

**MS THESIS**

**RELATIONSHIP BETWEEN SOCIAL MEDIA  
ADDICTION AND STUDENTS' MENTAL HEALTH AT  
UNIVERSITY LEVEL**



**Researcher**

AQSA WAJID ABBASI

411-FSS/MSEDU/F21

**Supervisor**

DR. SHAMSA AZIZ

**Co. Supervisor**

DR. ALINA RAZA

**DEPARTMENT OF TEACHER EDUCATION**

**FACULTY OF EDUCATION**

**INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD**

(May, 2024)

**RELATIONSHIP BETWEEN SOCIAL MEDIA ADDICTION  
AND STUDENTS' MENTAL HEALTH AT  
UNIVERSITY LEVEL**



**Aqsa Wajid Abbasi**

**Reg.no: 411-FSS/MSEDU/F21**

A thesis submitted in partial fulfillment  
of the requirement for the degree of  
MS in Education

**DEPARTMENT OF TEACHER EDUCATION**

**FACULTY OF EDUCATION**

**INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD**

**(May, 2024)**

## APPROVAL SHEET

### RELATIONSHIP BETWEEN SOCIAL MEDIA ADDICTION AND STUDENTS' MENTAL HEALTH AT UNIVERSITY LEVEL


By

Aqsa Wajid Abbasi

411-FSS/MSEDU/F21

This thesis has been accepted by the Department of Teacher Education, Faculty of Education, International Islamic University Islamabad in partial fulfillment of the degree of MS Education.

Supervisor:

  
Dr. Shamsa Aziz

Co-Supervisor:

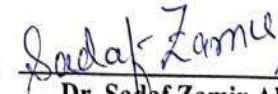
  
Dr. Alina Raza

Internal Examiner:

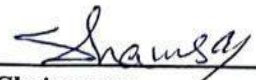



Dr. Fouzia Ajmal

External Examiner:

  
Dr. Sadaf Zamir Ahmed

Dated: \_\_\_\_\_

  
Chairperson  
Department of Teacher Education  
International Islamic University  
Islamabad- Pakistan

  
Dean  
Faculty of Education  
International Islamic University  
Islamabad- Pakistan

## **DEDICATION**

The study is dedicated to my beloved parents who have been source of inspiration, guidance and strength for me and continually provide their moral, spiritual, emotional and financial support.

## SUPERVISORS' CERTIFICATE

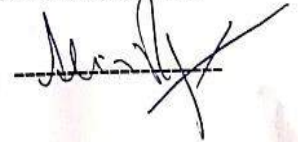
The thesis entitled "RELATIONSHIP BETWEEN SOCIAL MEDIA ADDICTION AND STUDENTS' MENTAL HEALTH AT UNIVERSITY LEVEL" submitted by Aqsa Wajid Abbasi Reg. 411-FSS //MSEDU/F21 in partial fulfillment of MS Education has been completed under my guidance and supervision. I am satisfied with the quality of student's research work and allow her to submit this thesis for further process as per IIUI rules and regulations.

**Signature:**

**Dr. Shamsa Aziz**

  
-----

**Dr. Alina Raza**

  
-----

## **DECLARATION**

I declare that this thesis has been composed by me and that it has not been submitted, in whole or part, in any previous application for a degree. Except where stated by reference or acknowledgement, the work presented is entirely my own.

Name      Aqsa Wajid Abbasi

Signature

## **ACKNOWLEDGEMENTS**

First of all, the researcher would like to thank the Almighty Allah for his enduring grace, guidance and protection that He has bestowed upon me during this research project.

The researcher also extends her sincere gratitude and appreciation to supervisor, Dr. Shamsa Aziz for her guidance, motivation, patience and encouragement throughout the entire research process. Her insights and feedback have been helpful in shaping the direction of the study.

The researcher is grateful to all faculty members especially Dr. Alina Raza, for their support, guidance and cooperation. Her encouragement and constructive feedback have been vital in completion of this research.

The researcher is grateful to Dr. Humaira for her valuable insights and for overseeing the progress of this thesis. Without her guidance and support this work have not been accomplished.

The researcher is also grateful to her parents who have continuously supported her financially, morally to accomplish this study and for their guidance, encouragement and inspiration to her throughout the life. The researcher also expresses a very special thank them for their parental presence and constant guidance, especially to her father who has always been there for her.

Aqsa Wajid Abbasi

## Table of Contents

Abstract.....	vii
Chapter 1.....	1
Introduction.....	1
1.1 Background and Context of the Study.....	1
1.2 Problem Statement.....	5
1.3 Significance of the Study.....	5
1.4 Objectives of the Study:.....	6
1.5 Research Question.....	6
1.6 Research Hypotheses.....	6
1.7 Delimitations of The Study.....	6
1.8 Operational Definitions.....	7
1.8.1 Social Media.....	7
1.8.2 Social Media Addiction.....	7
1.8.3 Mental Health.....	7
1.9 Conceptual Framework /Theoretical Framework.....	8
CHAPTER 2.....	9
LITERATURE REVIEW.....	9
2.1 Review of Related Literature.....	9
2.1.1 Social Media Platforms.....	10
2.1.1.1 Snap Chat.....	10
2.1.1.2 Pinterest.....	10
2.1.1.3 Youtube.....	10
2.1.1.4 Instagram.....	10
2.1.1.5 The Rise of the Twitter Platform.....	11
2.1.1.6 Impact of Negative Tweets.....	11
2.1.1.7 Tiktok.....	11
2.1.1.8 Linkedin.....	11
2.1.2 Concept of Social Media Addiction.....	12
2.1.2.1 Concept of Technology Addiction and Internet Addiction.....	12
2.1.3 Concept of Mental Health.....	14
2.1.3.1 Importance Of Mental Well Being.....	15
2.1.4 Social Media Addiction and Student’s Mental Health.....	16
2.1.5 Social Media Impact on Mental Health.....	20



2.1.5.1 Social Media and Anxiety .....	21
2.1.5.2 Stress and Social Media.....	21
2.1.5.3 Depression and Social Media .....	22
2.1.5.4 Social Media and Loneliness .....	23
<u>2.1.6</u> Mental Health & Social Relationships.....	23
2.1.7 Fear Of Missing Out.....	24
2.1.7.1 Concept Of Fomo .....	24
2.1.7.2 Effect of Signals and Notifications.....	25
2.1.8 Social Media Addiction and Social Anxiety .....	25
2.1.9 Social Media Addiction and Cyberbullying .....	27
2.1.9.1 Concept Of Cyberbullying.....	27
2.1.9.2 Social Media Addiction and Cyber Bullying .....	28
2.1.10 Social Media Addiction and Sleep Deprivation .....	29
2.1.11 The Impact of Sleep Deprivation on Mental Health .....	30
2.1.12 Social Media Addiction and Feelings Of Inadequacy.....	31
2.1.12.1Contribution of Social Media Addiction to Feelings of Inadequacy.....	31
2.1.13 Fear of Missing Out And Students’ Mental Health .....	33
2.1.14 Social Media Addiction Role and FOMO.....	33
2.2 Empirical Review .....	34
2.3 Critical Summary .....	35
CHAPTER 3 .....	37
RESEARCH METHODOLOGY .....	37
3.1 Research Paradigm .....	37
3.2 Research Design .....	37
3.3 Population And Sample Of The Study .....	37
3.4 Research Instrument .....	39
3.5 Procedure (Validity) .....	40
3.6 Reliability.....	40
3.7 Data Collection .....	41
3.8 Data Analysis .....	41
3.9 Ethical Consideration.....	41
CHAPTER 4 .....	42
DATA ANALYSIS AND INTERPRETATION.....	42
4.1 Graphical Representations .....	42

4.2	Descriptive Statistics.....	46
CHAPTER 5 .....		79
SUMMARY, FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS .....		79
5.1	Summary .....	79
5.2	Findings .....	79
5.3	Discussion.....	83
5.4	Conclusions.....	82
5.5	Recommendations.....	86
5.5	Recommendations For Future Researchers .....	87
REFERENCES .....		88
Appendix I.....		103
Appendix II.....		107

## **LIST OF FIGURES**

Figure 1.1 Conceptual Framework.....	08
--------------------------------------	----

## LIST OF TABLES

Table 3.1	Faculty of Education.....	38
Table 3.2	Faculty of Social Sciences.....	39
Table 3.3	Population and Sample of the Study.....	49
Table 4.1	Level of addiction among students of first four semester.....	50
Table 4.2	Level of Addiction among Students of 5th & 8 <sup>th</sup> semester.....	50
Table 4.3	Frequency of Sleep hours during night.....	51
Table 4.4	Spending time on Social Media after going to bed.....	52
Table 4.5	Responding Anything on Social Media at Night.....	52
Table 4.6	Symptoms of Sleep Deprivation during Day.....	52
Table 4.7	Frequency of Lack of Healthy Sleep.....	54
Table 4.8	Sleep deprivation.....	63
Table 4.9	Feelings of inadequacy.....	56
Table 4.10	Victim of Cyberbullying.....	60
Table 4.11	Frequency of status of victimization.....	61
Table 4.12	Online bullying.....	62
Table 4.13	Fear of missing out.....	64
Table 4.14	Social Anxiety.....	68
Table 4.15	Loneliness.....	71
Table 4.16	Relationship between SMA and Sleep Deprivation.....	76
Table 4.17	Relationship between SMA and Feelings of Inadequacy.....	77
Table 4.18	Relationship between SMA and Online bullying.....	77
Table 4.19	Relationship between SMA and Fear of Missing Out.....	78
Table 4.20	Relationship between SMA and Social Anxiety.....	78
Table 4.21	Relationship between SMA and Loneliness.....	79
Table 4.22	Relationship between SMA and Students' Mental Health.....	79

## **LIST OF ABBREVIATIONS**

FOMO	Fear of Missing Out
SMA	Social Media Addiction
SNS	Social Networking Sites

## **Abstract**

Social media has become immensely popular during the last one decade. Users have easy access to the dynamic and virtual social media platforms, which may encourage overuse and ultimately lead to social media addiction. Therefore, study aimed to find the relationship between social media addiction and students mental health at university level. The objectives of the study was to a) determine the students' level of addiction to social media usage. b) To explore students' mental health at university level and c) to investigate the relationship between university students' mental health and social media addiction. The study was delimited to Female campus of International Islamic University Islamabad. The study was further delimited to under graduate students of Faculty of Education and Faculty of Social Sciences. The study was quantitative in nature. Five-point Likert scale Questionnaire was used to collect data. The validity of the instrument was checked by the social sciences experts from the international Islamic university Female campus. The reliability of the questionnaires was measured by the Cronbach Alpha method by using SPSS. Sample was taken from undergraduate students of Faculty of Education and Faculty of Social Sciences. The sample size of the study was 347. Stratified proportionate sampling technique was used to select sample from the population. The researcher personally visited the university campus to collect data from the respondents. For the analysis of the quantitative data descriptive and inferential statistics were applied and Mean was calculated using SPSS. The Person Product-Moment Correlation Coefficient was utilized to determine the relationship between students' mental health and social media addiction. The results showed that students of age group 21-24 were highly addicted to social media while students of age group 18-20 years were moderately addicted to social media usage. According to the study's findings, there is an important relationship between university students' mental health and social media addiction. It was recommended that universities may organize seminars and workshops to increase awareness about social media addiction and mental health outcomes. These session may provide students with knowledge and strategies to recognize and manage social media addiction.

**Keywords:** Social media, Social media addiction, mental health

# CHAPTER 1

## INTRODUCTION

Social media use in society's culture and lifestyle seen to be increase with the development of information and communication technology. As claimed in the research that the highest online social media users are adolescents, college and university students (from age 18 to 28) as they are repeatedly associated with the social networking sites (Oueder & Abousaber, 2018). In Pakistan, the availability of smartphones and technological devices in any circumstances leads to social media addiction among the students. Social media stances both positive and negative scope that can impact students either positively or negatively. The positive is that it acknowledge students to share and publish and get information, share ideas at anywhere and anytime they want (Mukhtar et al., 2018). However, excessive social media usage surely has an association with students' life especially on their mental health.

### 1.1 Background and Context of the Study

In recent years, era of digital media and information communication technology the ways of communication has been changed completely. Especially, prevailing Internet-related applications such as social media (YouTube, WhatsApp, Facebook, Twitter, or Instagram) have played indispensable role in this way (Stone & Wang, 2018). Social media now has become the most inseparable part of individual's lives with the expeditious development of information and communication technology. Social media deals with any website or network that permits the individuals for social interaction, communication and exchange of ideas and feelings globally (O'Keefe & Pearson, 2014). Social media may include social networking sites such as Facebook, WhatsApp, photo/video sharing sites, Twitter, Instagram, YouTube, blogging sites, interactive video gaming Apps such as World of Warcraft or PUB G, messaging Apps, discussion forums, and email (Subrahmanyam & Greenfield, 2015). According to the studies, Social media is one of the newest and most popular internet services, which has caused significant progress in the social systems of different countries in the recent years (Lebni., et al, 2020). The use of the Internet has become popular among people in such a way that its use has become inevitable and has made life difficult for those who use it excessively (Huang, 2017). Social media has attracted the attention of millions of users around the world owing to the possibility of fast communication,

access to a large amount of information, and its widespread dissemination [Azizi & Surosh, 2019). Facebook, WhatsApp, Instagram, and Twitter are the most popular media that have attractive and diverse spaces for online communication among users, especially the young generation (Chao and hasiao, 2016). According to studies, at least 55% of the world's population used social media in 2022 (Andreassen and Pallen, 2014). Iranian statistics also indicate that 78.5% of people use at least once social media. WhatsApp, with 71.1% of users, Instagram, with 49.4%, and Telegram, with 31.6% are the most popular social media among Iranians (O'Keefe & Pearson, 2014).

