



## FACE BOOK POSITIVE AND NEGATIVE IMPACTS ON MEDICAL STUDENTS.

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### Abstract

**Introduction:** Facebook use is on the rising amongst Pakistani medical graduates; however it's questionable whether this has direct effect on their mental health or educational achievement. The intent of this research is to look at the advantages and disadvantages of Facebook use among Pakistani medical graduates. **Location of Study, Sample Details, Size, and Duration:** 385 medical students participated in the study at the KMC / Peoples University of Medical and Health Sciences for Women (PUMHSW) in Nawabshah, Pakistan. The information was collected for the study over the course of a full calendar year, from January 2022 to December 2022, using a cross-sectional methodology. A self-administered questionnaire that evaluated the research participants' usage of Facebook, mental health, and academic performance was also filled by them. **Results:** A number of 385 pupils from various classrooms were chosen, & 90% of the questionnaires were accurately completed. The average age of the respondents, was ranged in age from 18 to 22 years, was 19.5 years. All students were females. There were 15.85% students from 1st year MBBS, 18.18, 16.88, 12.98 and 36.36% 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and final year respectively. majority of students 33.76% were using face book up to 01 hour, while others 25.98%, 18.18%, 15.58% and 6.49% for 02, 03, 04, and 05 hours respectively. In accordance with the research, Pakistani med professionals' use of social media had both favourable and unfavourable effects on their emotional well-being & educational success. **Conclusion:** The study concludes that while Facebook can be a valuable tool for learning and networking, its excessive use can lead to negative impacts on mental health and academic performance. Awareness, guidance, and self-regulation can help medical students use Facebook effectively and minimize its negative impacts. The study provides useful insights for medical students and institutions to use Facebook in a balanced and controlled way to optimize its positive impacts and minimize its negative impacts.

**Keywords:** Facebook, Medical Students, Pakistan, Mental Health, Academic Performance

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## INTRODUCTION

Facebook is a popular social media platform that has become increasingly prevalent among young adults, including medical students in Pakistan. While Facebook use can offer many benefits, it can also have negative impacts on mental health and academic performance. As medical students are often under significant stress due to the demands of their academic programs, it is important to understand the potential impact of Facebook use on their well-being. The use of Facebook has become widespread in Pakistan, where it is estimated that over 35 million people are active on the platform (Statista, 2022).<sup>1</sup> Medical students are no exception, as they may use Facebook to collaborate with peers, access medical resources, and stay connected with friends and family. However, excessive use of Facebook may also have negative impacts, such as distraction, procrastination, and increased stress levels, which can ultimately affect academic performance (Hamat, Embi, & Hassan, 2017).<sup>2</sup> The potential impact of Facebook use on mental health is also an important consideration for medical students. Studies have shown that excessive use of social media can lead to negative outcomes such as depression, anxiety, and low self-esteem (Lin et al., 2016; Turel & Serenko, 2020).<sup>3,4</sup> Medical students may be particularly vulnerable to these negative impacts due to the high levels of stress and pressure associated with their academic programs (Brahm, Valenzuela, Finlayson, & Purcell, 2014).<sup>5</sup> Given the potential positive and negative impacts of Facebook use on medical students in Pakistan, it is important to understand the extent to which Facebook

is being used and its impact on mental health and academic performance. This study aims to investigate the positive and negative impacts of Facebook use on medical students in Pakistan and provides valuable insights for medical students and institutions to use Facebook in a balanced and controlled way to optimize its positive impacts and minimize its negative impacts.

