

# Social Networking and Depression among University Students

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## Abstract

**Background:** Students in the modern world are busy using social media for different purposes along with other activities. Research studies revealed that excessive use of social media influence the mental health of students. This study was design to measure the relationship of social media and depression among university students.

**Objectives:** The main objectives of the study were, to investigate the perception of university students regarding the usage of social media networks, to find out gender-wise differences of university students in using social media networks and depression level and to measure the relationship of social media and depression among university students.

**Subjects and Methods:** Following quantitative correlational research design, the sample which was consists of 200 Facebook and Twitter users comprising of 123 male and 77 female students from university of Swat and Peshawar were surveyed through two research instruments i.e. a questionnaire and Beck Depression Inventory (BDI).

**Results:** The main findings of the study were; most of the male social media users were more depressed than female. The students who spent more time on social media were found depressed. The students who spent more time on social media for searching health information and playing games were more depressed than those who used social media for chat with friends and family.

**Conclusion:** It was concluded that male students who spent more time on social media were found more depressed than female and students who used social media for searching health information and playing games were more depressed than those who used social media for chat with friends and family.

**Key words:** Social media, depression, facebook, twitter.

## Introduction

Social media are interactive media where users receive and send messages, post comments, call each others, sent and accept friend requests, upload photos, videos, update status and even interact via video calling. The users are both creators and consumers of the social media contents. Messages flow in all directions, among different users, from users to organizations and

organizations to users. The users explore social media which increase the probability of its influence on them. The impact of social media on the life of each individual is increasing day by day. It is now a part of the most individuals lives and in near future, all the people of the world will be using internet for their daily lives. They will be connected through social media and online blogging networks. In recent years, most of the young people are using social media for different purposes and technology is now playing an important role in the life of every individual irrespective of age.<sup>1</sup> The use of social media has become more popular in this globalized world where the users use social media for amusement and try to satisfy variety of needs which include; seeking information, entertainment, interacting people and escape.<sup>2</sup> Social media is now becoming the fastest and the easiest way of interaction and provide an environment where people from different part, culture and languages can interact with each others, they can share and exchange views and communicate with each other despite of the distance that separates them.<sup>3</sup>

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Received: 01 August 2017, Accepted: 22 May 2018,

Published: 20 June 2018

### Authors Contribution

NA conceptualized the project. SH & NM did the data collection. NA & NM also did the literature search. SH did the statistical analysis. Drafting, revision and writing of the manuscript were done by NA, SH & NM.

There are several types of social media and social networking websites. Among these sites some are for more specific users while others are for more general users. Since their creation, social media networking like Facebook, Twitter, Instagram and MySpace have become extremely popular among internet users, particularly in young students. Facebook is the largest social network and has surpassed 1.59 billion registered users accounts. Twitter has almost 316 million monthly active users.<sup>4</sup> The popularity of social media and using social media for communication and social interaction has led many people to decrease other social and communication activities such as sending letters, talking on the phone, sending email, and face-to-face meetings.<sup>5</sup> As a result, these social networks have enormously affected the traditional way of life, including the change in inter-personal communication and interaction. Recent growing research works suggested that social media usage is associated with a massive amount of negative outcomes. Research studies<sup>6,7</sup> found that majority of internet user were online for a considerable time daily. Most of them use internet for searching different information and using social media. Some other studies<sup>8-10</sup> described that people in the modern world consider internet as a highly important component of their everyday life and use it for forming and maintaining social relationships.

Social media is not basically good or bad like other types of media. It is the type and frequency of use that make it good or bad. Social media users receive short-term enjoyment when they go online every time and this enjoyment compels them to go online more to seek this pleasure.<sup>11</sup> This cycle continues but social media usage brings short-term pleasure and it does not give long term pleasure and does not give any usable reward in real life, which may leads to depression in real life.<sup>12,13</sup> A research conducted at the University of Glasgow found that young people who were actively and emotionally involved in their digital lives reported worse sleep, higher level of anxiety and depression. This means that the use of social media may increase depression and anxiety among users. Consistent social media usage is associated with decrease in happiness which means, increases in depression and this increase in depression is associated with social media usage.<sup>14</sup> Different research studies<sup>5,15,16</sup> have found that social media use was associated with depression and more social media use increase depression among adults.<sup>17</sup> This means that internet use may develop depression among all the users. A study carried by Orsal<sup>18</sup> found a high positive relationship between social media usage and depression among

university students. Another study found that Facebook use has positive relationship with depression.<sup>19</sup> It has been observed that adults with major depression spent more time online.<sup>20</sup> However, some findings suggested that there is no association between social media and depression.<sup>21</sup>

Social networking is a new phenomenon and very few studies so far have been carried out on its impact on mental health issues around the world and particularly this part of the world where the use of social media is increasing day by day. Facebook use has been associated with its possible negative effects to psychological problems.<sup>22</sup> Kross described that social media may lead to depression and anxiety.<sup>23</sup> Considering the findings of other research studies, it is important to investigate the relationship between social networking and depression among university students. The main objectives of the study were: (i.) To investigate the perceptions of university students regarding the usage of social media networks (ii.) To find out gender-wise differences of university students in using social media networks and the level of their depression (iii.) To measure the relationship of social media and depression among university students.

