

# Social Media Use and Its Link to Physical Health Indicators

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## Abstract:

*An individual's mental health may be harmed by extensive usage of social media. The study's main goal was to investigate the impact of social media on mental health. In the second part of the research, we wanted to learn about the normal discrepancies among gender, social networks, and mental health. To fulfill the study's goals, a cross-sectional research technique was adopted. A multi-stage sampling strategy was used to choose n=1067 persons from six different institutions in Punjab, Pakistan. A questionnaire including a political and social profile, a Maree (2017) social networking integration scale, and a Goldberg depression magnitude was constructed to explore the role of social media on young people's mental health (1993). Version 21 of the SPSS statistical analysis programmer was used to examine the responses that were received. Pearson correlation was used to confirm the direction or consistency of the link between these variables, and the results showed a link among mental health matters in Pakistan & social media use.*

## 1. Introduction:

Scholars, parents, and society have long seen social media as a source of mental health issues for people all over the world. Among today's young people, excessive social media use has become the most common pastime. It is possible to communicate with all of the application software via 2.0 and 3.0 websites. Facebook, Twitter, computer activities, YouTube, and WhatsApp are most likely among these programmers (Bashir & Bhat, 2017). Using a signal click, these social media tools let people to interact with those closest to them at any time and from anywhere in the globe. Only Facebook has more than a billion active users in 2015, which implies that one-seventh of the world's population relies on Facebook to stay in trace with family & friends.

There is a lot more to people's lives than just digital communication thanks to social media. Among the younger generation, a lack of comprehension is a major problem. Why? Because teens and young adults are more vulnerable to bad influences when they spend a significant time on social media (The Hearty soul, 2016). According to Kelly et al. (2018), although social media may be valuable for communication and other purposes, it is also highly associated to mental health disorders such as anxiety, stress, and sadness among young people. According to research, women are more vulnerable to mental health issues because of social networking. Fahy et al. (2016) looked at the intermediary pathways that relate young people's mental health to how much time them spending on social networking websites and how they communicate with others, as part of a growing corpus of research. Young people who are victims or perpetrators of online harassment are particularly vulnerable to mental health issues because of the ease with which they may share information that might harm their reputation and friendships (Tokunaga, 2010).

Post, like, and dislike whatever you want on Facebook or Instagram, according to the Construction idea. Potentially, young people who feel alone, despondent, panicked, or anxious may choose to connect with others in unconventional ways, such as via impromptu encounters (Barry et al., 2017). There is a durable correlation among the amount of time expended on face-book and the mental health and stress of young adults. Examples are Woods and Scott (2016), Viner et al (2019). Many studies, such as "Have smartphones ruined a generation?" ("Have Smartphones Destroyed a Generation") reveals a significant link between the use of social media and people's mental health. In addition, "social media has been linked to an increase in mental health issues" (Coyne ET al.2020). According to a study conducted by Zaheer in 2018, both traditional and social media have been accused of inciting irresponsible or unethical actions among Pakistani users.

Among young people, a feeling of alienation from national, cultural, and Islamic values has been accredited to the extensive employ of social media. In addition, a research by Saleem et al. (2016) found a negative association among Teenagers suffer from Facebook usage and isolation, as well as low self-confidence, selfishness, sadness, and a poor social life (Malik & Khan, 2015; Mehmood, Jafree & Sohail, 2020). In Pakistan, where luxurious mental health has been proved a prediction of five out of ten diseases by the world's largest disease ranking, there is a pressing need for it. However, few research in Punjab, Pakistan's most populated region, have checked the link between adolescent social media use and mental health. Therefore, this study will fill a gap in the literature about the link between social media usage and mental health among Punjabi adolescents. Furthermore, this study points out negative effects of gender & other variables on the mental health of adolescent people in Punjab, Pakistan's municipal colleges. The following are the study's goals:

#### **Research objectives:**

- Investigating the features of young people in terms of their socioeconomic status and their utilize of social media
- To determine the average disparities in social media use and psychological health between men and women.
- Youth mental fitness and socio-demographic profile are examined in connection to social media use.

#### **Problem statement:**

People's self-reported occurrence of use or the number of social media accounts they have made, as well as the platform they use to assess social media use, are mostly used in research. Social media use may be deliberate based on the amount of social media pages or channels used by participants, as well as the regularity and geographical scope of their use. For instance, Barry et al. (2017) investigated the link between social media consumption and emotional wellbeing features such anxiety, depression, fear of losing out, isolation, and attention deficit hyperactivity disorder.