The use of social media has increased significantly in all age groups due to the origin of the COVID-19 pandemic. It affected younger people, especially students, due to educational and other purposes (Lamia, 2018). Because of the sudden onset of the COVID-19 pandemic, educational institutions and learners had to accept eLearning as the only sustainable education option (Mukhtar et al., 2018). The rapid migration to E-learning has brought several challenges that can have both positive and negative consequences. Unlike traditional media, where users are passive, social media enables people to create and share content; hence, they have become popular tools for social interaction (Siddiqi & Singh, 2016). The freedom to choose to participate in the company of friends, anonymity, moderation, encouragement, the free exchange of feelings, and network interactions without physical presence and the constraints of the real world are some of the most significant factors that influence users' continued activity in social media. In social media, individuals can interact, maintain relationships, make new friends, and find out more about those they know offline (Mahmood et al., 2020). However, this popularity has resulted in significant lifestyle changes, as well as intentional or unintentional changes in various aspects of human life.

Furthermore, social media addiction is a type of Internet or technology addiction in which a person has an excessive desire to utilize social media (Griffiths et al., 2013). The usage of social media and the internet by university students has increased significantly in recent years due to their increasing technological needs. University students now have more access to the internet; hence they have more chances to stay online than they had in the past (Lenhart, 2015). Majority of the students now own their gadgets with internet access (such as computers, iPads, Smartphones and video games) which allow them to go online without time constraints.



Furthermore, social media use can overcome to the extent that it hinders with many other aspects of daily activities (Griffiths, 2000, 2012). According to Andreassen and Pallen (2014) social media addiction is defined as spending excessive amount of time on social media activities due to an uncontrollable desire that results in mismanagement of other important tasks in life. Number of academic, mental, emotional and health issues are associated with over use of social media (Marino et al., 2017).

In addition, according to research by Mukhtar et al. (2018), 59% of social media users were between the ages of 18 and 29. They spend on average, forty minutes or more every day. According to recent studies, half of the students in the sample had a moderate level of internet addiction (Lamia, 2018). Additionally, it revealed that most students enjoy spending their entire day online, demonstrating how dependent they are on social media. Excessive time spend in social networking sites can divide the concentration and shift focus from the task (Siddiqui & Singh, 2016). Williams and Teasdale (2018) observed that the students who use social media for eventually long time, they may fall in mental health issues. Oberst et al. (2017) have featured the effects of internet use that particularly impacts on individual's psychological wellness, the addiction of social media causes behavioral and well-being issues among teenagers. The impact of internet-based life relies upon its use if an individual who utilizes too much social media, he will feel addicted towards it.

Furthermore, research has conclusively shown that social media addiction is a rising problem among college students and is linked to their mental health (Mahmood et al., 2020). The World Health Organization (WHO) defines mental health as a condition of wellbeing in which people can recognize their own potential, manage everyday stressors, work effectively and efficiently, and give back to their communities (WHO, 2004). Anxiety, stress, and depression are the three mental health conditions that most frequently arise. The American Psychiatric Association defines a mental health issue as a social functioning difficulty that is associated with disorders involving shifts in an individual's emotion, thought process, and behavior.

Late-night social media users run the risk of sleep deprivation, which can lead to tension and headaches. The American Academy of Medicine states that students should get a minimum of 7 to 9 hours of sleep per night. Positive behavior, enhanced

focus, memory, and learning, as well as the control of emotional and mental health, are traits of good sleep quality. Sleep disruptions have a significant impact on the mental health of pupils. Understanding how and why students use social media as well as the connection between social media addiction and students' mental health is crucial for educators. Addiction to social media can have several negative effects, including a loss of focus among kids. Concentration problems are a common sign of depression, according to the National Alliance on Mental Illness. It is difficult to maintain connections and do effectively at work when one is not focused (Fried & Nesse, 2014).

Social media allows users to selectively showcase life by only selecting the finest moments. It can give a false impression that people must keep up and try harder to live a more desirable life. This can cause stress and lower self-esteem to an individual by putting unnecessary pressure on oneself to do better in life. An inability to establish and maintain real-life relationships can make a person turn to social media where connections are made easier. Someone who suffers from social anxiety may prefer to spend time in the virtual world as engaging does not require real-life interactions. Although an interaction in social media can make someone feel good, this effect is more temporary and less satisfying (Block, 2008).

In addition, social media use provides a chance for emotional and mental distress by getting threatening, harassing, or humiliating remarks from another teen. This is a common threat among university students. Whether a child is bullied online or outside, online bullying persists, spreading among classmates and damaging their reputation (Unicef - The State of the World's Children, 2017). The potential for bullies to hide behind a nameless profile, pose as someone other than themselves and – in a single click – instantly disseminate violent, hurtful or humiliating words or images is unprecedented. Moreover, once such content is posted, deleting it is difficult, which increases the risk of victims being revictimized and makes it hard for them to recover.

Furthermore, online bullying may occur to any young person online, and can cause profound psychosocial outcomes such as loss of concentration, depression, anxiety, stress, isolation, and, suicidal thoughts (Patchin & Hinduja, 2016). By taking this into account, researchers typically discover the connection between university students' mental health and social media addiction. To explore student's mental health

indicators would be feeling of inadequacy, sleep deprivation or disturbance, stress, online bullying, Isolation, Fear of missing out, burn out and self-esteem.

## **1.2 Problem Statement**

In the modern era, social media, the most influential source of interaction and information, the growing dimension of its use by the students cannot be miscalculated. Students now have an easy access to internet they can use it freely without anyone's permission and engage in different social media activities that leads to social media addiction. Social media addiction is characterized and driven by uncontrollable urge to use social media. Social media addiction is a growing concern among university students. Lack of supervision and self-regulation leads to negative impact on their mental health. Despite awareness about social media addiction there is still a lack of research on this topic. There is need to find association between social media addiction and students' mental health not only for medical specialists or health practitioners but for the educators so that they get to know about relationship between social media addiction and students' mental health. There is need to find solution to aware students' about social media addiction. Thus, the purpose of the study was to investigate the relationship between university students' mental health and social media addiction.

## **1.3 Significance of the Study**

The study will be significant to the teachers, students and parents. It will be significant for teachers as the study will provide in depth understanding of association between Social media addiction and students' mental health and to what extent students are addicted to it, so they will be able to motivate students for positive use of social media for learning purpose and to gain useful information. They will aware students about social media addiction and how it make them less productive. The findings of the study may lead to provide suggestions for addressing students, mental health regarding social media addiction. The study will also be beneficial for the future researcher as they can take benefit from the study. Future researcher can get benefit from this study by using it as a starting point to further investigate the effects of social media addiction on student's mental health. They can identify further aspects of social media addiction such as comparing male and Females' level of addictiveness, reasons behind addiction and how it can be reduced. Additionally, the research can be used as reference for other studies that explore relationship of social media addiction on students' mental health.

#### **1.4 Objectives of the Study**

The objectives of the study were to:

1. determine students' level of social media addiction to social media usage.
2. explore students' mental health at university level.
3. find out relationship between Social media addiction and students' mental health.

#### **1.5 Research Questions**

RQ1. What is the level of social media addiction among the students?

RQ2. What is the level of students' mental health?

#### **1.6 Research Hypotheses**

H<sub>a1</sub>: There is a significant relationship between social media addiction and Sleep deprivation.

H<sub>a2</sub>: There is a significant relationship between social media addiction and Cyber bullying.

H<sub>a3</sub>: There is a significant relationship between social media addiction and Fear of Missing out.

H<sub>a4</sub>: There is a significant relationship between social media addiction and Feelings of inadequacy.

H<sub>a5</sub>: There is a significant relationship between social media addiction social anxiety.

H<sub>a6</sub>: There is a significant relationship between social media addiction and Loneliness.

H<sub>a7</sub>: There is a significant relationship between social media addiction and mental health

#### **1.7 Delimitations of the study**

The study was delimited to Undergraduate students of Faculty of Social Sciences and Education Female campus of International Islamic University Islamabad. The study was also delimited to YouTube, Facebook, Twitter, Instagram, Snapchat and TikTok.

## **1.8 Operational Definitions**

### **1.8.1 Social Media**

Social media is a term that is used for websites and applications that focus on community-based input, communication, interaction, collaboration and content sharing. Social media is a network used by the people to get and share information, interact with others at anywhere and anytime they want.

### **1.8.2 Social Media Addiction**

Addiction to social media is defined as a worsening reliance on engaging and influential platforms like Facebook, Instagram, Twitter, TikTok, and Facebook. Overuse of social media and difficulties abstaining are signs of social media addiction. (Diagnostic and Statistical Manual for Mental Disorders, 5th Edition).

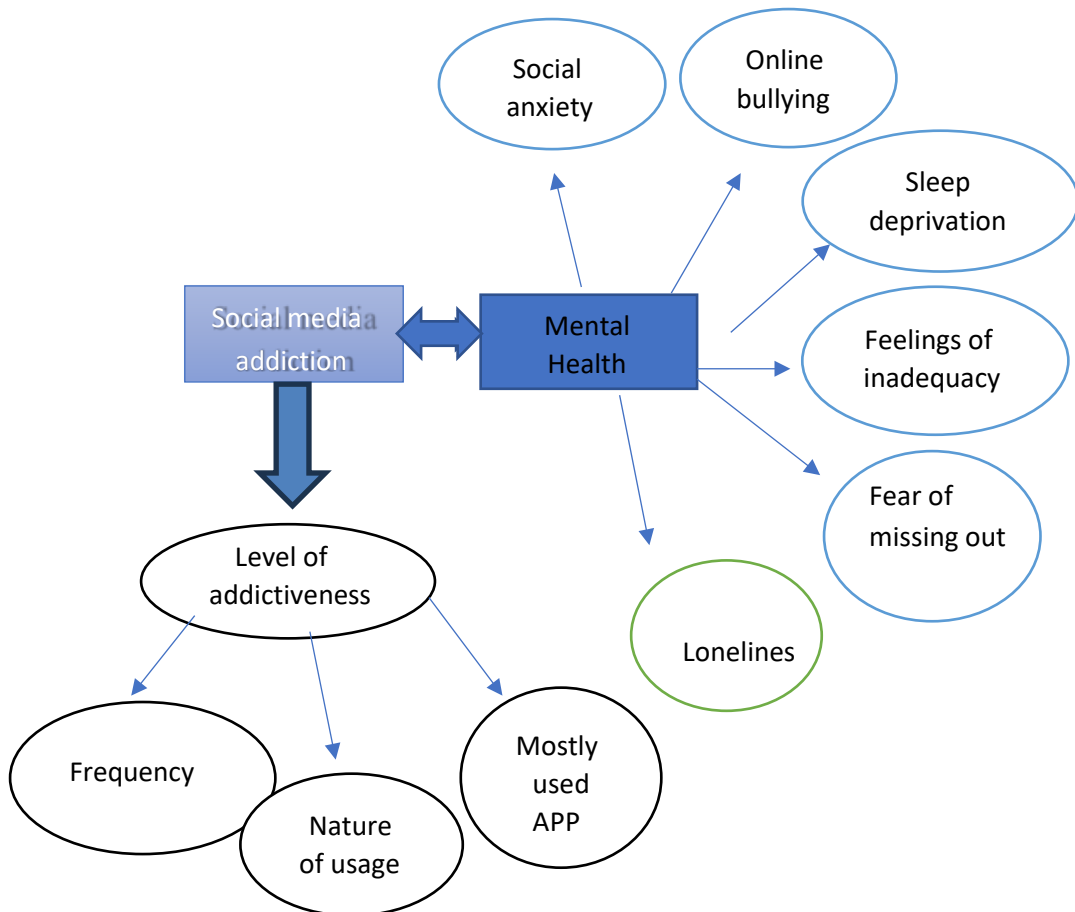
### **1.8.3 Mental Health**

Mental health refers to the state of mental well-being that enables an individual to cope with stresses of his life, realize their strength and abilities and contribute to the society. Individuals with mental health conditions are more likely to experience lower levels of mental well-being. Sleep deprivation, feelings of inadequacy, stress, online bullying are the factor that causes mental health issues. (UNICEF, 2017: The State of the World's Children).

