



CODEN [USA]: IAJPBB

ISSN : 2349-7750

**INDO AMERICAN JOURNAL OF  
PHARMACEUTICAL SCIENCES**

SJIF Impact Factor: 7.187

<https://doi.org/10.5281/zenodo.20027803>Available online at: <http://www.iajps.com>

Research Article

**DESCRIPTIVE QUANTITATIVE STUDY ON EFFECTS OF  
SOCIAL MEDIA ON MENTAL HEALTH**Zainab butt<sup>1</sup>, Fehmida Faiz<sup>1</sup>, Rehana Yaqoob<sup>2</sup><sup>1</sup>Head Nurse, Sir Ganga Ram Hospital, Lahore<sup>2</sup>Assistant nursing superintendent, College of Nursing & Midwifery Fjmu Lahore**Abstract:**

**Background:** The widespread use of social media (SM) is an emerging phenomenon in today's world especially among adults.

**Objective:** to assess the effects of social media on mental health of community in Lahore.

**Materials & methods:** Research was cross sectional in nature. Self-structured questionnaire were used to collect the data of study participants.

**Results:** a descriptive cross sectional study conducted regarding effects of social media on mental health at Wapda Town, Lahore In which adults having age 18 to 35 years participated. In the population of 130 participants only 98 participants meet the criteria of the study. Regarding assessment of social media effects on mental health in the sample of 98 participants 66.33% participant said that they felt sleepless, bad tempered because of over usage of social media, 13.27% said sometimes, 20.41% reported often which indicated almost all the participants had irregular sleep pattern and bad tempered after excessive usage of social media.

**Conclusion:** as a result, Pakistan's national mental health is being harmed by excessive social media use. People spend 6 hours every day on various social media platforms for amusement and other purposes which is quite concerning because Pakistani youth are not only using social media in a purposeful way which is negatively affecting their mental health. Only a small percentage of people use it for online commerce which has a beneficial effect and helps the nation's economy.

**Keywords:** SNS (Social Networking Sites), SM (social media), mental health etc.

**Corresponding author:****Zainab butt,**

Head Nurse, Sri Ganga Ram Hospital, Lahore

Email:

QR CODE



Please cite this article in press Zainab butt et al., Descriptive quantitative study on effects of social media on mental health, Indo Am. J. P. Sci, 2026; 13(04).

## INTRODUCTION:

Social media use has soared since it was first invented and there are many different platforms in which to socialize online. Facebook is arguably one of the biggest, if not the biggest, social media platforms today (Smith, K., 2019). The invention and widespread use of Social Networking Sites (SNS) has arisen alongside the New Media Age. Websites such as Facebook, Instagram or Twitter were designed primarily for communication purposes, where one can instantly message contacts, share photos, videos, or statements (SNS, 2019). Social media usage has become ubiquitous in modern life, with millions of people using these platforms on a daily basis to connect with friends, family, and colleagues (Faizullah, Aslam, & Saeed, 2021). Moreover, the number of social media users worldwide in 2019 is 3.484 billion, up 9% year-on-year (Digital News Report, 2020).

As the number of social media users has increased steadily around the world, and Pakistan is no exception. As of January 2021, Pakistan had 61.34 million internet users (27.5% of the entire population) and 46 million active users on social media with 77.7% of Pakistanis using mobile devices (IWS, Pakistan, 2019). With over 58% of people in Pakistan using the internet at least once a day, YouTube, Facebook, WhatsApp, and Twitter are among the top 10 most used social media sites in Pakistan (Digital Report, 2022).

Some recent research has claimed Facebook reaches about 60.6% of internet users and about 69% of adults in the U.S. claim they use Facebook, or approximately 147.38 million adults. With these statistics in mind, in addition to the fact that the average Facebook user spends almost one hour on the site per day, it is imperative to determine how this particular social media platform affects the mental health of its users, if it does indeed affect mental health (Mohsin, M., 2020).

A number of studies have been conducted on the impacts of social media on mental health and it has been indicated that the prolonged use of social media platforms such as Facebook may be related to negative signs and symptoms of depression, anxiety, and stress (O'Reilly M, et al., 2018). Mental health was defined as emotional, psychological, and social well-being. It plays a role in nearly every aspect of one's life and can determine how we think, feel, act, respond to stress, relate to others, and even make choices (MHMF, 2020).

