominant academic discipline was DPT (51.1%), followed by MBBS (27.3%), BDS (14.4%), and D-PHARM (7.2%). Regarding social media usage for learning, WhatsApp (64.3%) was the most preferred platform, followed by Instagram (45.9%) and Facebook (28.8%), while Twitter (7.2%) was the least used. Students' attitudes toward social media in education were largely positive, with 77.7% expressing a favorable attitude, while 22.2% had a negative perception. The majority (60.1%) agreed that social media is beneficial for learning, and 49.2% believed it helps in education. However, 39.6% remained neutral about its desirability.

Table1: Academic Characteristics of Participants

Gender		
Gender	Frequency	Percent
Male	64	19.2
Female	269	80.8
N	333	100.0
Degrees of students		
Degree	Frequency	Percent
MBBS	91	27.3
BDS	48	14.4
DPT	170	51.1
D-PHARM	24	7.2
N	333	100
Academic Years		
Academic year	Frequency	Percent
1 st year	126	37.8
2 nd year	40	12
3 rd year	72	21.6
4 th year	13	3.9
5 th year	82	24.6
N	333	100.0

Table 2: Percentage and frequency of responses about learning experiences.

Social media platforms	Experiences	Frequency	Percent
Facebook	No experience	45	13.5
	Poor experience	8	2.4
	Average	76	22.8
	Somewhat good	108	32.4
	Very good experience	96	28.8

	N	333	100.0
Twitter	No experience	127	38.1
	Poor experience	35	10.5
	Average	83	24.9
	Somewhat good	64	19.2
	Very good experience	24	7.2
	N	333	100.0
YouTube	No experience	74	22.2
	Poor experience	13	3.9
	Average	104	31.2
	Somewhat good	70	21.0
	Very good experience	72	21.6
	N	333	100.0
Instagram	No experience	17	5.1
	Poor experience	26	7.8
	Average	48	14.4
	Somewhat good	89	26.7
	Very good experience	153	45.9
	N	333	100.0
WhatsApp	No experience	0	0
	Poor experience	1	.3
	Average	63	18.9
	Somewhat good	55	16.5
	Very good experience	214	64.3
	N	333	100
Wikipedia	No experience	99	29.7
	Poor experience	12	3.6
	Average	60	18.0
	Somewhat good	96	28.8
	Very good experience	66	19.8

Table 3: Frequency of attitude of students

Students attitude	Response	Frequency	Percent
Helps me in learning	Strongly disagree	24	7.2
	Disagree	5	1.5
	Neutral	84	25.2
	Agree	164	49.2
	Strongly agree	56	16.8
	N	333	100.0

Social media for learning is a good idea	Strongly disagree	4	1.2
	Disagree	24	7.2
	Neutral	41	12.3
	Agree	200	60.1
	Strongly agree	64	19.2
	N	333	100.0
Finds online learning fun	Strongly disagree	7	2.1
	Disagree	32	9.6
	Neutral	99	29.7
	Agree	148	44.4
	Strongly agree	47	14.1
	N	333	100.0
Prefer to join social media for collaborative projects	Strongly disagree	5	1.5
	Disagree	31	9.3
	Neutral	76	22.8
	Agree	182	54.7
	Strongly agree	39	11.7
	N	333	100.0
Communicating with others gives me food learning experience	Strongly disagree	3	.9
	Disagree	13	3.9
	Neutral	132	39.6
	Agree	143	42.9
	Strongly agree	42	12.6
	N	333	100.0
Prefer join class where social media being used	Strongly disagree	3	.9
	Disagree	23	6.9
	Neutral	141	42.3
	Agree	119	35.7
	Strongly agree	47	14.1
	N	333	100.0
Learning through social media is desirable for me	Strongly disagree	5	1.5
	Disagree	24	7.2
	Neutral	132	39.6
	Agree	153	45.9

Table 4: Total scoring of attitude of students.