## 1.9 Conceptual Framework

Figure 1.1

*Conceptual Framework*



Social media addiction is defined as spending excessive amount of time on social media activities due to an uncontrollable desire that results in mismanagement of other important tasks in life. Students' level of addictiveness including frequency, nature of usage and mostly used platforms was investigated. Studies has indicated an association between social media addiction and students' mental health. To explore students' mental health indicators was sleep deprivation, fear of missing out, feelings of inadequacy, social anxiety, online bullying and loneliness. A conceptual framework was proposed for the investigation of student's addiction towards social media usage and association between social media addiction and student's mental health,

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Review of Related Literature

^ Social media can be a useful tool for connecting with family or friends that live across the country or to learn new things, it becomes not as useful when adolescents are fixated on whatever is on their screen, using their social media as a distraction from feelings, certain emotions or avoiding homework. Being online for three or more hours per day has shown decreases in social skills, attention, focus, and mental health (George et al., 2018). George and the team also report that adolescents spend less social time in person with peers but substitutes that time by interacting with peers online.

The modern digital world offers nonstop technology making it almost impossible to unplug and it is increasingly evident that many psychological problems can be caused or exacerbated by such technology (Valley & Simecka, 2016). This constant connectivity might also result in greater levels of stress and dependency related to these technologies.

Adolescents who regularly use their smartphones for communication or social media sharing might experience distress and anxiety when they find themselves without access to their devices, and unable to post new content or immediately respond to friends' text messages and social media feedback (a condition sometimes called "nomophobia") (Hawk et al., 2019). They can also become overwhelmed by the amount of social media information they might need to process to maintain connection and avoid missing out on important events (Hawk et al., 2019). Along with connection, both self-disclosing and receiving positive feedback on social media posts are fundamentally rewarding experiences. Smartphones provide the opportunity for individuals to share new content and monitor its popularity constantly, which might create a behavior-reward feedback loop that serves as a basis for addiction. The clinical cataloging of social media and smartphone addiction are still debated and not currently classified as disorders in the DSM-V as it is stated that further studies are needed. However, numerous studies in recent years have linked compulsive or "addiction-like" social media and smartphone behaviors to numerous behavioral, emotional, social, and academic struggles among adolescents in North America, Europe, and Asia (Scot et al., 2019).

## **2.1.1 Social Media Platforms**

### **2.1.1.1 Snap Chat**

For Android, iPad, and iPhone smartphones, there is an app called Snapchat. Photos that expire in one to ten seconds can be sent by subscribers to other subscribers. An estimated 100 million people use Snapchat every day, with women making up over 70% of the user base (Smith, 2015). According to Wagner's (2014) research, over 77% of college students use Snapchat on a daily basis. Snapchat was most frequently used for creative purposes (73%) and for keeping in touch (27%). According to roughly 23% of the college students surveyed, Snapchat is simpler to use than texting.

### **2.1.1.2 Pinterest**

Pinterest is a personalized media platform which allows registered users to “pin” and organize media content into collections called pin boards. Users can also browse the content of others in their feed.

### **2.1.1.3 YouTube**

YouTube is a video sharing website. It is owned by Google. Unregistered users can watch videos and registered users can upload videos.

### **2.1.1.4 Instagram**

Instagram is another popular platform and has proven to be one of the fastest growing social media sites (Sheldon & Bryant, 2016). Instagram was initially started as a mobile-only site and could only be accessed through a smartphone application (Sheldon & Bryant, 2016). The research indicated the growth of this platform gained popularity, and may have contributed to, the excessive smartphone usage and the potential development of smartphone addictions.

The focus of Instagram is on sharing photographs and live-streaming videos, which can be accessed and viewed by any individuals with an Instagram account. Research has also found higher levels of envy and depression for individuals who engage in social comparisons of the photos and videos of strangers, particularly those of which they perceive to have a better life (Hamelink et al., 2018).



#### **2.1.1.5 The Rise of the Twitter Platform**

Twitter is another popular social media platform that has gained increasing visibility over the years (David et al., 2018). Unlike Instagram, which is driven by photographs and videos, Twitter is designed to be a text-based platform where individuals exchange information through text-based messages, initially limited to 140 characters, called tweets (Abbasi & Jibble, 2021). Individuals with Twitter accounts have the ability to communicate directly with friends and family members, as well as celebrities and athletes, and any other organizations or individuals they may track. Twitter is also used by a variety of organizations to disseminate news and is heavily utilized in the sports arena (Fried et al., 2018).

#### **2.1.1.6 Impact of Negative Tweets**

With the growth and popularity of Twitter, studies emerged that examined the visceral nature of some of the exchanges, particularly when individuals were being critical of a sporting event (David et al., 2018). In examining the negative information disseminated, research focused on the motivation behind the communication and examined the mindset of the users, particularly surrounding their views on their quality of life (Yang & Srinivasan, 2016). Studies reflected that individuals with symptoms of depression, as well as a negative view of their quality of life, often disseminated tweets that expressed more anger and aggression, as well as dissatisfaction.

#### **2.1.1.7 TikTok**

TikTok, launched in September 2016, and by mid-2018, it had already reached half a billion users. To put this in perspective: TikTok gained on average, about 20 million new users per month over this period.

#### **2.1.1.8 LinkedIn**

LinkedIn is targeted at professionals interested in professional networking. Each user sets up a profile similar to a resume and then can link to other people that they know. Having been created in 2003, LinkedIn is one of the oldest social networks. However, this particular site is relatively new to younger generations. Facebook, Twitter and LinkedIn are being joined by a completely new line of competitors in the social media business. The social network platforms Snapchat, Instagram, Pinterest, and YouTube have become the new gateway for the expression for today's college generation.

## **2.1.2 Concept of Social Media Addiction**

Traditionally, the concept of addiction is based on a medical model, and it expresses extreme physical or psychological desire and commitment to a physical object. However, researchers argue that addiction should be addressed to cover a broader behavioral domain including social and psychological behaviors (Shaffer, 2014).

### **2.1.2.1 Concept of Technology Addiction and Internet Addiction**

In this context, Griffiths (2013) proposed the concept of technology addiction. He has defined technology addiction as the actions which are non-chemical but behavioral, and involve extreme human-machine interaction. Also, technology addiction is portrayed as a passive behavior like watching TV, playing a video game, and chatting online. Internet addiction is a special type of technology addiction.

The term “Internet addiction” was defined for the first time by Ivan Goldberg in 1995 as a psychological illness (Kim, 2012). Young (1998) named it as “internet addiction”, Morahan-Martin and Schumacher (2000) used the term “pathological internet use”, Davis, Flett and Besser (2002) labelled it as “problematic internet use”. Young (1998) suggests five types of Internet addiction: (a) cyber sexual addiction, (b) cyber relationship addiction to online friendships or affairs, (c) net compulsions to online gambling, auctions or obsessive trading, (d) information overload to compulsive web surfing or databases searches, and (e) computer addiction to game playing or programming. When properly used, Internet is an important technology that provides people with vital skills for the 21st century such as information access, problem solving, and self-directed learning.

However, when Internet is used unconsciously, it can cause anxiety or fear and negatively affect personal development (Colwell & Kato, 2003). In addition, excessive use of Internet may have detrimental effects on biological, physiological, psychological and social development of the user (Caplan, 2013). In this context, Internet addiction has gradually become a serious problem. Thus, although it was not mentioned in the previous editions, American Psychiatric Association (APA) has added Internet addiction, with a particular reference to online gambling, as a mental illness to the fifth edition of the Handbook of Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013). In many areas of behavioral addiction, it has been debated that whether some extreme behaviors can really be regarded as addiction

or not. Social media addiction, as a special type of Internet addiction, has been discussed in this context. Griffiths (2013) made an important contribution to this discussion by suggesting six essential components to describe a behavior as addiction. These six components are salience, tolerance, mood modification, relapse, withdrawal, and conflict (Griffiths, 2013). He states that a behavior can be defined as addiction if it has these six components:

**Salience:** This occurs when social networking becomes the single most important activity in a person's life and dominates his or her thinking, feelings, and behavior. For instance, even if individuals are not actually engaged in social networking, they will be constantly thinking about the next time that they will be.

**Mood modification:** This refers to the subjective experiences, that people report as or consequence of social networking and can be seen as a coping strategy (i.e., they experience an arousing feeling).

**Tolerance:** This is the process whereby increasing amounts of social networking activity are required to achieve the former mood-modifying effects. This basically means that for people engaged in social networking, they gradually build up the amount of the time they spend social networking every day.

#### **Withdrawal symptoms**

These are the unpleasant feeling states and physical effects (e.g., the shakes, moodiness, irritability) that occur when people are unable to engage in social networking because they are ill, on vacation, prohibited etc.

#### **Conflict**

This refers to the conflicts between a person and those around that person (interpersonal), conflicts with other activities (social life, hobbies, and interests), or from within the individual himself or herself subjective feelings of loss of control that are concerned with spending too much time on social networking.

**Relapse:** This is the tendency or desire for repeated reversions to earlier patterns of excessive social networking to recur and for even the most extreme patterns typical of the height of excessive social networking to be quickly restored after periods of personal control.

Around the world, a number of studies have been conducted on whether the Internet and its applications are addictive or not. A study conducted in China which was attended by 2,620 students, it was identified that 24% of the participants were addicted to social media. One of the notable points here is that students who have developed

high scores on addiction have got low scores on time management. In addition, internet-addicted adolescents provided meaningful results in emotional symptoms, problem management, hyperactivity situations and lower social behavior scores (Cao et al., 2017). Social media platforms are the virtual communities where users can create individual or public profiles, interact with friends in real life, and come together with other people based on common interests (Kuss & Griffiths, 2013).

The rapid increase in the use of online networks -mainly on the basis of time spent- has led some researchers to argue that excessive social networking can lead to addiction in individuals (Sussman et al., 2014). From time to time, individuals can have a variety of actions that are potentially addictive, such as using social networks extensively. These behaviors do not always have to be addictive, sometimes they are just behaviors which lead to addiction. Studies on social media addiction levels have produced inconclusive results because some are concerned about negative consequences of intensive use, while others have focused on gains through the use of social media. However, the latest research showed that greater access to social media brings greater concerns. For many institutions, social media addiction has become a major concern since the beginning years of social networks. For example, Davies and Cranston (2015) found that participants (120 managers and practitioners working on youth) were afraid that online social networking would replace other activities and face-to-face social interaction.

### **2.1.3 Concept of Mental Health**

According to World Health Organization's (WHO) definition, mental health refers to a person's ability to communicate with others. The term "mental health" refers to a person's capacity to deal with life's challenges, come into their own strengths and talents, and make positive contributions to their community (Jorm, 2019). People struggling with mental health issues are disproportionately represented among the population's least happy people. Sleep deprivation, feelings of inadequacy, stress, online bullying are the factor that contribute to mental health issues. When it comes down , mental health is a condition of psychological and emotional well-being that gives a person the necessary ability to handle life's everyday stressors and participate in constructive activities (Pilgrim, 2022). The capacity to effectively grasp one's environment, adjust to change, feel both happy and negative emotions, and sustain connections are characteristics of a strong mental health state. It includes a person's

capacity to develop their special talents and skills, work towards self-fulfillment, and make constructive contributions to the community (Raghavan et al., 2019). The issue of mental health has recently emerged as a worldwide concern.

According to the World Health Organization, a person is considered to be in a state of mental health if they are "aware of, and able to cope with, their own potential, the normal stresses of life, the demands of productive work, and the expectations of their community" (WHO, 2004). Mental health is commonly affected by stress, anxiety, and sadness (Abi-Jaoude et al., 2020).

A mental health disorder is defined by the American Psychiatric Association as an impairment in social functioning that is attributable to external factors that bring about alterations in an individual's mood, thinking, and/or behavior (Huang, 2022). Problems with social, vocational, or familial functioning have been associated with it, along with feelings of melancholy, worry, and discomfort. Mental health affects many facets of daily life, including the ability to get things done (at work or in school), get along with loved ones, and maintain one's physical health. One in five Americans experienced mental health issues of some type (19%), while one in 24 (4.10%) struggled significantly with their mental health (Rana & Kelleher, 2018).

#### **2.1.3.1 Importance of Mental Well Being**

According to research, mental well-being is essential to individuals 'survival, but it also enhances life by enabling an individual to develop, learn, express themselves, and reach their full potential. However, the status of a person's mental wellbeing is seriously hampered by mental health issues, which are also known as mental diseases or disorders (Filler et al., 2021). These illnesses can seriously reduce a person's cognitive, emotional, and social capacities, making it more difficult for them to carry out their daily activities, maintain healthy relationships, and fill societal duties. According to a recent research, Mood disorders like depression and bipolar disorder, anxiety disorders, personality disorders, and psychotic disorders like schizophrenia are just a few examples of the many ways that mental health diseases can present themselves (McEwen & Akil, 2020). People who have these disorders often have poorer levels of mental health, which, if ignored, might result in a lower quality of life and serious health issues.

#### **2.1.4 Social Media Addiction and Student's Mental Health**

According to Mental Health of America (2018), over 44 million Americans are living with a diagnosable poor mental health. According to data (Mental Health America, 2018), mental health problems such as major depressive disorder among young people are on the rise. In the United States, the rates of both mental illness and social media use are on the rise. To review, Zhong et al. (2021) reports that 28% of Americans' time spent online is spent interacting with social media.