#### **Research gap**

There are at least two ways in which current research defines the association among social media usage and health. Social media usage is seen as a typical social activity that may have both beneficial and bad impacts on health outcomes, whereas the other research concentrates on the unhelpful penalty of social media use. In our research, social media usage is seen as a regular part of everyday life. Most social media addiction measures used in research on problematic usage go beyond measure incidence and period of use.

#### **Importance of this research:**

Individuals and groups may build and preserve social capital via the use of social networks, especially offline ones, which provide them with access to resources like knowledge and social support. That is to say, those who are part of a social network benefit from the skills and knowledge of their fellow network members, while persons who are not have less admission to in sequence and social hold. Because of this, favorable social outcomes like as trust and reciprocity also lead to greater health for the individual. Mental happiness measures such as self-worth and life approval have been shown to be positively associated with many kinds of social capital, including social bonds.

#### **Literature Review and Construction of Hypothetical Model**

With 170 million people, Pakistan ranks as the world's 6th most populated nation. In Pakistan, social media is quickly flattering an essential part of people's daily life, and the availability of the digital revolution in cellular devices has a much bigger impact on people's lives. There has been an unprecedented surge in Pakistani internet and

social media use over the last several years. People of all age groups use it often on smart phones, iPads, and computers, and it's becoming more popular. To put it another way, the vast best part of people rely on social media to interact and communicate. Because of Pakistan's patriarchal culture, data on social media use among men are much greater than among women, as reported by Qadeer (2016). Of them, about 1.4 core Pakistani utilize the internet through mobile device in addition to their 10 core mobile users. Pakistan is among the nations with the highest percentage of 18-24-year-olds with 62 percent. "Zaheer (Zaheer, 2018) says that Young people's well-being is affected both positively and negatively by social media throughout their college years since it strengthens the mechanisms of human support and support". In addition, it may help children learn about academic material and build friendships (Jafree & Sohail, 2020). Overuse of social media, on the other hand, may lead to social media addiction and, ultimately, mental health issues (Mahmood, Jafree & Sohail, 2020). The underpinnings of Leon Festinger's Social Comparison Theory have another major detrimental effect (1954). The notion asserts that people are naturally inclined to compare their own lives to those of others. A person's self-perception is reflected in these foundations, which may lead to undesirable effects including such mental health problems. Social media users, particularly young people, have a tendency to show off their best selves.

Altering one's health habits is one route that might be taken. Studies show that a lack of quality and quantity of sleep may be a side effect of excessive social media or screen usage (Malik & Khan, 2015). Social media and mobile phone addiction may have a negative impact on sleep quality and insomnia, especially for people who use them excessively. Sleep deprivation has been associated to an increased risk of cardiovascular disease, hypertension, and early death, according to a large body of evidence.

The displacement hypothesis suggests that time spent on Facebook may have adverse impacts on well-being and health by replacing activities that are good, such as sleep, exercising, or face-to-face contacts. This viewpoint is consistent with this theory. Hyper connectivity—the constant availability and connectedness to peers, media material, and online services via social media—is also thought to exacerbate stress by some experts (Mehmood, 2020). Overwhelming amounts of stress may result from new communication norms and expectations brought on by hyper connectivity (e.g., the really have to monitor or reply to social media postings on a continuous basis). Somatic symptoms, the likelihood of infection and the intensity of symptoms after exposure to a cold virus, and systemic inflammation may all be exacerbated by stress.

These viewpoints show that excessive social media usage may be linked with worse physical health. We wanted to know whether being on social media was connected with worse physical health markers, so we conducted this research to find out. A sample of college students was chosen since they are the most active social media users in their generation.

As a result, those who watch others' postings have a greater understanding of other people's lives than they do of their own. Because of this, they develop a poor self-image and experience more mood swings. Over the last several years, a rising body of investigate has shown a relationship among young social media use and mental health concerns including nervousness and depression (Holland & Tiggemann, 2016). Social media addiction was linked to depression in Croatian research. The more time a kid spends online, the more likely; they are to get sad, which may lead to mental health difficulties.

### **Hypothetical Model of the Study**

1. Gender has a significant impact on social media usage and emotional wellbeing among students at Punjab's public institutions.
2. The educational status and location of young people are closely connected to their social media usage and mental health.
3. Students in public higher education institutions in Punjab, Pakistan, have a negative relationship between their usage of social media and their mental health.