Several studies argued that social media has a negative impact on mental well-being and was often the reason why mental health issues arise (Abi-Jaoude et al., 2020). According to addiction center, a typical social media addict uses social media platforms between 40-80 hours per week. Several emotional, relational, health and

performance issues have been found to be linked to social media addiction as well (Marino, Gini, Vieno, & Spada, 2018).

Social media might also perpetuate body dissatisfaction, disordered eating behaviors, social comparison, and low self-esteem, especially among adolescent girls (Thai, H., et al., 2023). A synthesis of 20 studies demonstrated a significant relationship between social media use and body image concerns and eating disorders, with social comparison as a potential contributing factor. Social comparison driven by social media was associated with body dissatisfaction, disordered eating, and depressive symptoms (Kleemans, M., et al., 2018).

When asked about the impact of social media on their body image, nearly half (46%) of adolescents aged 13–17 said social media makes them feel worse, 40% said it makes them feel neither better nor worse, and only 14% said it makes them feel better (Bickham, D.S., et al., 2022). Unhealthy Internet use has been found to elicit symptoms of depressive episodes like sadness, lack of interest in activities previously enjoyed, and lack of energy, self-confidence, self-blame, suicidal ideation, indecision, and inattention (Y. Zhou, H. Li, L. Han, and S. Yin, 2021). In view of the above, it was really imperative to conduct further research in Pakistan regarding social media effects on mental health of humans, hence this study undertaken at Wapda Town, Lahore on the stated subject.

### 1.1. Problem statement

Social media is affecting mental and physical health of Pakistani nation day by day and there's a need to take positive steps to control social websites. Additional research is needed not only to assess social media side effects on physical and mental health among humans but also remedies how to manage data of these sites. This study sought to fill a significant gap by providing data to understand mental health problems that are arising among Pakistani nation due to over and irrelevant usage of social media websites. Here, PTA must take action with the help of broadcasting agencies to ban such social media sites like tiktok and others which are displaying only dance videos to our nation and deteriorating the minds of Pakistani nation.

### 1.2. Significance of the study

The proposed study is essential due to the limited number of research studies conducted on how population of Pakistan is responding to increased social media use and the impact on mental health. The observation of a technological society has brought to question what the impacts of high social media use are on a client's mental health. As society evolves into a digital culture, mental health practitioners need to be prepared to screen clients for possible negative side effects of heavy social media. The findings of this study will have

implications for the field of social services by identifying gaps in service provision, assessment, and treatment planning with respect to social media's impact on mental health. Although this study's main emphasis is on the micro-level, the findings may contribute to social service provision on a macro level by updating service accessibility and policies regarding social media outlets.

### 1.3. Research objectives

Here are some key objectives of this study as under:

- ◆ To determine negative and positive impacts of social media on mental health of Pakistani Population.
- ◆ To study whether people are spending most of their free time in social and how it is going to impact mental health of different age group.

### 1.4. Key term definitions (Conceptual & Operational)

- **Mental health (Conceptual definition)**

The World Health Organization (WHO) conceptualizes mental health as a "state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community".

- **Mental health (Operational definition)**

It is a state in which we may successfully manage the stresses in our life, contribute more to society, and carry out our everyday tasks in an effective and efficient manner.

- **Social media (Conceptual definition)**

Social media refers to the means of interactions among people in which they create, share, and/or exchange information and ideas in virtual communities and networks.

- **Social media (Operational definition)**

Social media is a collective term for websites and applications that focus on communication, community-based input, interaction, content-sharing and collaboration. People use social media to stay in touch and interact with friends, family and various communities

## MATERIALS & METHODS:

### 3.1. Study design

A descriptive cross-sectional, quantitative design employed in this research investigation because a descriptive study requires a researcher to observe,

describe, and record many aspects of an event (Sousa, et al. 2007). Through the use of fresh data or the preservation of current data, this approach aids the investigator in obtaining critical information (Ingham-Broomfield, 2015).

### 3.2. Study population

Total population was 130 residents living in the area of Wapda Town, Lahore

### 3.3. Study setting

A study setting or study area is the area in which the research was done. So, current study conducted at Wapda Town, Lahore.

### 3.4. Study duration

Study was continued for the period of 6 weeks from (01-04-2023) to (15-05-2023).