A research has found associations between excessive social media usage and negative psychological outcomes. These studies suggest that social media has an immediate impact on student's mental health and well-being owing to the authenticity of the content and relationships seen on these sites. The majority of studies have focused on children and adolescents, however heavy social media usage has also been related to increased incidence of mental health symptoms in adults. Ashford (2018) found that social media use was associated with increased feelings of loneliness, depression, insecurity, jealousy, and low self-esteem. Some users may encounter cognitive distortions while seeing the material of others, which may lead to feelings of depression and dissatisfaction. Consider the phenomena of comparing one's own follower and like counts with those of other users, of feeling left out of social gatherings, and of contrasting one's own photographs with others' images. This means that those with mental health illnesses or who may be able to trigger mental health symptoms are more likely to be negatively impacted by their use of social media (Deepa & Priya, 2020).

However, using social media, students can now communicate with anybody, anywhere in the world, at any time. New types of bullying, such as cyberbullying, have emerged as a result of the increased accessibility of social media. Extreme cases of cyberbullying might result in the victim taking their own life. The ramifications of cyberbullying may be devastating. The studies conducted by Lowry et al. (2016) highlighted the negative outcomes and potential dangers associated with cyberbullying. Cyberbullying has been shown to mostly impact adolescents, although studies show that adults can also be affected by this phenomenon (Koehler & Parrell, 2020). Giumetti and Kowalski (2022) utilized social media to investigate workplace cyberbullying and found that 30% of 3,666 respondents have been victims of such behavior.

The predisposition for addiction to social media among young college students has been linked to psychological distress. Over the past few years, internet and social media addiction has become more and more of a public health concern (Rahman & Ahmed, 2018). According to research conducted by a licensed psychologist, excessive use of social media is bad for users' physical and mental health, especially for young people.

Certain individuals who engage in excessive use of social networking sites fit the criteria for addiction; these include disregarding personal obligations, becoming fixated on the sites, trying to escape reality, taking part in activities that change mood, becoming tolerant of the sites, and concealing their addictive behavior (Haand & Shuwang, 2020). This leads to the emergence of "Social Network Site Addiction Disorder" and "Facebook Addiction Disorder." One of the surprising effects of the digital age has been the explosion in popularity of online social networking sites. These online hubs now play a crucial role as places where people can meet, learn, and have fun. However, as Bisen and Deshpande (2018) have demonstrated, excessive social media usage among students is associated with an increased risk for mental health issues. A sizable percentage of these users are teenagers and young adults, who are especially susceptible to the impact of these platforms since they are still growing. Some people's usage of social media goes well beyond that of a casual pastime and becomes fundamental to how they function on a daily basis (Bisen & Deshpande, 2018). If they continue to use excessively and cross the line into addiction, it might have a detrimental effect on their mental health, academic performance, and social interactions.

The Internet may be a great resource, but excessive use can be a problem and could lead to addiction (Kruzan et al., 2022). Researchers and clinicians have disagreed on the best way to define and identify Internet addiction (Naranjo et al., 2021). On the other hand, some people see the web as a way to engage in harmful activities like gambling, gaming, or pornography. Some people think it needs to be recognized as its own condition. Although "Internet gaming disorder" has been recognized by the American Psychiatric Association (2013), the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition fails to include Internet addiction as a separate diagnosis. Many scholars (Giumeti et al., 2022) utilize variations of the term "Internet

addiction" (also "problematic Internet use," "computer addiction," "Internet mania," and "pathological Internet use") in their writings.

According to a Becker et al., (2013) compulsive Internet use is a form of impulsive control problem. Diagnostic criteria include Internet use being the primary activity or utilizing the Internet for longer periods of time than planned. Internet addiction is linked to severe impairment in social, professional, and other critical domains of functioning. Numerous studies (Bisen & Deshpande, 2018) have found links between problematic Internet usage and a variety of mental illnesses. Excessive online shopping, gambling, gaming, and idle browsing have all been linked to increased levels of depression, according to a number of studies (Abbasi & Dibble, 2021). A researcher found that negative behaviors have both an origin and an effect, such as feelings of isolation or depression all find correlations between poor mental health, low self-esteem, and problematic Internet usage (Nakaya, 2015). Mental health is harmful is proven on many studies, yet some have found the opposite to be true. For example, Young et al. (2020) found that it can reduce feelings of isolation and depression while simultaneously increasing feelings of confidence and belonging. These results emphasize the need for more studies examining the connections between Internet use, mental health, and other factors. Despite a wealth of research linking Internet addiction to issues of mental health and low self-esteem, less attention has been paid to other facets of the phenomenon.

A study of Korean adolescents found that children from higher socioeconomic backgrounds tended to have higher self-esteem, which the researchers interpreted as a negative factor in the development of Internet addiction (Pontes, 2017). In another research of teenagers, Hur and Gupta (2013) found that internet addiction was associated with poor academic performance, suggesting that young people who struggled in school were more likely to become dependent on the medium. The correlation between Internet addiction and personal traits has not been investigated in any study of international students.

A researcher Lu (2021) have found that males are at a higher risk than women. Smartphone addiction, a subset of Internet addiction, has been linked to negative health outcomes in a study of Chinese international students in Korea (Kim et al., 2015). This may be because, as suggested by research by S. E. Kim et al. (2015), international



students spend less time participating in physical exercise due to their excessive smartphone use. Dutta and Chye (2017) found that overseas students in Singapore who had feelings of loneliness, sadness, and social isolation were more likely to engage in problematic Internet use. The authors hypothesized that studying abroad would lead to increased Internet use and addiction for some students. They also noted that depressive symptoms might hinder a person's ability to exercise self-control. A small amount of research on foreign students studying in the US indicates that worse psychological well-being is linked to lower Internet use. Using data from a Yale University survey on student mental health, Su et al. (2020) found that international students at Yale who spent a "optimal" amount of time online reported significantly better mental health than those who spent less time online. Stress from work or school can prevent students from spending enough time online, which can have a negative effect on their mental health (Su et al., 2020).

Previous study by Fallah found that online addicts had higher rates of depression than non-addicts social media users . Those with internet addiction were shown to worry more than the general population and be at a higher risk for mental health problems (Fallah et al., 2022). Although (Lebni et al., 2020) found no statistically significant link between internet addiction and poor mental health among students, they did find a negative correlation between internet usage and social isolation. It was separate from the gender and marital status of the pupils. According to another study by Nastizai, college students are more likely to have mental health issues as a result of their internet addiction. Because of their increased inclination to use the internet, students are at a higher risk of being addicted to the medium.

Therefore, it is important to focus on students' mental health needs for the sake of their future and the country's development. Colleges and universities should priorities their students' happiness, growth, and mental wellness. Addiction to the internet is a serious problem all across the world (Fergie, 2015). Students are the largest demographic of internet users, reflecting the increased interest in online activities among younger generations. Problems with mental health, psychological damage, and other health conditions are associated with excessive Internet usage. In order to prevent internet addiction among children, experts have proposed appropriate procedures to treat illnesses and health difficulties when necessary.

The negative psychological effects of excessive internet use are highlighted in a research by (Oberst et al., 2017). They also stressed the serious correlation between excessive use of social media and a variety of negative outcomes in children's health and development. Addiction develops when people become dependent on technology for their primary sources of pleasure, self-affirmation, and social interaction. Increased anxiety, depression, loneliness, and a loss of life satisfaction have all been linked to excessive social media use. These platforms create a deceptive narrative by continually highlighting the best moments of users' lives, which can drive users, especially impressionable teenagers, to constantly compare themselves to others, feel inadequate, and have low self-esteem.

Therefore, while these platforms can serve as information and communication hubs, improper or excessive use of them may have a detrimental impact on users' psychological well-being. Another case in point is the research conducted by (Cheng & Lau, 2022). They focused on a group of female college students and found a correlation between high scores for addiction to social media and symptoms of stress, anxiety, and low self-esteem. Research highlights how easy access to social media may lead to dependency. Students' easy access to these tools 24/7 contributes to a culture of overuse. The platform's ability to attract and retain users, along with the ease with which they may become hooked, creates an addictive environment.

### **2.1.5 Social Media Impact on Mental Health**

The Mental Health of America (2018) has estimated that over 44 million American adults have a mental health condition. The statistics of youths experiencing mental health conditions, such as major depressive disorder, continues to rise in high rates yearly (Mental Health of America, 2018). Mental health in the United States continues to increase, and the amount of time Americans spend using social media is also on the rise. To reiterate, on average, Americans spend 28% of the time using the internet for social media interaction (Huang, 2018). Multiple studies have found social media use as a contributing link to various mental health symptoms associated with depression, anxiety, low self-esteem, and negative well-being (Hardy & Castonguay, 2018). These studies find that social media has a direct impact on mental health and well-being through the pure nature of content and interaction found while using social media sites. Although most studies find that youth populations are at most risk, adults are also associated with high mental health symptoms related to social media use.

Ashford (2017) found that individuals may experience feelings of social isolation, depression, insecurity, jealousy, and poor self-esteem while using social media. Some individuals develop cognitive distortions when comparing their lives to other users' content, which may lead to feelings of sadness and depression (Ashford, 2017). Some examples include comparing users' number of likes and followers, feeling left out for not being invited to events, and comparing grandiosity pictures to one's photos. As a result, social media has a higher rate of affecting vulnerable populations, like those who suffer from mental health diagnosis and have the potential to cause mental health symptoms to surface. Meanwhile, with social media being universal, access to anyone around the world has become unlimited. While social media has brought new ways of communication, new opportunities for bullying have also emerged, such as cyberbullying. Cyberbullying can have immense negative impacts through users taking cyberbullying so far that the victim commits suicide.

#### **2.1.5.1 Social Media & Anxiety**

There is evidence that social media use and obsessive behavior have a relationship, according to numerous research. According to research, 45% of adult British people become restless when they can't access their social media accounts (Anxiety 2012). Virtual generation (Net & iGeneration) is said to frequently check the messages on their social networking applications, according to Rosen et al. (2013). Additionally, it has been discovered that the younger generation experiences restlessness when they are unable to read messages from their social networking accounts without their peers, which can lead to Phantom vibration syndrome (PVS). It is nothing more than an addict's interpretation of his phone's vibration (Drouin, et al., 2012). Any PVS victim who demonstrates a fixation with frequently checking social media displays signs of anxiousness brought on by their phones.

#### **2.1.5.2 Stress and Social Media**

Social media addiction has skyrocketed in the modern era, and once someone logs on, it can be tough to stop using it. Positive feedback from comments and likes makes it harder to stop. Some people draw comparisons between their lives and their friends' flawless lifestyles. According to Dick (2013), using free social networking sites like Facebook and Twitter allows users to read useful content and stay in touch with friends, but it also compromises their privacy and discretion. These days, anxiety is one of the main issues with mental health. Individuals worry about how many people like

and comment on the photos and videos they share. Hardly anybody is exempt from the context of social media in the modern world. According to The Hearty Soul (2016), using social networking sites like Facebook and Twitter does not help students focus better or feel less anxious. It also claims that the more time spent on social media, the more miserable one becomes.

Kaur and Bashir (2015) investigated the effects of social media on teenagers' mental health, both good and bad. Positive consequences include learning opportunities, improved communication, sociability, and access to health information. Negative features include weariness, tension, sexting, cyberbullying, melancholy, emotional repression, and a reduction in intellectual capacity. Nearly everyone in the world today, aged 11 to 93, has access to social media. Young individuals are the most frequent users of social media and are primarily at high risk of acquiring mental health issues, according to research by Strickland (2014). Another study by Park, Song, and Lee (2014) found a favorable correlation between college students' acculturative stress and social media applications like Facebook. In a similar vein, Patchin and Hinduja (2016) conducted a thorough examination into the impact of stress on students' mental health and concluded that stress may have a detrimental effect. Thus, research indicates that youth mental health may be impacted by excessive social media use.

### **2.1.5.3 Depression and Social Media**

The literature mentioned above makes it abundantly evident that social media is the primary factor that both exacerbates and feeds mental health issues. Overuse of social media can have terrible effects on a person, starting with anxiety and ending with despair. According to Pantic et al. (2012), there is a positive correlation between teenage depression and Facebook usage. Similar to these findings, Rosen et al. (2013) reported that people who spent the majority of their time on social networking sites managing their images and engaging in online activities had symptoms of significant depression. In a similar vein, Lou et al. (2012) claimed that students who use Facebook frequently report feeling more alone. Additionally, it has been discovered that using social media exacerbates psycho-social issues like adjustment and self-esteem (Kalpidou et al., 2011). According to research by Davila (2012), there is a correlation between higher levels of negative and lower levels of positive social contacts and severe depressive symptoms in younger generations. Kraut et al. (2017) have presented opposite evidence of an inverse relationship between internet usage and depression.

They also imply that different social activities such as gaming and talking reduce the incidence of depression.

#### **2.1.5.4 Social Media and Loneliness**

Social media usage is growing at a remarkable rate predominantly among young adults, surprisingly in spite of having greater interconnectivity, present young generation is lonelier than other groups and even loneliest ever (Pittman & Reich 2016). Loneliness is one of the prime concerns of present virtual society, as it is intimately related to serious health problems (Patterson & Veenstra, 2018). Loneliness can be understood as discrepancy among desired level and practical level of social contacts of an individual's social life. According to Yao and Zhong (2013) uncontrolled, unhygienic and compulsive usage of internet resources enhances loneliness over the time also higher level of internet usage among young generation enhances the emotional loneliness.