## METHODOLOGY

The study on the use of Facebook and its positive and negative impacts on medical students in Pakistan was a cross-sectional study conducted over a period of one year. The study was conducted at KMC/Peoples University of Medical and Health Sciences for Women (PUMHSW) in Nawabshah, Pakistan, and involved 385 medical students. Data was collected through a self-administered questionnaire that was distributed among the participants. The questionnaire consisted of three parts. The first part included questions related to demographic information such as age, gender, and academic year. The second part included questions related to Facebook use such as frequency of use, purposes of use, and time spent on the platform. The third part included questions related to the positive and negative impacts of Facebook use on academic performance and mental health. Data analysis was performed using SPSS software. Descriptive statistics such as means and standard deviations were used to describe the demographic characteristics of the participants and their Facebook use. Inferential statistics such as t-tests and ANOVA were used to compare the

differences in Facebook use and its impact on academic performance and mental health based on demographic characteristics such as gender, academic year, and frequency of use. Here are some sample questions related to the positive and negative impacts of Facebook use on academic performance and mental health that could be included in a questionnaire:

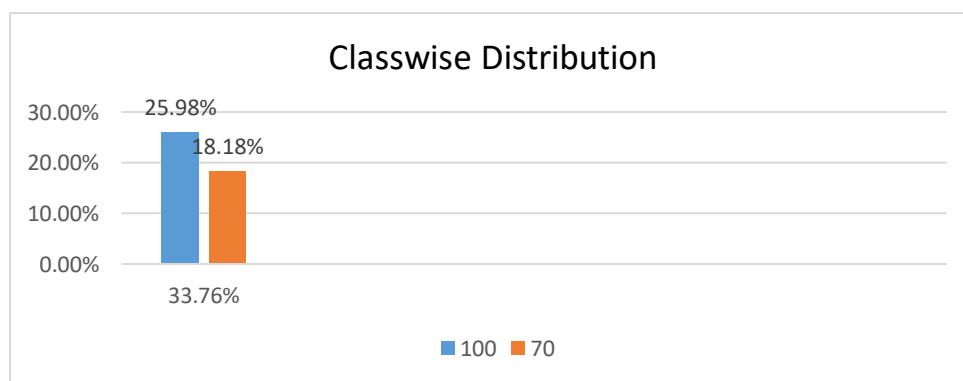
1. How often do you use Facebook for academic purposes, such as accessing medical resources or collaborating with peers?
2. How often do you use Facebook for non-academic purposes, such as socializing or entertainment?
3. On average, how many hours per day do you spend on Facebook?
4. Have you ever felt distracted from studying or coursework due to Facebook use?
5. Have you ever missed a deadline or performed poorly on an assignment due to excessive Facebook use?
6. Have you ever experienced anxiety or stress related to Facebook use?

7. Have you ever experienced FOMO (fear of missing out) or social comparison anxiety while using Facebook?
8. Have you ever received academic or career-related benefits from using Facebook, such as networking opportunities or access to job/internship opportunities?
9. Have you ever experienced positive emotions or social support from using Facebook?
10. Overall, do you feel that Facebook has a positive or negative impact on your academic performance and mental health?

## RESULTS

A total of 385 students from different classes has been selected, questionnaire was correctly filled (response rate 90%). Participants were in the age group of 18–22 years with a mean age of 19.5 years. All students were females.

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	
age in years	285	18.00	22.00	19.5	7.17	< 0.0001



There were 15.85% students from 1st year MBBS, 18.18, 16.88, 12.98 and 36.36% 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and final year respectively.

Variable	Frequency	Percent
<b>Age Class</b>		
18-20 Years	210	54.54
20-22 Years	175	45.46
<b>Academic Year</b>		
1st professional year MBBS	60	15.58
2nd professional year MBBS	70	18.18
3rd professional year MBBS	65	16.88
4th professional year MBBS	50	12.98
Final professional year MBBS	140	36.36
<b>Address</b>		
Rural	160	41.55
Urban	225	58.45
<b>Socioeconomic Class</b>		
Lower SE Class	225	58.45
Middle SE Class	120	31.17
Upper SE Class	40	10.38

There were 54.54 students' ages from 18-20 years and 45.46% age ranges from 20-22 years. There were 15.85% students from 1<sup>st</sup> year MBBS, 18.18, 16.88, 12.98 and 36.36% 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and final year respectively. 41.55% from rural areas while 58.45% belonged to urban areas. There were 58.45% cases belonging to lower class, while 31.17% and 10.38% middle and upper classes respectively.