## **2. Research methodology**

### **3.1 Material and Methods**

Pakistan's Higher Education Commission (HEC) in 2014 mandated 26 universities in Punjab, Pakistan, to undergo structural pathology. With these criteria in mind, this research was put together.

### 3.2 Participants and Procedure

N=1067 students from six public universities participated in the current study, which included Gujrat University, Bahauddin-Zakariya University Multan, Islamic university Bahawalpur, Sargodha University and the University of Punjab Lahore. n=1067 students from six public universities participated in this study. However, only students who had completed at least one year of BS or masters-level coursework and were still enrolled for at least 1 month in their programmes may participate in research. In the beginning, the researcher sent out a permission letter to targeted students in order to get their approval to participation in research.

The researcher used a multi-stage sampling procedure to ensure that the replies were accurate, generalizable, and representative of the general population. First, the authors picked n=6 notable districts among Punjab's 36 districts by drawing a random sample from the population. Secondly, the researcher chose one public institution from the areas identified & contacted the study respondents using a simple random sample procedure. The sample size was determined using Cochran's (1963) approach, which takes into consideration the overall number of master's or bachelor's degree students at these institutions. As a result, the present study's sample size was n=1067.7.

$$n = \frac{\frac{z_{\alpha/2}^2 \sigma^2}{d^2}}{(1.96)^2 (0.5)^2}$$

$$n = \frac{(3.8416)(0.25)}{0.0009}$$

$$n = \frac{0.9604}{0.0009} = 1067.11 \text{ or } 1067$$

Measurements Students utilized social media to share their mental health concerns. For this reason, the questionnaire consists of three sections: socio-demographic profile, autonomous construction (social media usage), and dependent construct (social networking) (Mental health). Questions on age, gender, level of education, parents' employment sector and location of residence were used to measure sociodemographic profile. The average time spent on social media and the number of friends on social networking websites was also included in the survey. The data for these concepts came from the Pakistani Social and Living Standards Measurement (2013).

Because of this, social media use became a separate concept. Berryman, Ferguson, & Negy (2018) employed the same ten-question measure that Maree (2017) had previously used to gauge the emotional value of people's lives on social networking sites (Maree, 2017). A maximum of five points was awarded for each answer. A Likert scale of 1 to 5 represents strongly disagreeing as 1 and strongly agreeing as 5 on the scale. The Goldberg Depressive Scale (1993), a nine-item questionnaire that measures mood and sentiments generally, was used to assess the mental health of respondents in relation to their behavior during the last week. The weighing scale has a chain of links connecting each of the items on it. A 5-point Likert scale was used to record these responses, with 1 indicating no interest, 2 indicating no interest, 3 indicating no interest, 4 indicating considerable interest, and 5 indicating a great deal of interest.

### 3.3 Statistical Analysis

For coding, manipulating, and recording the study's components, SPSS version 21 was used. To begin, frequency and percentage were used to establish the subject's socio-demographic profile. Then, to test whether mean differences exist, an independent - samples t was performed to examine the relationship between the independent factors of adolescent gender and residence location and the response variable of social media usage and mental health difficulties. The relationship between social media usage, mental fitness, gender, educational level, and home location was investigated using Pearson's correlation coefficient.

## 3. Data Analysis

### 4.1 Descriptive Statistics

Data on socioeconomic position, demographic traits, and favorite social media sites, as well as time spent using social media by targeted individuals are presented in this section using frequency (f) & percentage (percentage).

**Table 1**

Items	Categories	f (%)
Age	18-20	85(8)
	21-23	498(47.7)
	24-26	342(32.1)
	27 and above	142(13.3)
Gender	Male	17(39)
	Female	651(61)
Level of education	B5	470(44)
	Masters	597(55.9)
Father's Qualification	Illiterate-Primary	190(17.8)
	Middle-Matriculation	153(14.3)
	Intermediate-Bachelors	519(48.6)
	Masters	149(14)
	Above	56(5.2)
Father's work	sector Government	240(22.5)
	Semi-government	191(17.9)
	Private	122(11.4)
	Unemployed	50(4.7)
	Other	464(43.5)
Mother's Qualification	Illiterate-Primary	371(34.7)
	Middle-Matriculation	288(26.9)
	Intermediate-Bachelors	303(28.3)
	Masters	63(5.9)
	Above	42(3.9)