While Mental Health foundation of United Kingdom asserts 60% of the young adults of age group 18-34 admitted loneliness despite of having all social media applications and facilities to run these applications (Murphy, 2013). Similarly, studies by Williams and Wise (2012) found that students who report feeling more alone on Facebook have more friends than friends. On the other hand, Deters and Mehl (2012) found that individuals who use social media less exhibit higher levels of shyness and loneliness as well as being less socially active. Sheldon (2012) also found that increasing status updates can help lessen the issue of loneliness.

#### **2.1.6 Mental Health & Social Relationships**

In order to protect our mental health, friendship is essential. High-quality and quantity of social relationships have an impact on mortality threat, mental health, physical fitness, and fitness behavior, according to Umberson and Montez (2015). Numerous empirical studies conclude that social assistance can deter despondency, discourage avoidant coping, and support positive emotional states (Gonzalez et al., 2004). On the other hand, depression is linked to suicidal thoughts, poor social relationships, and social isolation (Holma et al., 2013). According to Reich et al. (2015), social assistance is associated with increased mental fitness. Social dating is essential for enhancing mental well-being However, the truth is that there is disagreement among researchers over which aspects of social relationships impact mental health. Because of the stress-discounting effect of this social support, people who received greater social

assistance from friends and family suffered from mental health problems substantially less following stressful life events (Maulik et al., 2016).

## **2.1.7 Fear of Missing Out**

### **2.1.7.1 Concept of FOMO**

According to the Oxford Dictionary, FOMO is "a sense of unease brought on by way of posts on social media that propose something thrilling is occurring someplace else right now" (Fabris et al., 2020). due to FOMO, individuals are advised to often test their social media bills with the intention to live in touch with their pals and own family in addition to to live on pinnacle of possibilities to take advantage of and errors to keep away from. in line with latest studies in the area, FOMO is immediately anticipated by means of social media addiction (Hamutoglu et al., 2020).

According to a study, FOMO is a sensation which you are missing out on something basically tremendous that other people are actually playing. It is not most effective a guilt-inducing feeling which you should be doing something better at this time (Blackwell et al., 2017). Mental health is impacted by way of the fear of dropping out, which is likewise observed with the aid of a strong feeling of jealousy. a person's mind-set toward and assessment in their very own perspectives and feelings approximately themselves are both examples. The interactions and studies someone has had at home, at college, with pals, and of their social circles all have an impact on their sense, . college students can also specific themselves on many social media systems on their seems, thoughts, and abilities (Bettmann et al., 2021). whilst this could inspire some, it may additionally motive self-doubt in others. people's and self-evaluation can also go through if they are regularly uncovered to comparisons on social media platforms. As a end result, it may have an impact on how they view themselves and motive them to impeach their very own skills.

The research meditated that individuals with difficult social media use evolved an uncontrollable want to go online to at least one in every of their increased options and Uncontrollable Use With a couple of techniques to hook up with friends, research pondered that individuals with complicated social media use advanced an uncontrollable need to go browsing to at the least one of their social media platform at some point of the day (Stodt, & emblem, 2017). Their use became immoderate as individuals felt compelled to maintain a social media presence with each day posts and

remarks, and in all likelihood compete with the posts in their peers (Wegmann et al., 2017). This changed into particularly vital after they had been envious of the existence regarded or have been seeking popularity of their personal material. this could had been exacerbated through the expanded anxiety surrounding the sensation that they may were missing out on records when they were not logged directly to a platform ,worry of lacking Out whilst assessing additional factors that may contribute to social media dependency, research have no longer simplest tested the correlation with elaborate phone usage but have also studied the effect of bad emotions and cognitions, including increasing tiers of fear of lacking out (Buglass et al., 2017).

#### **2.1.7.2 Effect of Signals and Notifications**

With this prevalence of fear of lacking out, studies shifted their consciousness to the variety of platforms and their growing use being accessed through smartphones. maximum social media systems offer non-stop notifications and signals at some stage in the day of latest content posted, in addition today by day offers and advertisements. these platforms create get admission to actual-time data, which may additionally exacerbate the growing demanding situations with excessive social media utilization, especially in view that these notifications are often disbursed through smartphones research have proven that there is a giant correlation among online vulnerability and a person's mental wellness (Buglass et al., 2017).

#### **2.1.8 Social Media Addiction and Social anxiety**

The American Psychiatric affiliation states that anxiety is "muscular tension and avoidance behavior more often accompanied by future fear" (Baltaci, 2019). anxiety is one of the destructive results of excessive social media use, the look at observed. because folks who use social media excessively are more likely to experience feelings of irritation, fear, and the need to isolate themselves from others as a result of their dependency to these structures (Zsido et al., 2021). Isolation from pals and loved ones due to an unhealthy preoccupation with digital media. Caplan (2005) revised this version to encompass impairments in social skills and self-presentation as risk factors for the emergence and maintenance of dysfunctional SMU (Casale & Fioravanti, 2015). One study located that introverts and those who have trouble setting themselves accessible ought to prefer online social engagement over face-to-face communicate. This predilection for virtual communication places these individuals prone to collaborating in potentially adverse moves on the net (Prizant et al., 2016).

Due to its supposed motive, it is important to look at how people with social tension are using social media and networking sites. Lyngdoh et al. (2023) looked at the connections between social anxiety, isolation, and unhealthy internet use. The findings pointed to a connection between isolation and social anxiety. tension approximately social situations and emotions of isolation have been found to have fine institutions with a preference

A sturdy correlation become found between people' desire for online social relationships and their social avoidance and worry of grievance (Padilla-Walker et al., 2020). 3.6% of people worldwide suffered from anxiety disorders in 2015; girls were more likely to experience these issues (4.6% vs. 2.6% vs. 3% vs. 3% vs. 4%). Prior research has demonstrated that an overindulgence in the internet and social media can lead to feelings of stress, anxiety, and hopelessness. (Dempsey et al., 2019). The look at with the aid of Win et al. (2017) discovered that 36.5 percent of respondents who used the internet frequently also experienced tension. in step with Hasmujaj (2016), there's a fine and strong correlation between tension and internet addiction. tension became skilled by fifty-nine percentage of social community addicts, in comparison to 80. eight% of internet users and 28.5% of non-internet customers, as reported via (Rugai & Hamilton-Ekeke, 2016).

Making the relationship among social media use and the onset of such concerns could be very beneficial. "Trait tension," rather than "situational anxiety," is a greater continual shape of worry. Trait tension has been connected to characteristics which include worry, tension, and nervousness (Goswami & Singh, 2016). further evidence linking social media websites and tension comes from the work of Zahid et al. (2019), who observed that anxiety turned into a sizeable predictor of both emotional connectedness to Facebook and strategies for connecting with others at the social media platform.

Ho et al. (2014) conducted a meta-evaluation to analyze the association among immoderate social media use and mental comorbidities. The consequences verified that folks who were addicted to the internet also had improved tiers of anxiety. the best rate of tension become located in adults between a while of 19 and 39. Reyes et al. (2018) performed research into the hyperlink among psychopathology, pathological net use, and disruptive behavior in adolescent populations across Europe. Suicidal ideation,



depression, and tension were shown to be the most powerful predictors of complex internet use. individuals with pathological and maladaptive net use additionally validated significantly higher degrees of anxiety and despair.

## **2.1.9 Social Media Addiction and Cyberbullying**

### **2.1.9.1 Concept of Cyberbullying**

Bullying that takes place via electronic means, such as the Internet or mobile phones, is known as cyberbullying (Giumetti & Kowalski, 2022). Persistent, aggressive activity that is deliberate, recurrent, and intended to injure the victim through electronic interaction is another synonym for cyberbullying. The vast bulk of research on cyberbullying has focused on youth and has linked it to more traditional forms of bullying. More and more data suggests that cyberbullying among young people is on the rise. Chu et al. (2022) extensive study found that the victimization rate of cyberbullying among children and adolescents varied from 13.99 to 57.5%, while the perpetration rate was found to be anywhere from 6.0 to 46.3%. Cyberbullying is also a problem among college students and young adults, with estimates placing the percentage of bullies at 3- 40% and the percentage of victims at 7-62%. Adults may also be victims of cyberbullying, not simply children and teens. The matter is further complicated by the fact that many cyberbullies have also been targeted.

According to a meta-analysis conducted by Lozano-Blasco et al. (2022) the correlation between cyberbullying perpetration and cyberbullying victimization is moderate to high . Cyberbullied college students may suffer from emotional distress, low self-esteem, and poor grades for the rest of their lives. Previous studies on cyberbullying among teenagers and young adults indicated that the percentage of bullies ranged from 8% to 35%, and the percentage of victims from 18.6% to 66.0%. Cyberbullying incidents and internet usage have a relationship in which increased internet usage is linked to increased bullying. (Lee et al., 2023).

Social media use provides a chance for emotional and mental distress by getting threatening, harassing, or humiliating remarks from another teen. This is a common threat among teenagers especially university students. Furthermore, online bullying may occur to any young person online, and can cause profound psychosocial outcomes such as loss of concentration, depression, anxiety, stress, isolation, and, suicidal thoughts (Chung et al., 2019). Nowadays, online bullying has found to be common

among university students. For enjoyment purpose or threatening they try to harass and criticize others without realizing its harmful effects. Cyberbullying is described as "willful and repeated harm inflicted through the use of computers, phones, and other electronic devices" by the Cyberbullying Research Center. Victimized children used to be able to just go home or spend time by themselves. But there's no longer a place where this option is available in today's linked culture. You can receive messages, emails, chats, and social media updates whenever you want, no matter where you are, if you have a mobile phone, laptop, or other internet-connected device.

According to a study on the condition of children throughout the world, cyberbullying is a ubiquitous phenomenon that may have detrimental impacts on both the offline and online identities of children (Kaur & Saini, 2023). Bullies now have an option that has never been available to them before: they can hide behind an anonymous profile, take the identity of another person, and instantly transmit violent, nasty, or humiliating words or photographs with the touch of a button. This gives them a tremendous amount of power. Additionally, once such material is uploaded, it is impossible to erase it, which both increases the risk of the victim being re-victimized and makes it more difficult for the victim to recover.

#### **2.1.9.2 Social media addiction and Cyber bullying**

According to some descriptions, social media addiction is a form of behavioral addiction, just like other problematic online behaviors like smartphone addiction and internet gaming disorder. According to a survey, young adults in Malaysia mostly utilize social media as a tool for cyberbullying (Hazlyna, 2021). Social networking site use that is problematic has been linked to psychological discomfort, sadness, anxiety, and low self-esteem. Increased cyberbullying and cyber victimization may be a risk of problematic social media usage, including social media addiction. To clarify this link, Craig et al. (2020) used the issue behavior theory and social learning theory. The issue behavior hypothesis states that risky behaviors frequently co-occur and that some people have particular profiles that make them more prone to risky behaviors. For instance, those who are addicted to social media may spend more time on these websites, increasing their exposure to cyberbullies or cyber victims; as a result, the addiction to social media raises the risk of cyberbullying.

According to the social learning theory, people who use social media platforms for a longer period of time may see more aggressiveness and, as a result of modelling

and reinforcement, may believe that the aggressors have greater social standing and imitate their actions (Giumetti & Kowalski, 2022). Conforming to group standards can give people a sense of belonging, which can perpetuate bullying behaviors. In a research conducted among 11 to 15-year-old teenagers in 42 countries, problematic social media use was associated in varying degrees with both cyberbullying and cyber victimization. In research involving university students in Malaysia, structural equation modelling revealed that social media use was strongly related to cyber engagement, and that this engagement was also significantly related to cyber harassment, cyberstalking, and cyberbullying. Social media addiction and cyberbullying have both been linked to psychological discomfort (Fergie, 2015). In research of Bosnian teenagers, it was discovered that individuals with anxiety and depressive illnesses scored higher for cyber victimization. Another research of 1691 Malaysian teenagers found that individuals who were depressed were more likely to encounter cyberbullying both before and after the COVID-19 epidemic.

According to a research conducted among Chinese college students, cyberbullying in gaming and social media environments was linked to increased anxiety and signs of internet addiction (Kee et al., 2022). Social media use during the COVID-19 epidemic among university students has been connected to depressive and anxiety symptoms as well as reduced self-esteem. Studies on cyberbullying and social media addiction among medical students are few and far between. This is significant since a meta-analysis revealed that 30.1% of medical students had internet addiction, of which social media addiction is a subcategory.

Bullying has been pervasive in the context of medical education (Ahmad et al., 2019). In an examination of 68 articles, it was found that 36.1% were told to work below their level of expertise and 38.2% were subjected to unreasonable pressure to generate work. In UK research, over half (46.2%) of medical students reported experiencing cyberbullying at least once. Medical students' mental health has also been poor.