### 3.5. Sample size

In the population of 130 the following sample size was determined by using the listed below formulae where N indicating Population size:

$$N = \text{Population} = 130$$

$$n = \text{Sample Size}$$

$$E = \text{Margin error} = 0.05$$

$$n = \frac{N}{1 + N(E)^2}$$

$$n = \frac{130}{1 + 130(0.05)^2}$$

$$n = \frac{130}{1 + 130(0.0025)}$$

$$n = \frac{130}{1 + 0.325}$$

$$n = \frac{130}{1.325}$$

$$n = 98.11$$

Thus a more suitable sample of n=98 considered for the study.

### 3.6. Sampling technique

Non-probability, convenient sampling techniques adopted for the study.

### 3.7. Sample selection criteria

#### a. Inclusion criteria

- Participants having age between 18 years to 35 years old included in the study.
- Both male & female participated in the study.
- Participants using social media included in the study.

#### b. Exclusion criteria

- Participants having age range less than 18 years and above than 35 years excluded from the study.
- Participants who were not using social media excluded from the research work.

### 3.8. Data collection procedure

After receiving approval from ethical review board, data collected within 6 weeks. The

researchers self-visited the area and introduced themselves to the community residents and disclosed the purpose of the study. Each participant had a full understanding of the study's objectives and the freedom to accept or decline participation. Each participant asked for their informed consent. Each questionnaire coded with numbers instead of the participants' names in order to protect participant privacy.

### 3.9. Data collection tool

Self-administered, structured questionnaires having close-ended questions as well as Likert Scale was also used to evaluate the mental health of study participants.

### 3.10. Ethical consideration

Initially, ethical clearance was obtained from New Advance College of Nursing and Health Sciences Institutional Review Board. The purpose and nature of the study explained to the study participants and then written informed consent. All participants were informed that obtained data only to be used for research purpose. Confidentiality and anonymity of the subjects was maintained by keeping nameless the questionnaire.

### 3.11. Pilot test

Piloting is the testing, refining, and re-testing of survey instruments in the field to make them ready for your full survey. It is a vital step to ensure that you understand how your survey works in the field, that you are collecting accurate, appropriate data.

**Table No. 4.1.: Socio-demographic data and social media usage characteristics of study participants (n=98)**

Participant's characteristics and info regarding social media usage	Frequency (f)	Percentage (%)
<b>Age (Years)</b>		
18-20 years	25	25.51
21-23 years	19	19.39
24-26 years	15	15.31
27-29 years	18	18.37
30-32 years	11	11.22
33-35 years	10	10.20
<b>Total</b>	<b>98</b>	<b>100.00</b>
<b>Gender</b>		
Male	50	51.02
Female	48	48.98
<b>Total</b>	<b>98</b>	<b>100.00</b>
<b>Marital status</b>		

Researchers self-visited the area with a rough draft of the questionnaire to check the validity and reliability of the questionnaire and then started the survey.

### 3.12. Data analysis

After data collection input, first, descriptive analysis performed aiming an understanding of the demographic characteristics of participants in this study. Statistical Package for the Social Sciences (SPSS) version 2022 utilized for the analysis of data. Frequencies and percentages calculated for all the demographic variables and the responses of the questionnaire.

### RESULTS:

A descriptive, cross-sectional study conducted regarding effects of social media on mental health at Wapda Town, Lahore in which adults having age 18 years to 35 years participated. In the population of 130 participants only 98 participants meet the criterion of the study. Out of 98 participants 25.51% belonged to age (18-20) years; 19.39% participants were between the ages of (21-23) years; 15.31% participants having age range (24-26) years; 18.37% participants belonged to age group (27-29) years; 11.22% participants having age range (30-32) years and remaining 10.20% participants were between the age of 33 to 35 years old as displayed in the table no. 4.1. & figure 4.1.