Items	Categories	f (%)
Place Of residence	Rural	435(40.8)
	Urban	632(59.2)
Family Type	Extended	155(14.5)
	Joint	440(41.2)
Monthly Family Income	below 200000PKR	176(16.5)
	200000PKR-400000PKR	183(17.2)
	41000PKR-60000PKR	373(35)
	61000PKR and above	335(31.4)

Table 1 .In this survey, 498 percent of respondents were between the ages of 21 and 23; 61% of them were female; 597 percent were enrolled in graduate programmers; 519 percent reported that their father had earned an associate's or bachelor's; 464 percent of respondents reported that their father worked in fields other than government or semi-government; and 371 percent reported that their mother had a degree from a public, semi-government, or private institution. Conclusions Drawn from Data Tests based on responses from participants are used in this section to validate the study's hypothesis. Among the students at universities in Punjab, Pakistan, gender has a substantial impact on social media use and mental health. H2: Youth social media use and mental health are strongly linked to educational attainment and geographic location.

**Table 2** Independent - Samples t for Study Subjects' Use of Social Media and Mental Health, Considering Gender and Location

Variables	Categories	M	SD	Df	Sig(2-tailed)	95% condifence interval	
						of the difference	
						Lower	Higher
SM	Male	43.9	4.04	1062	0.055	-405	.753
	Female	43.77	5.05	872.4	0.53	0.753	.725
MH	Male	28.9	2.41	1062	0.47	-377	-0.005
	Female	29.4	4.07	1045.5	0.27	0.725	-0.050
SM	Rural	44.4	4.89	1065	0.001	-876	1.50
	Urban	43.4	4.49	879.4	0.002	-0.005	1.51
MH	Rural	29.7	3.07	1065.1	0.000	-831	1.23
	Urban	29.8	3.77	34.2	0	-0.05	1.21

Students at Punjab's universities are more likely to be depressed if they waste a lot of moment on social media.

**Table 3** mental health's, gender, education level and residence all have a connection to social media use.

Variables	M	SD	1	2	3	4	5	6
SM			R		-0.208	-0.01	0.079	0.98
	43.84	4.68	P	1	0	0.782	0.01	0.001
MH			R			0.054	0.091	0.112
	29.26	3.52	P		1	0.077	0.003	0
Gender			R				0.215	0.205
	1.62	0.503	P			1	0	0
LoE			R					0.181
	2.18	0.919	P				1	0
PoR			R					
	1.59	0.492	P					1

#### 4. "Discussion and Conclusion"

The World Health Organization defines an individual's well-being as a feeling of self-awareness, the capacity to cope with stressful life situations, and the capacity to have a good impact on society. The conclusions of this new research should be taken with a grain of salt since the study's primary objective was to examine the link among social networks and mental fitness issues among Pakistani adolescents... It was also a primary goal of research to determine the mean dissimilar aspect of communal media use, mental physical condition, and location in terms of gender and location. When it came to social media use and brain health difficulties, the researchers looked at the differences in gender, profession, and geography.

The findings of this study reveal that there are significant differences between men and women when it comes to social media usage and mental health difficulties. This research establishes that females were much more susceptible to mental health issues as a consequence of their utilize of social media. People in rural and urban locations face comparable issues, thus their use of social media is likely to be affected in similar ways. Previous research found that females are more probable to experience from depression & mental health issues than boys since they endure online abuse, which makes it difficult for them to openly discuss their feelings with others because of their social reputation. In contrast, Tokunaga's (2010) critical review and synthesis studies found that mental health issues are not gender-specific. While utilizing social media, both girls and boys are at danger of developing mental health issues.

Social media has been proven to have a negative collision on mental health, as well as gender, educational attainment level and location of home. Similarly, mental health is connected with the gender and adversely correlate with educational attainment and location. Hearty discovered a direct correlation between social media usage and mental health difficulties in teenagers and young adults (2016). Viner et al. (2019) and Saleem et al. (2019) have connected Facebook addiction to loneliness, low self-esteem, personality, sadness, and a poor social life in later life among students (2016). According to Sathar et al. (2016), there is no link between social media usage and mental health since women use less social media platforms than men. In a recent study, however, mental health and teenage usage of social media were shown to be adversely connected. Using social media has a detrimental influence on people's life since it negatively impacts their mental health, according to one research.

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