#### **2.1.10 Social media addiction and sleep deprivation**

Multiple aspects connected to social media use and sleep have been researched (Xanidis & Brignell, 2016). These include social media use, technology use, light levels, technology use at night, and the consequences of getting too little sleep. For children between the ages of 5 and 17, Cain and Gradisar (2010) conducted a

comprehensive evaluation of 36 research articles to examine the connection between the usage of electronic devices and sleep quality. Prolonged exposure to social media platforms can contribute to addictive behaviors, leading to excessive use at the expense of sleep. Research conducted by Chou et al. (2014) revealed that individuals who spend more time on social media platforms are prone to experiencing symptoms of sleep deprivation.

### **2.1.11 The Impact of Sleep Deprivation on Mental Health**

Sleep deprivation has been linked to various mental health issues, such as anxiety, depression, and reduced academic performance. A study conducted by Bruni et al. (2015) among university students found that sleep-deprived individuals were more likely to experience increased levels of anxiety and depression, as well as difficulty concentrating and retaining information. Researchers found a link between greater use of electronic devices, such as television, phones, computers, and video games, and lower sleep, more daytime drowsiness, and worse academic performance.

Using a quasi-experimental approach, Kaur et al. (2021) investigated how light from screens interrupts sleep rhythm, social cognition from social media influences sleep, and the overall effects on sleep quality. Facebook was utilized to evaluate the social media and social cognition components. To examine the effects of using Twitter during the week vs the weekend on sleep, a non-experimental methodology was used. Using a convenience sample strategy, 197 individuals who sent at least three tweets each week were included. The researchers counted the amount of tweets sent out every day, every night, every workday, and every weekend. A self-report 5-point Likert scale including questions about the quality of sleep, stressors, stress maintenance, and mental wellness was used to assess the quality of sleep. Based on the quantity and timing of tweets, the quality of sleep was compared.

According to the researcher, poorer sleep quality was associated with more late-night tweeting on workdays, but there was no correlation between sleep quality and tweeting on weekends. To enhance sleep quality, the researchers advised reducing Twitter usage throughout the week. In order to compare the sleep quality of 380 patients who reported using a mobile and applications (Viber, WhatsApp, Tango, and Instagram), Mohammadbeigi et al. (2016) used a non-experimental, cross-sectional design. On a 5-point Likert scale, the mobile phone overuse measure has 17 items.

Participants were then divided into three groups (overuse, normal, and low usage) based on the findings. yet 61.7% of participants reported having trouble sleeping. However, those who used their phones and social media more often reported the worst quality. In addition to excessive phone use, researchers observed that the respondents' sleep quality varied greatly depending on their living situation, with those residing in dorms reporting worse sleep quality.

Distor et al. (2022) assessed how social media use affected first semester college students' sleep habits and health using a non-experimental methodology. The researchers proposed a correlation between increase sleep deprivation and social media addiction. To ascertain the connection between nurse performance and patient safety and tiredness and drowsiness, Distor (2022) performed a meta-analysis of 211 research articles. Insufficient sleep-related problems, their consequences, long work hours, back-to-back shifts, and how they influence patient care quality were covered.

## **2.1.12 Social Media Addiction and Feelings of Inadequacy**

### **2.1.12.1 Contribution of Social Media Addiction to Feelings of Inadequacy**

Inadequacy feelings in regard to social media use are studied on the theoretical groundwork of the social comparison theory. Researchers have shown that seeing the perfect lives of others on social media might make people feel inadequate and unhappy with their own lives (Fioravanti et al., 2020). Specifically among young women, Gioia et al. (2020) found that engaging in such comparisons increased feelings of body image dissatisfaction. After finding a robust correlation between Facebook use and depressive symptoms, which was mediated through social comparison. Recent studies have begun to examine the complex interplay between social media addiction and deficiencies, shedding insight on a wide range of unexplored topics. One such addition was made by Bettmann et al. (2021) when they introduced the concept of "Facebook envy" to the field. Since social comparisons on Facebook have been hypothesized to contribute to feelings of inferiority, the study's authors set out to learn more about this phenomenon. They found that many Facebook users mistakenly assume that others' lives are better or more desirable than their own based of what they see on the site. You may begin to feel inferior and inadequate as a result of your envy.

Furthermore, After Facebook envy became a problem, Sallehuddin et al. (2021) looked at its impact on users' psychological wellbeing. Envy on Facebook has

been linked to clinical depression. They theorized that a downward spiral of depression may trigger a spiral of increased social media use. Inadequate users, according to their research, may be more prone to get addicted to social media in their pursuit of acceptance or escape. This finding highlights the potential downsides of such social comparisons by highlighting the link between feelings of inadequacy and addictive behaviors. Evers et al. (2020) conducted a longitudinal study to evaluate the long-term effects of heavy social media usage in conjunction with low self-esteem. Their findings suggest that the combination of these two factors may contribute to increased anxiety. This study contributes to our understanding of the consequences of social media addiction by showing that low self-esteem might increase consumption and, over time, exacerbate mental health problems.

Chan et al. (2022) investigating the relationship between compulsive social media use and feelings of inadequacy. This research focused only on adolescents, a demographic known for their extensive participation in online social networks. The results of the study showed that among people of this age, addictive behaviors on social media were strongly linked to both excessive social media usage and feelings of inadequacy (Chan et al., 2022). This finding provides vital insight into the potential risks faced by younger social media users and lends to the concept that social media addiction and feelings of inadequacy are connected. Weaver and Swank (2019) brought a new perspective to the table by discussing the relevance of "cyber balkanization." What we mean by "cyber balkanization" in this context is the phenomenon whereby social media users become trapped in "online echo chambers," where they are only exposed to content and ideas that reinforce their already-held convictions. Because of this, users may begin to feel inadequate because they compare themselves negatively to those in their echo chambers.

In addition, this trapping effect may result in obsessive social media use since users may feel compelled to keep up with the lives and activities of their friends. A researcher note that further research is needed to fully understand the causes and implications of cyber balkanization with respect to reliance on social media and feelings of inadequacy (Dalne & Moundekar, 2023).

### **2.1.13 Fear of Missing Out and Students' Mental Health**

Through social media, adolescents can maintain their contacts, extend their system of knowledge, or find and exchange information and materials; it also contributes to the structure of their social identity in relation to peer groups, especially in terms of popularity and, therefore, acceptance and sense of belonging (Fabris et al., 2020). Along with that, more evidence suggests that FOMO may ultimately have an impact on the well-being of individuals, increasing negative affect and emotional symptoms (Fabris et al., 2020). The increase in emotional symptoms are caused from the heightened feeling that they do not belong and that they are missing out on important shared experiences, along with social media fatigue. For adolescents showing a higher state of FOMO, they could be more sensitive and prone to distress due to experiencing neglect and negative reactions by peers on social media sites. With the increase of being on social media sites due to not wanting to miss anything, comes the fear of not receiving comments or likes or the fear of receiving negative reactions to their posts. This would then trigger compulsive use of social media in order to fulfill their unsatisfied need to connect with others and maintain a positive online social status (Fabris et al., 2020). Fabris and team spent time researching Social Media Addiction (SMA). It was found that SMA in adolescents has been found to be associated with depressive symptoms, anxiety, low self-esteem, and general psychological distress. Fabris and team hypothesized that FOMO might be positively associated with emotional symptoms in adolescents, both directly and indirectly.

The results of a study supported the relationship between FOMO and decreased emotional well-being in adolescents, along with higher sensitivity to stress associated with experiences, to neglect and negative reactions by online peers on social media. Their findings also support the link between FOMO and SMA and identifies a heightened sensitivity to stress, along with neglect by online peers. With this, they Emotion Regulation When children and adolescents fail to implement positive strategies to help regulate their emotions, increased rates of peer rejection, aggression, antisocial behavior, cyberbully or bullying and social media stress can occur (Taddeo et al., 2018).

### **2.1.14 Social Media Addiction Role and FOMO**

The usage of social media and FOMO are closely related. People may stay always connected to their social and professional networks thanks to smart phones. Due

to a fear of losing out on chances, this might result in a compulsive drive to continually check messages and status updates (Hamutoglu et al., 2020). This usually alludes to the anxiety social media users experience around the possibilities they feel they have missed while offline or unable to engage with people as efficiently or fully as they would want.

Caplan (2019) conducted research and found that despite the fact that it may have a detrimental effect on their mood, the adolescent participants regularly checked their newsfeed to make sure that classmates were not talking about them on social media. Many of these participants claimed to have attempted to erase or totally uninstall SNS, but they frequently went back to quench their curiosity, demonstrating how crucial SNS have grown to be for young people. To avoid criticism from their peers, they also avoided publishing or removed postings. It is significant to note that participants also discussed the advantages of using SNS to interact with others, which motivated them to keep using the websites even if they were aware of the drawbacks of signing up. Their usage was viewed as a gamble that involved weighing the benefits and drawbacks of their SNS experiences, but it eventually seemed inevitable. Additionally, individual users have the option to continuously and from any place share their own data.

Fuster et al. (2017) underlined the ubiquity of seeing parents checking their phones while pushing strollers, seeing kids and their parents texting during family dinners, and being at a coffee shop where practically everyone is using a computer or smartphone. According to the author, a colleague who oversaw a study abroad programmed in Spain for American students said that students were no longer "experiencing Spain" because they were spending their free time to check social media and keep up with what was happening at home. Even while this could happen frequently, the ongoing connection creates new fears about disconnecting (Fuster et al., 2017).

## **2.2 Empirical Review**

The qualitative findings for research impact of social media excessive social media use on student's mental health indicated that practitioners have seen both positive and negative impacts on individual's mental health due to social media use. Common themes that surfaced regarding negative impacts included: low self-esteem, higher rates



of depression, and anxiety. Practitioners described the positive impacts of social media use being increased social support and connectedness. It was also revealed in the findings that social media has brought new ways of communication, new opportunities for bullying have also emerged, such as cyberbullying. Cyberbullying can have immense negative impacts through users taking cyberbullying so far that the victim commits suicide. (Lowry et al., 2016). Furthermore, findings of study Patel, et al. (2016.) pointed out that online networking is creating a problem like uneasiness, sorrow, and dietary issues. Besides, the utilization of social media has been turning out to be a progressively troublesome issue for younger's since more invests their energy looking over however social media applications and they don't get anything as result it is a huge danger of youngster's mental health. It is commonly discovered that unnecessary utilization of SNS can prompt elevated misery, uneasiness, pain, depression, and disappointment with life, in this manner falling apart psychological well-being (Woods and Scott, 2016), SM use was altogether connected with expanded depression (Lin et al; 2016). Despite what might be expected of past explanation Townsend, et al. (2016) thought about that social media becomes a hindrance in vis-à-vis meeting and individuals typically live alone when they converse with others as result it become their propensity that is an indication of stress, sadness.

### **2.3 Critical Summary**

Social media addiction deals with the excessive use of social media to the extent that it interferes with other aspects of daily life. With growing technology, easy access to devices and internet, University students are becoming highly addictive to social media irrespective of their loss on other areas of life. Without knowing consequences and association with mental health they are involved in addiction towards captivating social media platforms. There has been much research done on usage of different social media platforms and their addiction among students. Furthermore, various studies have investigated effects of social media addiction on students' mental health such as depression, anxiety and stress as key indicators. The experts have talked about how social media addiction differs in men and women and how it affects mental health. The researcher discovered a research gap regarding the relationship between social media addiction and university-level students' mental health in terms of burnout, life dissatisfaction, loneliness, stress, anxiety, and feelings of inadequacy due to online bullying. Social media, in this day of advanced technology, has a significant impact on

how children develop their personalities, emotions, and mental health. In order to inform students, instructors, and medical professionals about the negative effects of social media addiction on students' mental health, the researcher also identified a research gap regarding the relationship between social media addiction and students' mental health

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Research Paradigm

The study came under positivist paradigm. Positivist paradigm relies on measurement and reason, that knowledge is revealed from a neutral and measurable (quantifiable) observation of activity, action or reaction.

#### 3.2 Research Design

The study was quantitative in nature. The study used correlational design. A correlation reflects the strengths or direction of relationship between two or more variables.

#### 3.3 Population and Sample of the Study

The population of the study was consisted of undergraduate students of Faculty of Social Sciences and Faculty of Education. The total number of populations of Faculty of Social Sciences and Faculty of Education was 5071. Stratified proportionate sampling technique was used to select sample of the study. From the targeted population sample was selected. Sample of the study was selected according to (L.R Gay Table, 1998). So, sample size was 347 undergraduate students. 347 study tools were distributed among the study sample of the students at IIUI. All the 347 questionnaires were responded.

**Table 3.1***Faculty of Social Sciences and Faculty of Education*

---

<b>Department</b>	<b>Population</b>
Anthropology	140
Sociology	510
History and Pakistan studies	153
Islamic Art and Architecture Studies	300
Media and communications	350
Politics and IR	1300
Psychology	1200
Teacher Education	163
Educational Leadership and Management	255
Total	5071

---

*(Source : Department of Education and Department of social sciences, Dec 2022)*

**Table 3.2***Total population and sample of the study*

<b>Department</b>	<b>Sample size</b>
Anthropology	12
Sociology	45
History and Pakistan studies	13
Islamic Art and Architecture Studies	21
Media and communications	24
Politics and IR	99
Psychology	92
Teacher Education	27
Educational Leadership and Management	14

### **3.4 Research Instruments**

To measure the students' level of addictiveness to social media usage Social Media Addiction Scale -Student Form (SMAS-SF) developed by Sahin 2018 was used. (SMAS-SF) consisted of 29 items. Level of addiction was categorized into a) Slightly addicted (ranges from 20 to 30%), b) Moderately addicted (ranges from 30% to 50%), c) Highly addicted (ranges from 55%). To explore students' mental health, questionnaire was adapted. The indicators to explore students' mental health was sleep deprivation, Loneliness, online bullying, feelings of inadequacy, FOMO, Social anxiety.