## Subjects and Methods

Quantitative correlation research design was adopted following the pragmatist research paradigm. The respondents of the study were consisted of those under graduate students of University of Swat and University of Peshawar, Khyber Pakhtunkhwa, Pakistan who are using Facebook and Twitter accounts reflecting information of their institutional affiliation. The exact number of the respondents was not identified therefore, efforts were made to send the instruments to the identified respondents as more as possible.

The selection of the respondents were made on the basis of the opportunity they have in using social media networks and their trends towards social media. Due to time and resources constraints, the study was delimited to University of Peshawar and University of Swat which are public sector universities of Khyber Pakhtunkhwa. The sample of the study was selected through non-probability volunteer sampling techniques which were consisted of two hundred 200 respondents. The sample group respondents were included; one hundred and twenty three male respondents. Similarly, the sample group of the study was comprised seventy seven female respondents from University of Swat and University of Peshawar from

social and physical science departments. The respondents of the study were investigated in relation to the use of social media and depression.

The data were collected through two research instruments; one a self-developed questionnaire to measure the major uses of social media networks and a standardized inventory Beck Depression Inventory (BDI) for measuring the depression level of the respondents. Furthermore, there were ten items having four options for each item in the questionnaire which was reflecting respondents' interest in social media networking and its usage for different purposes. As the respondents were undergraduate students and have no issue in understanding BDI which was developed by Judith Beck, Aaron Beck, John Jolly, Robert. Steer in 2005 and which was consisted of twenty one 21 items was used to measure the depression level of the respondents of the study.

After data collection, it was placed into SPSS version 20 for the purpose of analysis. The data was analyzed through mean, std. deviation, independent sample t test and Pearson correlation.

The mean scores and std. deviation of students' responses along with Beck Depression Inventory explanation was made on the following criteria;

Mean	Std. Dev.	
4.00	3.51	Most of the time
3.50	2.51	Sometimes
2.50	1.51	Rarely
1.50	1.00	Not at all

  

Beck depression inventory scoring description.	Scores	Range
	00 – 13	Minimal
	14 - 19	Mild
	20 – 28	Moderate
	29 – 63	Severe

Ethical approval was taken from the Institutional Review Board (IRB) of the University of Swat.

### Results

Most (53.5%) of the respondents were of the view that they used social media for one to three hours per day which is a significant time period for adults. Twenty nine percent of the respondents spend almost six hours per day on Facebook and twitter, while 17.5% respondents were of the view that they spend more than six hours a day on social media. These results illustrate that undergraduate university students spent considerable amount of time on social media which reduce their involvement in practical life like sports, reading books and other activities.

**Table 1: Description of time spent on social media.**

Time spends on social media in intervals	Number	%
1 to 3 hours	107	53.5
4 to 6 hours	58	29
6 and plus	35	17.5

Table-2 shows respondents' interest towards the use of social media, use social media for getting information and reasons for liking social media pages and groups.

The respondents were found interested in using social media as reflected by the mean scores and std. deviations (3.12 and .782), however, the user give less importance to the obtained information from social media (mean 2.80, and std .986). Similarly, the mean scores of searching health information, chatting with friends and playing games were the reasons for which majority of the respondents like pages and groups on Facebook and twitter as shown by the mean 3.32 and std .797.

The Table-3 illustrates gender-wise depression level of the respondents. Female respondents were found less depressed than male

**Table 2: Respondents' interest towards the use of social media.**

Variables	Items	Mean Scores	Std Deviation
Interest towards the use of social media	Social Media is useful medium	3.50	.657
	Like to spend more time on SM	3.01	.839
	Like to make friends on SM	2.87	.852
Usage of information from social media	Cumulative results	3.12	.782
	Enhance user's self-awareness	2.79	.975
	Enhance communication skills	2.72	1.003
	Enhance critical skills of users	2.91	.980
Reasons for liking a social media page or group	Cumulative results	2.80	.986
	Contains on health information	3.44	.706
	Provides space for games	3.19	.964
	Chatting opportunity with friends	3.33	.722
	Cumulative results	3.32	.797

at minimal level of depression (31.16%, 38.21%). At mild level of depression male 28.45% developed depression than female which is 41.55%, however 21.95% male and 16.88% female developed moderate level of depression and 11.38% male and 10.38% female developed severe depression.