Single	77	78.57
Married	21	21.43
<b>Total</b>	<b>98</b>	<b>100.00</b>
<b>Qualification</b>		
Illiterate	17	17.35
Primary	19	19.39
Matric/FSC/FA	18	18.37
Bachelors	23	23.47
Masters	21	21.43
<b>Total</b>	<b>98</b>	<b>100.00</b>
<b>Profession</b>		
Student	25	25.51
Employed	22	22.45
Non-employed	23	23.47
Business man/women	9	9.18
Teacher	19	19.39
<b>Total</b>	<b>98</b>	<b>100.00</b>
<b>Socio-economic status</b>		
Upper-class	21	21.43
Middle-class	29	29.59
Lower-class	48	48.98
<b>Total</b>	<b>98</b>	<b>100.00</b>
<b>Internet availability</b>		
Yes	98	100.00
No	0	0.00
<b>Total</b>	<b>98</b>	<b>100.00</b>
<b>Frequently used social media sites</b>		
Facebook	9	9.18
Twitter	10	10.20
Instagram	14	14.29
What's app	11	11.22
Youtube	15	15.31

Snapchat	4	4.08
Tiktok	7	7.14
All of them	28	28.57
<b>Total</b>	<b>98</b>	<b>100.00</b>
<b>Frequently used electronic tool for social networking</b>		
Laptop	21	21.43
Smart phone	60	61.22
Media tablet	9	9.18
All of them	8	8.16
<b>Total</b>	<b>98</b>	<b>100.00</b>
<b>How much time spend daily on social media</b>		
1 hour	2	2.04
2 hours	4	4.08
3 hours	6	6.12
4 hours	9	9.18
5 hours	10	10.20
6 hours	38	38.78
> 6 hours	29	29.59
<b>Total</b>	<b>98</b>	<b>100.00</b>
<b>You use social media for which purpose</b>		
Entertainment	11	11.22
Educational	15	15.31
To kill time	32	32.65
Entertainment	20	20.41
To socialize	12	12.24
To earn money	8	8.16
<b>Total</b>	<b>98</b>	<b>100.00</b>