### 3.5 Procedure (Validity)

The validity of the instrument was checked by the social sciences experts from international Islamic university Female campus. They gave suggestions for improvement and by their suggestion the researcher improved the statements.

Validity Experts name	Qualification	Specialization
Dr. Fozia Ajmal	PhD	Teacher Education
Dr. Shamsa Aziz	PhD	Curriculum Development, Science Education, Quantitative Research
Dr. Munazza Mehmood	PhD	Curriculum Development, Teacher Education, Leadership & Management
Dr. Rabia Mushtaq	PhD	Social Psychology

### 3.6 Reliability

A pilot test was conducted on 38 students from the Faculty of Social Sciences and Faculty of Education. The participants who were part of pilot test was excluded from final data collection. The reliability of the questionnaires was measured by Cronbach Alpha method by using SPSS.

Reliability Statistics			
Variables	Cronbach's value	Alpha	No. Of Items
Sleep deprivation	0.789		7
Feelings of inadequacy	0.782		13
Online bullying	0.790		6
Fear of missing out	0.706		14
Social Anxiety	0.842		10
Loneliness	0.866		13

### **3.7 Data Collection**

Data were collected by the personal visit of researcher to the students' of IIUI. Quantitative data was collected through questionnaires from the students. Researcher personally distributed the questionnaires to all the selected students and before collecting data researcher took permission from the Department head.

### **3.8 Data Analysis**

For the analysis of quantitative data descriptive statistic was applied and, frequency and percentages was calculated by using SPSS. To measure level of students' addictiveness towards social media use four groups were developed as normal use, slightly addicted, moderately addicted and highly addicted. The Pearson Product-Moment Correlation was utilized to determine the relationship between social media addiction and students' mental health.

### **3.9 Ethical Consideration**

The management of International Islamic University Islamabad and respondents was assured that the data collected from them, and findings of the research study will solely be used for educational research purpose and will be kept confidential. Official permission was taken from the department head for data collection through a survey questionnaire. The researcher avoided using biased language.

## CHAPTER 4

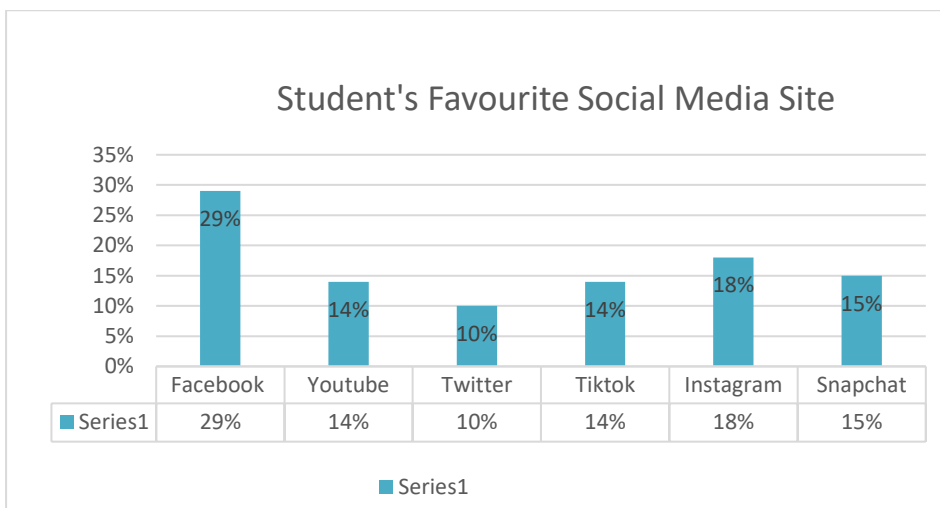
### DATA ANALYSIS AND INTERPRETATION

The first three chapters of this study introduced the research problem, reviewed the related literature, and outlined the research methodology. This chapter focused on presentation and analysis of data. The data collected through questionnaire were analyzed using descriptive statistics. The researcher used Statistical program for Social Sciences (SPSS) for statistical analysis. The hypothesis was examined using mean and Pearson product moment correlation. Then, results were interpreted.

#### 4.1 Graphical Representations

**Figure 1**

*Favorite social media site of students of age group 18-20 years*

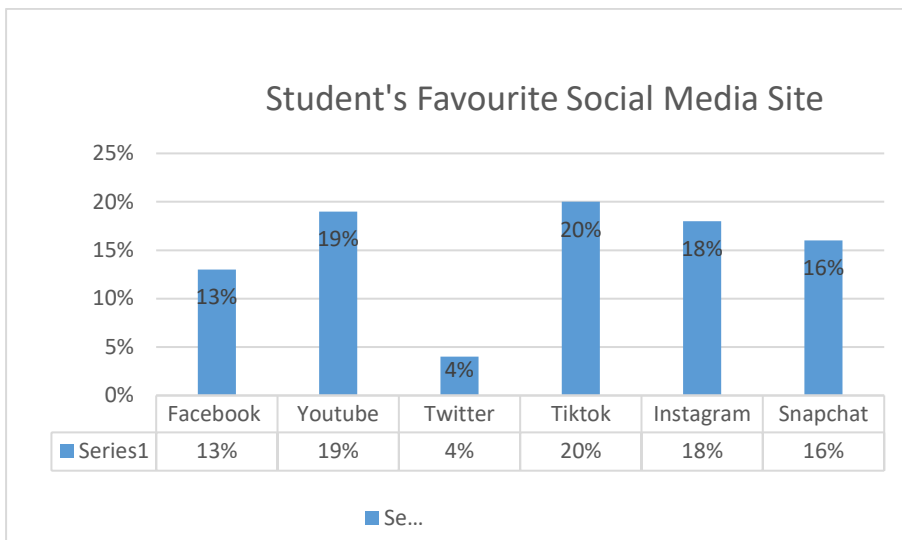


The above figure shows that most students' favorite social media site is "Facebook" with 29% of the students choosing it as their favorite. Instagram is the second most popular social media site, with 18% of the students choosing it as their favorite. Snapchat is the third most popular social media site, with 15% of the respondents, YouTube and TikTok with 14% respondents choosing it as their favorite. Twitter is the least most popular social media site, with 10% of the students choosing it as their favorite. So the figure concluded that favorite social media site of most of the students of age group 18-20 years is Facebook.



**Figure 2**

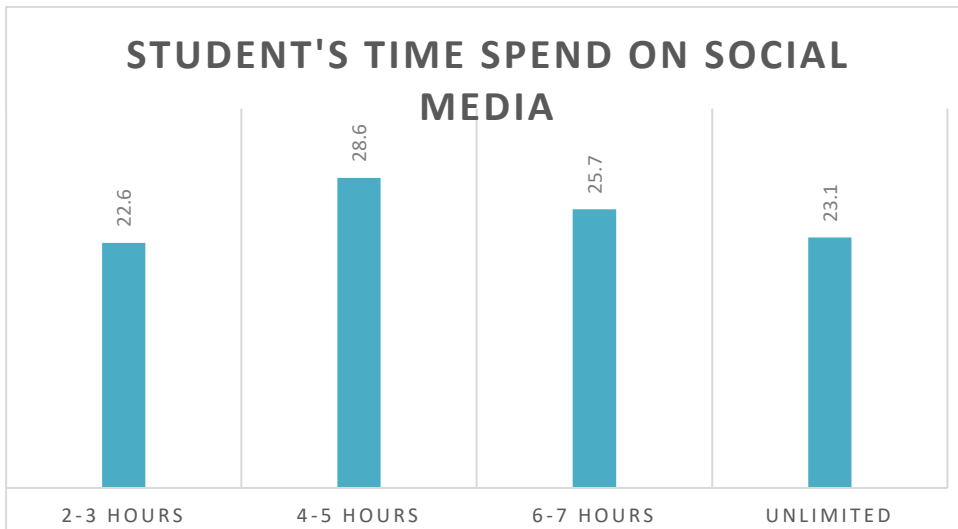
*Favorite social media site of students of age group 21-24 years*



The above figure shows that most students' favorite social media site is "Facebook" with 23% of the students choosing it as their favorite. TikTok is the second most popular social media site, with 18% of the students choosing it as their favorite. YouTube is the third most popular social media site, with 19% of the respondents, Snapchat with 16% and Instagram with 18% respondents choosing it as their favorite. Twitter is the least most popular social media site, with 44% of the students choosing it as their favorite.

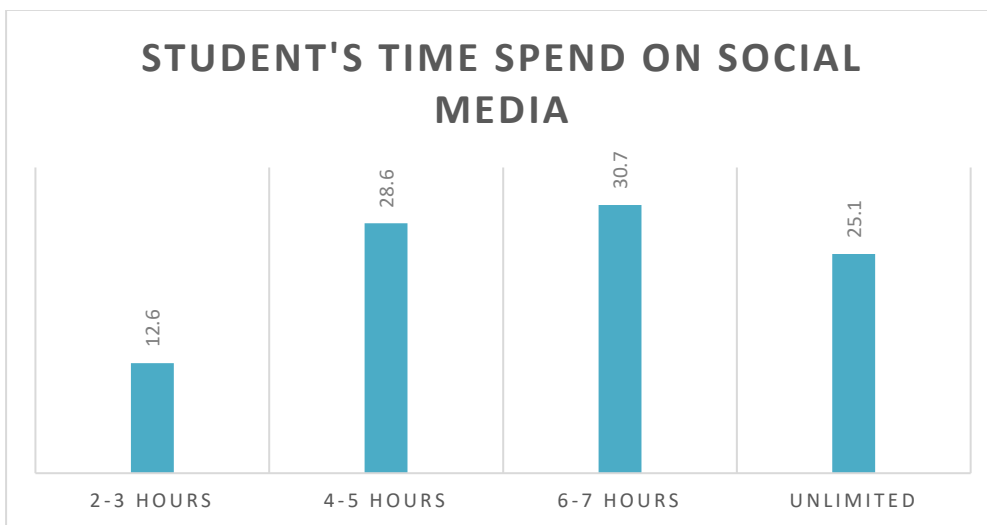
**Figure 3**

*Amount of time spend on social media (18-20years)*



**Figure 4**

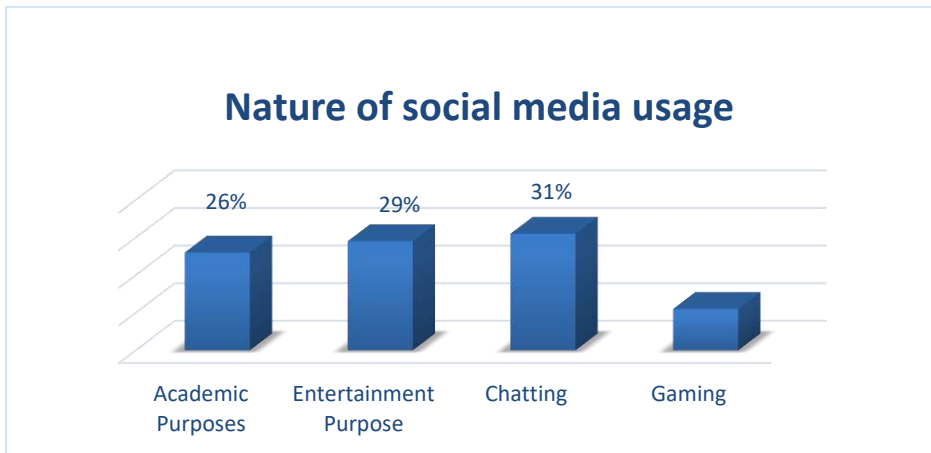
*Amount of time spend on social media (21-24years)*



The above figure reveals the student's time spent on social media daily. Almost 12% students' spend 2-3 hours per day on social media, 28% of student's time spends 4-5 hours on social media per day, 30% of students spend time 6-7 hours per day on social media, and 25% students spend unlimited time on social media per day. It is concluded that students spend 6 to 7 hours on social media per day.