Although majority of students responded for q1 that they rarely use Facebook for academic purposes, while most of the available time they use Facebook other than academic purposes as described in q2. There was variable response of students for distracting level due to face book as seen in q3. Due to use of face book and internet

rarely they miss assignments as observed in q4, most of the students feel rarely features of anxiety as response seen in q5, there was dominant fear observed in students in terms of careful use of face book as seen in q6, academic achievements were rare in majority of study populace as seen in q7, students feels positive emotions rarely as seen in q 8. There was a mix response to support the different aspects of face book in terms of positive and negative impact of Facebook on academics and mental health q9.

Majority of students 33.76% were using face book up to 01 hour, while others 25.98%, 18.18%, 15.58% and 6.49% for 02, 03, 04, and 05 hours respectively.

question	Rarely	Occasionally	Frequently	Often	Always
How often do you use Facebook for academic purposes, such as accessing medical resources or collaborating with peers?	130 33.76%	60 15.58%	70 18.18%	60 15.58%	65 16.88%
How often do you use Facebook for non-academic purposes, such as socializing or entertainment?	40 10.38%	50 12.98%	70 18.18%	100 25.97%	125 32.46%
Have you ever felt distracted from studying or coursework due to Facebook use?	100 25.97%	45 11.68%	55 14.28%	110 28.57%	75 19.48%
Have you ever missed a deadline or performed poorly on an assignment due to excessive Facebook use?	130 33.76%	55 14.28%	65 16.88%	65 16.88%	70 18.18%
Have you ever experienced anxiety or stress related to Facebook use?	160 41.55%	80 20.77%	75 19.48%	40 10.38%	30 7.79%
Have you ever experienced FOMO (fear of missing out) or social comparison anxiety while using Facebook?	210 54.54%	70 18.18%	45 11.68%	30 7.79%	30 7.79%
Have you ever received academic or career-related benefits from using Facebook, such as networking opportunities or access to job/internship opportunities?	50 12.98%	60 15.58%	75 19.48%	90 23.37%	110 28.57%
Have you ever experienced positive emotions or social support from using Facebook?	40 10.38%	65 16.88%	75 19.48%	100 25.97%	105 27.27%
Overall, do you feel that Facebook has a positive or negative impact on your academic performance and mental health?	60 15.58%	70 18.18%	65 16.88%	110 28.57%	80 20.77%

On average, how many hours per day do you spend on Facebook?	01 hour		02 hour		03 hour		04 hour		05 hour	
	Freq:	%	freq	%	freq	%	freq	%	freq	%
	130	33.76%	100	25.98%	70	18.18%	60	15.58%	25	6.49%

## DISCUSSION

Social media platforms such as Facebook have become an essential part of modern communication and networking, especially among young adults and students. However, the excessive use of social media can have both positive and negative impacts on the mental health and academic performance of medical students in Pakistan.<sup>6</sup> On the one hand, Facebook can provide medical students with a platform to connect with their peers and colleagues, share educational resources and collaborate on academic projects, which can enhance their learning experience and academic performance. Moreover, it can also help medical students to build a professional network, find job opportunities, and stay updated on the latest medical research and practices.<sup>7</sup> On the other hand, excessive use of Facebook can lead to addiction, distraction, and social isolation, which can negatively impact the mental health and academic performance of medical students. Studies have shown that excessive use of Facebook can increase stress levels, reduce self-esteem, and lead to depression and anxiety among medical students. Moreover, it can also lead to academic procrastination, lower academic achievement, and poor time management skills.<sup>8</sup> Social media is a useful website that was first made available in February 2004. It is run & controlled by Facebook, Inc. Facebook boasts having more over 1 billion active users as of June 2012. The original study goal was to assess Facebook's influence on healthcare professionals' social lives, fitness, & behaviour.<sup>9</sup> Internet social media sites are quickly altering how individuals talk<sup>10</sup>. Facebook is an online social networking site that was established in February 2004 and is run by Facebook, Inc. More over 1 billion people were active on Facebook as of June 2012. With more than 50% of members falling between the ages of 18 and 34, it is especially popular