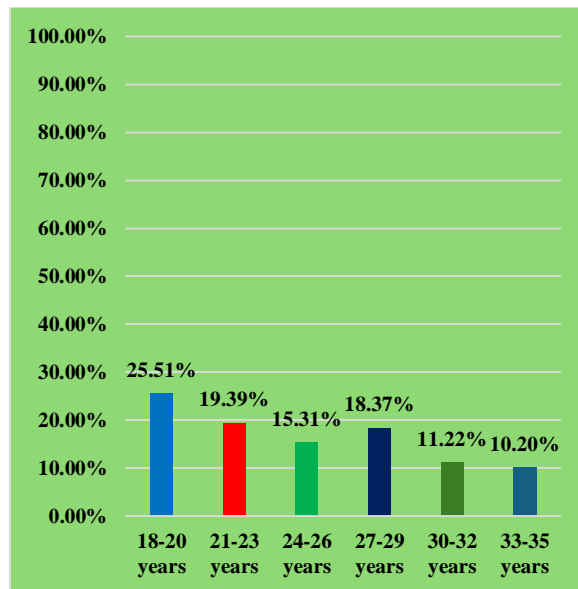


Figure No. 4.1. : Age of study participants

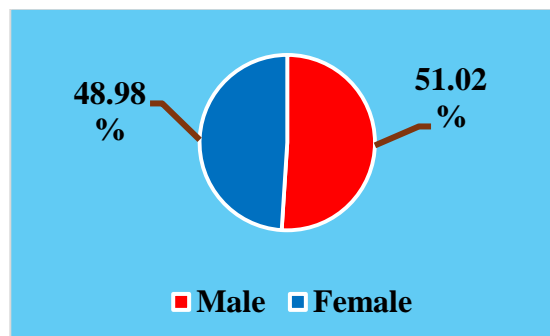


Figure No. 4.2. : Gender classification of study participants

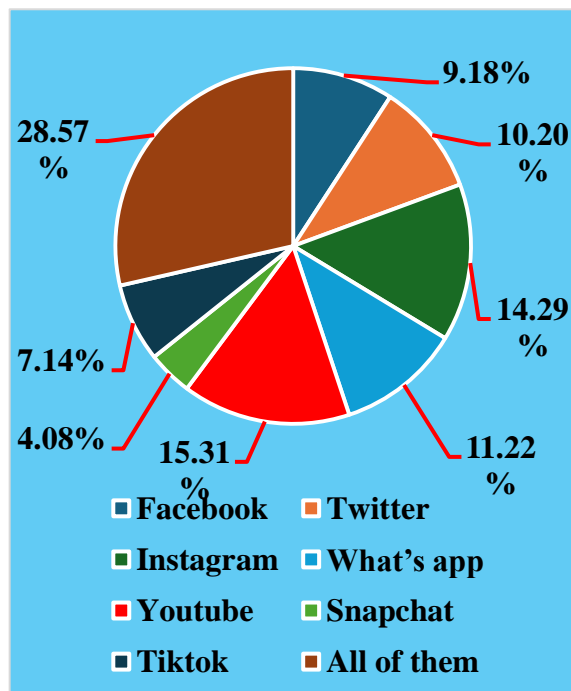


Figure No. 4.3. : Status of frequently used social media sites

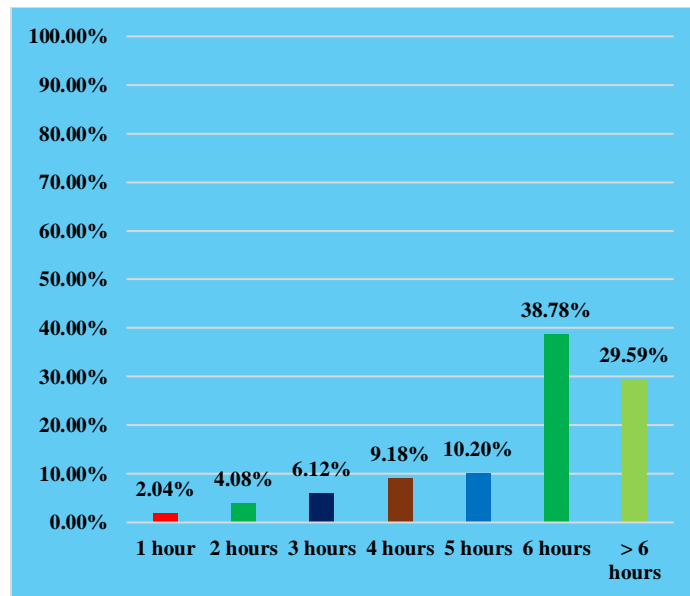


Figure No. 4.4. : Time spend daily on social media

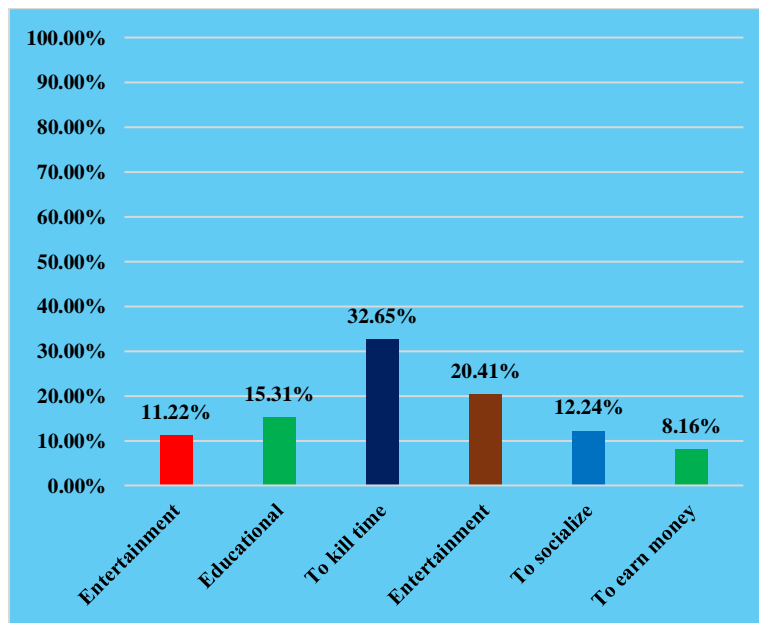


Figure No. 4.5. : Purpose of usage of social media

Regarding assessment of social media effects on mental health, in the sample of 98 participants 66.33% participants said that they felt sleepless/bad tempered because of over usage of social media; 13.27% said sometimes; 20.41% reported often which indicated almost all of the participants had irregular sleep pattern and bad tempered after excessive usage of social media. 56.12% participants stated that they used 2 hours social media before going to bed; 34.69% said 1 hour and only 9.18% used social media > 3 hours before going to bed as shown in the table no. 4.2.