Attitude	Frequency	Percent
Positive	259	77.7%
Negative	74	22.2%
N	333	100.0

DISCUSSION

This study looked into the three main factors that influence undergraduate medical students' use of social media for learning at Lahore Medical & Dental College in Lahore. These include social media experiences, attitudes toward using social media to support learning, and the benefits of using social media for learning. We discovered that nearly all students used social media, the majority of them on a daily basis, and that they all used it for educational purposes. The aims were achieved using valid and reliable custom self-reported questionnaire. The reliability of the questionnaire was assessed using Cronbach's alpha which revealed excellent reliability of 0.83. The social media platforms with best experiences were reported to be WhatsApp, Instagram, YouTube, Facebook, Wikipedia, Twitter and video teleconferencing. The most preferred social media platforms for learning were Wikipedia, followed by WhatsApp, Facebook, Instagram, Skype and Snapchat. The findings revealed that students' overall behaviours and attitudes toward using social media for learning purposes greatly influenced their learning experience. The majority of them found learning through social media to be helpful, desirable and fun. They preferred to join collaborative projects and classes where instructors used social media. In addition, it was discovered that their attitude toward using social media has become slightly positive in the last few years. Finally, when asked about the advantages of using social media for learning, the majority of students agreed that when they use social media, they find many educational resources and links. It assisted them in learning more effectively than traditional teaching methods. Communicating and watching videos helped them improve their listening and writing skills. It has enabled them to be more creative in their projects and assignments, enhancing their ability to learn independently, but in this study the differences in social media use between the genders have not been reported. A study conducted by Shaheen et al.²⁰ did report the differences in social media use between the genders. According to their findings YouTube, Wikis, WhatsApp, and Twitter were cited as the most popular learning applications. And students rated social media platforms as superior to traditional teaching methods. These platforms aid in the discovery of educational resources, the development of writing, listening, and social skills, the sharing of knowledge, the enhancement of self-directed learning, the increase of collaborations, and the development of creativity which is in line with the findings of our study. But our study included all medical disciplines not only DPT. Our study found that discussing and exchanging views with others using social media develops students critical thinking skills and communicating and interacting with classmates and instructors through the social media helped them develop their social skills, being more creative in their projects and thus enhancing not only self-dependent learning but also enabling them to learn anytime and anywhere using social media, which is consistent with a study²¹ that included not only the medical disciplines but also paramedical sciences students. According to which students from both disciplines prioritized sending and receiving educational videos and sending and receiving educational texts, posts, and contents when using social media. Students' motivation to learn can be improved by using social media to educate and motivate medical students. Adding more, in the favor of social media use to support learning another study conducted by Mahdi²² showed there were generally positive attitudes toward using social media for academic purposes, among students and their study also found that there was a statistically significant link between the purpose of social media use and the GPA of the students. Also, revealed that the length of time students spent on social media had no statistically significant impact on their GPA. The most popular social media platforms among students were WhatsApp and Twitter, while Wiki, Facebook, and LinkedIn were the least popular. Social media, like any other tool, has its drawbacks as well. Our study didn't report any as it was not the objective of our study. But Madhusudan M et al²³ found that the majority of students use social media on a daily basis, with the most common activities being chatting and uploading photos. The majority of students believe that social media has harmed their personal life and academic performance. Inconsistent with our study, other studies' findings were suggesting a negative correlation between students' attitudes towards using social media and academic performance²⁴. To increase objectivity and provide results that can be reported on a larger scale, future studies should include participants from various medical colleges comprising postgraduate students as well. Future research should look into the impact of innovative learning interventions on teacher and student satisfaction with the teaching process, as well as the long-term effects on learning outcomes. However, researchers should pay special attention to lecturers' adoption rates and willingness to use social media as a teaching tool.

CONCLUSION

Undergraduate students from all medical disciplines reported to have positive attitudes towards use of social media for learning purposes. They find it convenient for academic purposes. The most popular and preferred social media platforms for academic learning were Facebook, WhatsApp, and YouTube.

AUTHOR'S CONTRIBUTION:

Author	Contribution
Maryam Zafar	Conceptualization, Methodology, Formal Analysis, Writing - Original Draft, Validation, Supervision
Ayesha Kousar	Methodology, Investigation, Data Curation, Writing - Review & Editing
Imbisat Abaid	Investigation, Data Curation, Formal Analysis, Software

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