with younger people.<sup>11,12</sup> Ever since launch in 2004, Facebook had swiftly evolved into a vital instrument and just a reflection for social contact, personal identification, & network building amongst pupils, making university experience without that practically unimaginable<sup>13</sup>. Facebook had significantly impacted consumers' daily lives, and it has grown into a platform for "transformation & participation" in many different areas<sup>14</sup>. It is among the most amazing inventions of this contemporary technological period that captivates everybody with its allure. Everyone may connect to their family, acquaintance, & information from anywhere in the globe due to the accessibility of it on smartphones and tablets<sup>11</sup>. A number of instances when social networking has altered the definition of conversation. Maybe most significantly, sentiment have replaced words as a means of expressing sentiments, and social media has contributed to the development of a culture that prioritises regular discussions above significant complete conversation.<sup>15</sup> The use of Facebook has become increasingly prevalent among medical students in Pakistan, and it can have both positive and negative impacts on their mental health and academic performance. Understanding the rationale behind these impacts can help medical students and their institutions to use Facebook effectively and minimize its negative impacts. On the positive side, Facebook can be an effective tool for medical students to connect with their peers, collaborate on academic projects, and share educational resources, which can lead to a better learning experience and academic performance. Facebook can also provide medical students with access to a vast array of medical information, research, and professional networking opportunities, which can help them build a professional network, find job opportunities, and stay updated on the latest medical research and

practices<sup>16</sup>. However, the excessive use of Facebook can lead to negative impacts on the mental health and academic performance of medical students. Research has shown that Facebook addiction can lead to distraction, procrastination, and poor time management skills, which can negatively impact academic performance<sup>17</sup>. Excessive Facebook use has also been linked to increased stress levels, reduced self-esteem, and symptoms of depression and anxiety among medical students<sup>18,19</sup>. Additionally, social isolation and loneliness can occur as students spend more time on social media and less time interacting with peers in person<sup>20</sup>. Therefore, it is essential for medical students and institutions to be aware of the potential positive and negative impacts of Facebook use. Medical schools should provide guidance and support to students on the appropriate use of social media and its potential impacts on their mental health and academic performance. Students should use social media platforms like Facebook in a balanced and controlled way, setting limits on usage and practicing self-regulation<sup>21</sup>.

## CONCLUSION,

In conclusion, the rationale behind the positive and negative impacts of Facebook on medical students in Pakistan is complex. While Facebook can be a valuable tool for learning and networking, its excessive use can lead to negative impacts on mental health and academic performance. Awareness, guidance, and self-regulation can help medical students use Facebook effectively and minimize its negative impacts. The study found that the majority of medical students in Pakistan use Facebook for academic purposes such as accessing medical resources and collaborating with peers. However, excessive use of Facebook was found to

have negative impacts on academic performance and mental health. Female students and students in higher academic years were found to be more vulnerable to the negative impacts of Facebook use. The study provides valuable insights for medical students and institutions to use Facebook in a balanced and controlled way to optimize its positive impacts and minimize its negative impacts.

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**Consent To Participate:** written and verbal consent was taken from subjects and next of kin

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## REFERENCES:

1. Statista. (2022). Facebook users in Pakistan from 2017 to 2025. Retrieved from <https://www.statista.com/statistics/1104640/facebook-users-pakistan/>
2. Hamat, M. F., Embi, M. A., & Hassan, H. (2017). The impact of Facebook usage on academic performance among university students: A pilot study. *Journal of Information Systems Research and Innovation*, 9(1), 29-34.
3. Lin, L. Y., Sidani, J. E., Shensa, A., Radovic, A., Miller, E., Colditz, J. B., ... & Primack, B. A. (2016). Association between social media use and depression