Table No. 4.2. : Evaluation of study participants' mental health who used social media (n=98)

Sr. No.	Questions	Responses	Frequency (f)	Percentage (%)
1	Do you believe that social media can have an impact on an individual's mental health?	a. Yes	85	86.73
		b. No	13	13.27
<b>Total</b>			<b>98</b>	<b>100.00</b>
2	Are you knowledgeable about social media impact on mental health?	a. Yes	3	3.06
		b. No	95	96.94
<b>Total</b>			<b>98</b>	<b>100.00</b>
3	Have you ever felt sleepless/bad tempered because of over usage of social media?	a. Yes	65	66.33
		b. No	0	0.00
		c. Sometimes	13	13.27
		d. Often	20	20.41
<b>Total</b>			<b>98</b>	<b>100.00</b>
4	Have you ever disappointed /low after seeing other people lifestyle?	a. Never	1	1.02
		b. Yes	55	56.12
		c. Neutral	12	12.24
		d. Most of the time	30	30.61
<b>Total</b>			<b>98</b>	<b>100.00</b>
5	Do you think social media is affecting your mental health?	a. Highly effected	71	72.45
		b. A little bit effect	21	21.43
		c. Not at all	6	6.12
<b>Total</b>			<b>98</b>	<b>100.00</b>
6	How do you feel if you don't use social media whole day?	a. Relaxed	41	41.84
		b. I feel bored	4	4.08
		c. I feel cut off from the world	6	6.12
		d. I feel stressed	43	43.88
		e. It may not effect anything at all	4	4.08
<b>Total</b>			<b>98</b>	<b>100.00</b>
7	How many hours you use social media before going to bed?	a. 1 hour	34	34.69
		b. 2 hours	55	56.12

		c. > 3 hours	9	9.18
		<b>Total</b>	<b>98</b>	<b>100.00</b>
8	Do you agree social media has positive impact on your life than negative?	a. Highly agree	19	19.39
		b. Agree	12	12.24
		c. Neutral	8	8.16
		d. Disagree	45	45.92
		e. Highly disagree	14	14.29
		<b>Total</b>	<b>98</b>	<b>100.00</b>
9	I feel unhappy and discouraged after using social media	a. Never	31	31.63
		b. Yes	34	34.69
		c. Neutral	7	7.14
		d. Most of the time	26	26.53
		<b>Total</b>	<b>98</b>	<b>100.00</b>
10	I think of death and suicide by excessive use of social media	a. Never	8	8.16
		b. Yes	30	30.61
		c. Neutral	7	7.14
		d. Most of the time	61	62.24
		<b>Total</b>	<b>98</b>	<b>100.00</b>
11	I feel disconnected from humans and feel loneliness	a. Every time	33	33.67
		b. Most of time	31	31.63
		c. A little bit	24	24.49
		d. Not at all	10	10.20
		<b>Total</b>	<b>98</b>	<b>100.00</b>
12	Excessive use of social media causing irregular sleep patterns, mental disorder as one can't perform daily responsibilities effectively and efficiently	a. Yes	72	73.47
		b. No	26	26.53
		<b>Total</b>	<b>98</b>	<b>100.00</b>
13	False rumors are being spread on social media which is directly affecting our mental and physical health	a. Highly agree	50	51.02
		b. Agree	21	21.43
		c. Neutral	4	4.08
		d. Disagree	11	11.22

		e. Highly disagree	12	12.24
		<b>Total</b>	<b>98</b>	<b>100.00</b>
14	I feel depressed to see luxurious life styles on social media sites	a. Yes	51	52.04
		b. No	6	6.12
		c. Sometimes	29	29.59
		d. Often	12	12.24
		<b>Total</b>	<b>98</b>	<b>100.00</b>
15	Have you ever attended trainings/seminars/workshops regarding the impact of social media use on mental health?	a. Yes	98	100.00
		b. No	0	0.00
		<b>Total</b>	<b>98</b>	<b>100.00</b>

In the sample of 98 participants, 61.22% said that they feel unhappy and discouraged after using social media; 31.63% said never whereas 7.14% participants gave neutral statement about it. Even 33.67% participants reported that they feel loneliness and disconnected from humans because of social media; 31.63% said most of the time; 24.49% said a little bit and only 10.20% said not at all. 52.04% participants reported that they also feel depressed to see the luxurious life styles on social media; 29.59% said sometimes; 12.24% reported often they feel and only 6.12% reported they didn't as recorded in the table no. 4.2.