**Table 3: Gender-wise depression of the respondents. (n=200)**

Scores	Range	Respondents	Frequency	%
00 to 13	Minimal	Male	47	38.21
		Female	24	31.16
14 to 19	Mild	Male	35	28.45
		Female	32	41.55
20 to 28	Moderate	Male	27	21.95
		Female	13	16.88
29 to 63	Severe	Male	14	11.38
		Female	08	10.38

Table-4 shows the mean score and standard deviation of female respondents which was 35.05 and 10.19, while male students were 39.56 and 10.85. The t and p value was 12.39 and .000 indicated that there is a significant difference between the mean scores of the two groups. This reflected that male students who use social networking developed more depression as compared to female students who use social network.

**Table 4: gender wise differences of social media user on depression scale. (n=200)**

Variable	Female N= 133		Male N= 77		tp
	M	S.D	M	S.D	
Depression	35.05	10.19	39.56	10.85	12.39 .000*

\*p<.01, df= 198

**Table 5: Students' depression on the bases of time spent on social media for chat and searching health information. (n=200)**

Variable	Health information & games N= 115		Chat N= 85		tp
	M	S.D	M	S.D	
Depression	65.37	21.03	39.17	11.43	12.57 .000*

\*p<.01, df= 198

Table-5 shows the mean score and standard deviation of respondents who use social media for searching health information and games were 65.37 and 21.03, and the mean and standard deviation of students who use social media for chat was 39.17 and 11.43. The t and p value was 12.57 and .000. This indicates that the difference between

the mean scores of the two groups was highly significant as the t value is high and which is significant at .000. This means that students who use social networking for searching health information and games developed more depression as compared to students who use social network for chatting friends and family members.

Table-6 shows positive relationship between depression and time spent on social media. This means that students who spent more time on social media have more chances to developed depression as compare to those who spent less time on online. The increase in time spent increase the chance of depression. Table also shows positive relationship between depression and searching for health information on social media. The students who used social media for searching health information were more depressed as compare to those who use social media for chat with friends and family members.

**Table 6: Correlation scores of Depression, time spent on Social media and searching health information & games.**

Variables	Depression	Time on Social Media	Health Information & Games
Depression	1	.217**	.183**
Time on social media	.217**	1	-.007
Health information	.183**	-.007	1

\*\* Correlation is significant at the 0.01 level.

## Discussion

This study focused on the use of social media and its relationship with depression of undergraduate university students. The finding of the study showed that students who spent more time on social media were found depressed was supported by a study on Association between online social networking and depression in high school students and found that high school students who spent more time on social media has a greater risk for depression.<sup>19</sup> Another study also support these findings and found that college fresh students who spent more time online for playing games and doing research was associated with higher levels of depression, but students who spent less time and use internet for e-mail and chat rooms was associated with lower levels of depression.<sup>24</sup> Rosen also found that users who spent more time with technologies were associated with high level of depression.<sup>25</sup> However, another study found that depression has no relationship with the amount of time spent online.

The finding of this study revealed that most of the male students who use social media were more depressed than female students was in conformity with Primack who found that females' media users were significantly more depressed than male media users.<sup>26</sup> However Block finding showed that depression among male and female users were nearly identical and both male and female users developed equal amount of depression.<sup>27</sup>

One of the major findings of the study was that students who used social media for searching health information and playing games were more depressed than those who used social media for chat with friends and family. This finding was in conformity with Bessièrè whose findings described that users who use social media for searching health information were more likely to developed depression, whereas those users who spent time online for chatting with friends and family had low level of depression.<sup>28</sup> Chou<sup>29</sup> also confirmed the findings of this study that young people who spent more time online playing games were more depressed than those who used the Internet for chat. Another study by Lenhart<sup>13</sup> found that social media is beneficial for users who use it for searching health information. Most of the teens use internet to find answers to their health issues. He found that 31% of online teens use internet for getting health, and physical fitness information.

It was concluded that male students who spent more time on social media were found more depressed than female and students who used social media for searching health information and playing games were more depressed than those who used social media for chat with friends and family.

Based on the findings of this study it is recommended that social media user should make its usage under control to avoid its negative impact. For this they can have some outside support and can move back to older pattern of entertainment as they can strengthen their personal relationship with friends and family members. The more personal relationships the social media users have in real life, the less they will need the Internet for social interaction. It is recommended that social media users should dedicate time for media usage and friends and family.

**Conflict of interest:** None declared.

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