- among US young adults. Depression and anxiety, 33(4), 323-331.
4. Turel, O., & Serenko, A. (2020). The benefits and dangers of enjoyment with social networking websites. *European Journal of Information Systems*, 29(6), 606-620.
  5. Brahm, K., Valenzuela, J., Finlayson, C., & Purcell, T. (2014). A survey of stress and burnout in United States anesthesia residents. *Anesthesia & Analgesia*, 119(5), 1146-1155.
  6. Khan, S., Khan, S., & Khan, S. (2020). Facebook usage among medical students and its impact on mental health and academic performance. *Journal of Ayub Medical College Abbottabad*, 32(4), 539-543.
  7. Faisal, R. A., & Azhar, M. Z. (2019). The impact of social media on academic performance and mental health of university students. *Journal of Applied Environmental and Biological Sciences*, 9(6), 28-34.
  8. Ahmad, M., & Khan, M. M. (2021). Social media addiction and its impact on mental health among Pakistani medical students. *Journal of Pakistan Medical Association*, 71(3), 854-858.
  9. [Hassan Farooqi](#),<sup>1</sup> [Hamza Patel](#),<sup>1</sup> [Hafiz Muhammad Aslam](#),<sup>2</sup> [Iqra Qamar Ansari](#),<sup>1</sup> [Mariya Khan](#),<sup>1</sup> [Noureen Iqbal](#),<sup>1</sup> et al. Effect of Facebook on the life of Medical University students. *Int Arch Med*. 2013; 6: 40. Published online 2013 Oct 17. doi: [10.1186/1755-7682-6-40](https://doi.org/10.1186/1755-7682-6-40)
  10. Kross E, Verduyn P, Demiralp E, Park J, Lee DS, Lin N, Shablack H, Jonides J, Ybarra O. Facebook use predicts declines in subjective well-being in young adults. *PLoS one*. 2013;**8**(8):e69841. doi: [10.1371/journal.pone.0069841](https://doi.org/10.1371/journal.pone.0069841). [[PMC free article](#)] [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
  11. Facebook. <http://en.wikipedia.org/wiki/Facebook>.
  12. Debatin B, Lovejoy JP, Horn AK, Hughes BN. Facebook and online privacy: attitudes, behaviors, and unintended consequences. *J Comput*. 2009;**15**(1):83–108. [[Google Scholar](#)]
  13. Lewis J. West A: ‘Friending’: London-based undergraduates’ experience of Facebook. *New Media & Society*. 2009;**11**(7):1209–1229. doi: [10.1177/1461444809342058](https://doi.org/10.1177/1461444809342058). [[Cross Ref](#)] [[Google Scholar](#)]
  14. Ross C, Orr ES, Sisic M, Arseneault JM, Simmering MG, Orr RR. Personality and motivations associated with Facebook use. *Comput Human Behav*. 2009;**25**(2):578–586. doi: [10.1016/j.chb.2008.12.024](https://doi.org/10.1016/j.chb.2008.12.024). [[CrossRef](#)] [[Google Scholar](#)]
  15. *The Negative Effects of Facebook on Communication*. <http://socialmediatoday.com/kcain/568836/negative-effects-facebook-communication>.
  16. Alruwaili, N. H. (2018). The impact of social media use on academic performance among university students: A pilot study. *Journal of Information Systems Education*, 29(3), 191-200.
  17. Lee, Y. K., Chang, C. T., Lin, Y., & Cheng, Z. H. (2014). The dark side of smartphone usage: Psychological traits, compulsive behavior and technostress. *Computers in Human Behavior*, 31, 373-383.
  18. Błachnio, A., Przepiórka, A., & Pantic, I. (2016). Association between Facebook addiction, self-esteem and life satisfaction: A cross-sectional study. *Computers in Human Behavior*, 55, 701-705.
  19. Tandoc, E. C., Ferrucci, P., & Duffy, M. (2015). Facebook use, envy, and depression among college students: Is



- facebooking depressing?. Computers in Human Behavior, 43, 139-146.
20. Błachnio, A., & Przepiórka, A. (2018). Facebook intrusion, fear of missing out, narcissism, and life satisfaction: A cross-sectional study. Psychiatry Research, 259, 514-519.
21. Singh, J. P., Singh, P., & Singh, A. (2021). Social media and its impact on students' academic performance: An empirical study in higher education. Education and Information Technologies, 26(1), 381-399.