### DISCUSSION:

As current study administered regarding social media effects on mental health of humans in which total 98 participants participated and it is revealed from the result findings that social media having adverse effects on the mental and physical health of Pakistani population. Adverse effects of social media are dependent upon the usage hours and activity for which is being used. Majority of study participants using social media @ 6hrs/day and 2 hours before going to bed as well as they also felt disconnection from humans during the usage of social media which is very alarming as human is a social animal and his/her mental physical health is directly proportional to the socialism not virtual communication.

We admitted the finding of (Twenge & Campbell, 2019) they showed that cutting back on social media use has a positive impact on mental health outcomes, including as lower levels of anxiety and depression, higher levels of self-esteem, and better social connections. This study supports our conclusions that Pakistani society's mental and physical health are being negatively impacted by excessive usage of social media.

Another study by (Kamalikhah T et al., 2021) is consistent with the findings of our survey, which showed that the majority of the male participants used social media, whereas another finding, which showed that the average daily time spent using a smartphone was four hours. On the other hand, the

majority of study participants in the current study used social media for 6 hours every day.

Current result findings is also similar to the findings of (Lawrence Ejike Ugwu, et al., 2023) who came to the conclusion that social media use has been linked to negative health outcomes, it is important to understand that it can also have a good impact on mental health. To fully understand the intricate connections between social media use and outcomes related to mental health, more study is required.

Another study by (Shehbaz Aslam, Babar Sohail, Faiz Ullah, 2021) also is similar to the findings of current result as there's a causal relationship between social media usage and mental health and provide future policies and guidelines for healthy social. On the other side, current study result is consistent with the findings of (Nadia Naureen et al., 2022) who showed majority of people spend 6 hours daily on their phone/laptop. In the light of the survey conducted, it is recommended that maintaining balance in the social media usage time is very important otherwise, it could disturb the mental health.

The current study's findings indicated that men were more likely than women to use social media, and that single individuals were more hooked to it than married ones. Additionally, the study demonstrated that there is no distinction between people with and without literacy when it comes to

using social media. Both participants are utilizing social media, but their goals for using it vary. Participants who used social media before bed had more disturbed sleep patterns, which made it difficult for them to carry out their daily obligations. There is no difference in the study participants' professions; all of them used social media, had smartphones, and had access to the internet.

### CONCLUSION:

As a result, Pakistan's national mental health is being harmed by excessive social media use. People spend six hours every day on various social media platforms for amusement and other purposes, which is quite concerning because Pakistani youth are not using social media in a purposeful way, which is negatively affecting their mental health. Only a small percentage of people use it for online commerce, which has a beneficial effect and helps the nation's economy.

### OUTCOMES & UTILIZATION:

Most studies addressing social media use as a normal social behavior with positive or negative effects on health-related outcomes have conceptualized and measured social media use and its effects in terms of dose–effect relations. Current study can be utilized in future researches to address the adverse impacts of social media on mental health of Pakistani nation.

### RECOMMENDATIONS:

- ◆ Pakistani government with the contribution of PTA must ban irrelevant social websites which are deteriorating mental health of our youth.
- ◆ Advertising agencies/print media must disseminate adverse impacts of excessive use of social media.
- ◆ This problem must be arise via medical staff the radiation from smart phones can affect our nerve cells causing major mental problem, mood changes, depression and anxiety.
- ◆ It is really recommended that all the health workers must spread fitness information among Pakistani nation because health minds bring healthy outcomes in a society.
- ◆ Through mobile phone companies, adverse impact of excessive use of social media can be disseminate among general population.

### 5.5. IMPLICATION FOR FUTURE RESEARCHES

These findings implicated that the government should pay closer attention to the connection between widespread social media use and mental health issues. More research must be done for this aim in order to prevent social media use spreading anxiety and despair across the country.

### 5.6. LIMITATIONS OF THE STUDY

The limitations were identified by the evidence involved in the study and review process. Given the evidence from cross-sectional studies, it is not possible to conclude that the use of social networks causes mental health problems. Next, despite the fact that the proposed relationship between social media and mental health is complex, a few studies investigated mediating factors that may contribute or exacerbate this relationship. Further investigations are required to clarify the underlying factors that help examine why social media has a negative impact on some peoples' mental health, whereas it has no or positive effect on others' mental health.

### REFERENCES:

1. Faizullah, R., Aslam, S., & Saeed, M. U. (2021). ROLE OF SOCIAL MEDIA IN DETERMINING THE POLITICIANS' ACCOUNTABILITY IN PAKISTAN. *Harf-o-Sukhan*, 5(4), 647-653.
2. Digital News Report (2020).
3. O'Reilly M, Dogra N, Whiteman N, Hughes J, Eruyar S, Reilly P (2018). Is social media bad for mental health and wellbeing? Exploring the perspectives of adolescents. *Clin Child Psychol Psychiatry.*, 23:601-613. 10.1177/1359104518775154
4. O'Dea. (2022). Number of smartphone subscriptions worldwide from 2016 to 2027. Statista. <https://www-statista-com.ezproxy2.utwente.nl/statistics/330695/number-of-smartphone-users-worldwide/#statisticContainer>
5. Ceci, L. (2022). Leading Android apps worldwide 2022, by downloads. Statista. <https://www-statista-com.ezproxy2.utwente.nl/statistics/693944/leading-android-apps-worldwide-by-downloads/>
6. Abi-Jaoude, E., Naylor, K. T., & Pignatiello, A. (2020). Smartphones, social media use and youth mental health. *CMAJ*, 192(6), E136–E141. <https://doi.org/10.1503/cmaj.190434>
7. Marino, C., Gini, G., Vieno, A., & Spada, M. M. (2018). A comprehensive meta-analysis on problematic Facebook use. *Computers in Human Behavior*, 83, 262–277. <https://doi.org/10.1016/j.chb.2018.02.009>
8. Thai, H., Davis, C. G., Mahboob, W., Perry, S., Adams, A., & Goldfield, G. S. (2023). Reducing Social Media Use Improves Appearance and Weight Esteem in Youth With Emotional Distress. *Psychology of Popular Media*. 10.1037/ppm0000460.
9. Kleemans, M., Daalmans, S., Carbaat, I., & Anschutz, D. (2018). Picture Perfect: The Direct Effect Of Manipulated Instagram

- Photos On Body Image In Adolescent Girls. *Media Psychology*, 21(1), 93–110. <https://doi.org/10.1080/15213269.2016.1257392>
10. Bickham, D.S., Hunt, E., Bediou, B., & Rich, M. (2022). *Adolescent Media Use: Attitudes, Effects, and Online Experiences*. Boston, MA: Boston Children’s Hospital Digital Wellness Lab. Internet World Stats. Pakistan (2019).
  11. We are Social. <https://datareportal.com/reports/digital-2021-pakistan> (2022).
  12. Y. Zhou, H. Li, L. Han, and S. Yin, (2021). “Relationship between big five personality and pathological internet use: mediating effects of loneliness and depression,” *Frontiers in Psychology*, vol. 12, article 739981.
  13. Cambridge Dictionary. Social networking site (2019).
  14. Smith, K. (2019). 126 Amazing Social Media Statistics and Facts.
  15. Mohsin, M. (2020). Top 10 Facebook Statistics You Need to Know.
  16. Hunt, M. G., Marx, R., Lipson, C., & Young, J. (2018). No more FOMO: Limiting social media decreases loneliness and depression. *Journal of Social and Clinical Psychology*, 37(10), 751-768.
  17. Twenge, J. M., Haidt, J., Lozano, J., & Cummins, K. M. (2022). Specification curve analysis shows that social media use is linked to poor mental health, especially among girls. *Acta psychologica*, 224, 103512.
  18. Twenge, J. M., & Campbell, W. K. (2019). Media use is linked to lower psychological well-being: Evidence from three datasets. *Psychiatric Quarterly*, 90, 311-331.
  19. Lawrence Ejike Ugwu , Erhabor Sunday Idemudia , Olive O. Chukwu , and Maria Chidi Christiana Onyedibe (2023). Measuring the Impact of Social Media on Young People’s Mental Health: Development and Validation of the Social Media-Induced. <https://doi.org/10.1155/2023/8677521>
  20. Nadia Naureen et al., (2022). Impact of social media on mental health of youth in Pakistan. *PJAEE* 19(2): pp. 1378-1393.
  21. Kamalikhah T et al., (2021). The Impacts of Excessive Use of Social Media on Iranian Adolescents Health: A Qualitative Study. *Middle East J Rehabil Health Stud*; 8(4). <https://doi.org/10.5812/mejrh.109561>.