**Figure 5**

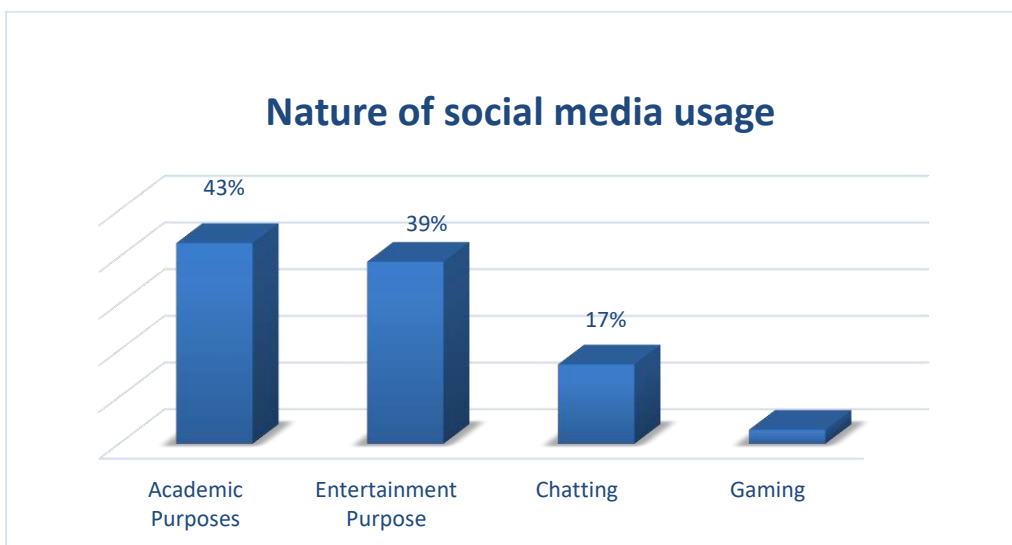
*Nature of social media usage (18-20)years*



According to the survey, 26% of students use social media for academic purposes, 28% of the students use social media for entertainment purposes. 24% of the students use social media for chatting purposes and 11% of the students use social media for gaming purposes. It is concluded that students of age group 18-20 years use social media for chatting purpose.

**Figure 6**

*Nature of social media usage(21-24 years)*



According to the survey, 43% of students use social media for academic purposes, 39% of the students use social media for entertainment purposes. 17% of the

students use social media for chatting purposes and 3% of the students use social media for gaming purposes. It is concluded that students of age group 21-24 years use social media for academic purpose.

#### **4.2 Descriptive Statistics**

##### **Objective 1: To determine students' level of addiction to social media usage.**

Twenty-nine questions with five-point scale responses were given to students in order to determine their level of social media addiction. The statement "I am eager to go on social media" found that the students are generally interested in using social media and are likely to check it frequently.

The statement "I check social networking sites instantly after waking up in the morning" shows that the students are very attached to social media and are likely to check it as soon as they wake up.

The statement "I check for updates on social media while working." shows that the students are likely to check social media even when they are supposed to be working.

The statement "I feel relaxed whenever I am on social media" reveals that the respondents generally feel relaxed when they are using social media.

The statement "Social media helps me lift my mood" explores that the student's find social media to be a mood booster.

The statement "Even my family frown upon, I cannot give up on social media" demonstrates that the student's are very reluctant to give up social media, even if their family disapproves of it.

The statement "I prefer virtual communication on SM to going out" explores that the student's prefer to communicate with others online rather than in person. They may find it easier to connect with others online, or they may simply prefer the convenience of being able to communicate from anywhere.

The statement "SM activities lay hold on my daily life" reveals that the student's feel that social media activities are taking over their daily lives.

The statement “I left my assignments incomplete because I spend time on social media demonstrates that the respondents have neglected their work because of social media.

The statement “I feel bad if someone asked me to decrease my time on social media” shows that the students are very resistant to the idea of reducing their time on social media.

The statement “Being on social media excites me” suggests that the student’s find social media to be a stimulating and enjoyable experience. They may find it exciting to see what their friends and family are up to, to learn about current events, or to simply interact with others online.

The statement “The curious world of social media always captivates me” reveals that the student’s find social media to be a fascinating and intriguing place.

The statement “I don’t even notice that I am hungry and thirsty when I am on social media” explores that the students are so engrossed in social media that they forget about their basic needs.

The statement “I noticed my productivity has diminished due to social media” demonstrates that the students have experienced a decrease in their productivity because of social media.

The statement “I like using social media to keep informed about what happens” shows that the student’s use social media to stay up to date on current events.

The statement “Keeping informed about things related to my courses makes me always stay on social media” shows that the student’s use social media to stay up to date on their coursework.

The statement “I usually have unlimited access to social media” explores that the students have easy access to social media, such as having a Smartphone or a laptop with them at all times.

The statement “I am active on social media to be instantly informed about what happens around” demonstrates that the student’s use social media to stay up-to-date on current events and happenings.

The statement “I cannot think of anything else but the moment I will be able to use social media again” shows that the students are very attached to social media.

The statement “Regularly I neglect other activities (hobbies, sport) to spend time on social media” reveals that the student’s may be sacrificing other activities in their lives in order to use social media.

The statement “Tried to spend less time on social media but failed” explores that the students have tried to reduce their social media use, but they have been unsuccessful.

The statement “I often find life boring without using social media” suggests that the students are very dependent on social media for entertainment and stimulation.

The statement “I spend more time on social media to see some special announcements” reveals that the students are interested in staying up-to-date on news and events that are important to them.

The statement “I use social media even when walking on the road to be instantly informed about developments.” shows that the students are very attached to social media and are constantly checking it for updates.

Overall, the results of all these statements of “**Social Media Addiction**” suggest that the respondents have a complex relationship with social media. They find it to be both enjoyable and distracting, and they are aware of its potential negative consequences. However, it was revealed that students are addicted to social media usage.

**Table 4.1**

*Level of social media addiction among students of first four semester.*

Addiction Level	Frequency	Percentage
Highly addicted	58	16.7%
Moderately addicted	168	48.4%
Slightly addicted	121	34.8%

Table 4.1 show that the Frequency of moderate level of social media addiction was 168 and the percentage was 48.4%. This table show that majority of students of age group 18-20 years are moderately addicted to social media.

**Table 4. 2**

*Level of social media addiction among students of 5<sup>th</sup> to 8<sup>th</sup> semester.*

Addiction Level	Frequency	Percentage
Highly addicted	272	78.38%
Moderately addicted	75	21'6%
Slightly addicted	0	0

Table 4.2 shows that Frequency of highly addicted level of social media addiction was 272 and percentage was 78%. This table show that majority of students of age group 21-24 years are highly addicted to social media usage.

**Objective 2: To explore Students' Mental Health at university level**

**4.2.1 Sleep Deprivation**

**Table 4.3**

*Frequency of "Sleep hours during night*

	Frequency	percent
9- 10 Hours	94	24.4
8-9 Hours	86	22.3
6-7 Hours	93	24.2
Less than 5 Hours	112	29.1
Total	347	100%

The table showed the results of a survey about the number of sleep hours during the night for 385 university students. According to this survey, 24% of the students sleep for 9-10 hours per night. This is the highest percentage and suggests that these students are getting enough sleep, 22% of the students sleep for 8-9 hours per night. This is also considered to be an adequate amount of sleep. Similarly, 24% of the students sleep for 6-7 hours per . Finally, 29% of the students sleep for less than 5 hours per night. This is considered to be a significant amount of sleep deprivation.

**Table 4.4**

*Frequency of time spent on social media after going to bed*

	Frequency	Percent
5-10 mints	74	19.2
20-30 mints	75	19.5
40 to 1 Hour	78	20.3
More than 2 Hours	90	23.4
I don't use technology on bed	68	17.6
Total	347	100.0

The table showed the results of a survey about the number of spend time on social media after going to bed for 385 university students. According to this survey, 19% of students spend 5-10 minutes on social media after going to bed, 19% of students spend 20-30 minutes on social media after going to bed. Furthermore, 20% of students spend 40 to 60 minutes on social media after going to bed. Similarly, 23% of students spend more than 2 hours on social media after going to bed. And 17% of students do not use technology in bed.



**Table 4.5***Frequency of responding anything on social media at night*

	<b>Frequency</b>	<b>Percent</b>
Yes Frequently	110	28.6
Yes, occasionally	103	26.8
Very Rarely	82	21.3
Not Ever	90	23.4
Total	347	100.0

The table explored the results of a survey about whether university students wake up after falling asleep at night to respond to anything on social media such as text messaging. According to the survey, 28% of students wake up frequently to respond to social media at night, 26% of students wake up occasionally to respond to social media, 21% of students wake up very rarely to respond to social media and 23% of students never wake up to respond to social media.

**Table 4.6***Frequency of symptoms of sleep deprivation during day*

	<b>Frequency</b>	<b>Percent</b>
I felt sleepy during class	75	19.5
I yawned more than once	82	21.3
I fall asleep in class	73	19
I feel confused and my mind is foggy	72	18.7
No, I am not aware of any symptoms	83	21.6
Total	347	100.0

The table revealed the results of a survey about whether university students notice any of the symptoms of sleep deprivation during the day. About 19% of students feel sleepy during class, 21% of students yawn more than once during the day, 19% of students fall asleep in class, 18% of students feel confused and their mind foggy during the day and 21% of students are not aware of any symptoms of sleep deprivation.

**Table 4.7**

*Frequency of lack of healthy sleep*

	<b>Frequency</b>	<b>Percentage</b>
Mental Stress	108	28.1
Academics	102	26.5
Relationship	88	22.9
No, I am getting enough sleep	87	22.6
Total	347	100.0

The survey results only showed how the students feel about the potential impact of lack of healthy sleep on their lives. The results showed that 28% of the students feel that lack of healthy sleep may be affecting them as mental stress. Another 26% of the students feel that lack of healthy sleep may be affecting them in the academic's area. This means that students are concerned about how their sleep deprivation is affecting their ability to learn and perform well in school. 12% of the students feel that lack of healthy sleep may be affecting them in the relationships area.

## 2: Sleep Deprivation

**Table 4.8**

Sleep Deprivation						
S. No	Items	SA	A	UD	DA	SDA
1	Lack of sleep creates difficulty in coping with daily life.	140 (41.0)	135 (39.5)	45 (13.2)	10 (2.1)	11 (3.2)
2	Sleep deprivation make me to lose interest in work.	150 (26.4)	85 (24.9)	48 (14.1)	55 (16.1)	3 (18.5)
3	I feel tired and exhausted in class when I did not have enough sleep.	125 (24.9)	80 (23.5)	55 (16.1)	60 (17.6)	21 (17.9)
4	Lack of sleep quality makes me stressed the whole day.	80 (23.5)	78 (22.9)	58 (17.0)	65 (19.1)	60 (17.6)
5	Sleep deprivation makes me anxious and forget things easily.	90 (26.4)	88 (25.8)	55 (16.1)	50 (14.7)	58 (17.0)
6	I wake up in the morning well rested.	50 (14.7)	45 (13.2)	75 (22.0)	70 (20.5)	101 (29.6)
7	I wake up in the morning quite tired	60 (17.6)	68 (19.9)	55 (16.1)	70 (20.5)	88 (25.8)

The statement "Lack of sleep creates difficulty in coping with daily life" has the highest percentage of responses (29%) in the "strongly agree" category. This suggests that over 57% of respondents agree that sleep deprivation makes it difficult to cope with daily life. The remaining 13% of respondents are either undecided (13%), disagree (2%), or strongly disagree (3%). This suggests that there is a significant minority of people who do not believe that sleep deprivation makes it difficult to cope with daily life.

The statement "Sleep deprivation make me to lose interest in work" has the highest percentage of responses (26%) in the "strongly agree" category. This suggests that over 51% of respondents agree that sleep deprivation makes them lose interest in work. The remaining 48% of respondents are either undecided (14%), disagree (16%), or strongly disagree (18%).

The statement "I feel tired and exhausted in class when I did not have enough sleep" has the highest percentage of responses (24%) in the "strongly agree" category, followed by "agree" (23%). This suggests that over 48% of respondents agree that they

feel tired and exhausted in class when they do not have enough sleep. The remaining 51% of respondents are either undecided (16%), disagree (17%), or strongly disagree (17%).

The statement "Lack of sleep quality makes me stressed the whole day" has the highest percentage of responses (23%) in the "strongly agree" category. This suggests that over 46% of respondents agree that lack of sleep quality makes them stressed the whole day. The remaining 53% of respondents are either undecided (17%), disagree (19%), or strongly disagree (17%).

The statement "Sleep deprivation makes me anxious and forget things easily" has the highest percentage of responses (26%) in the "strongly agree" category. This suggests that over 52% of respondents agree that sleep deprivation makes them anxious and forget things easily. The remaining 47% of respondents are either undecided (16%), disagree (14%), or strongly disagree (17%).

The statement "I wake up in the morning well rested" has the highest percentage of responses (29%) in the "strongly agree" category, followed by "agree" (20%). This suggests that over 50% of respondents wake up in the morning well rested. The remaining 49% of respondents are either undecided (22%), disagree (20%), or strongly disagree (14%). This suggests that there is a significant minority of people who do not wake up in the morning well rested.

The statement "I wake up in the morning quite tired" has the highest percentage of responses (25%) in the "strongly agree" category, followed by "agree" (19%). This suggests that over 45% of respondents wake up in the morning feeling quite tired. The remaining 54% of respondents are either undecided (16%), disagree (20%), or strongly disagree (17%).

Overall, the results of all these statements of “Sleep Deprivation” suggest that sleep deprivation can have a significant impact on a person's physical and mental health. It can make it difficult to function normally, and it can also lead to anxiety, stress, and forgetfulness.

### 3: Feeling of Inadequacy

**Table 4.9**

*Feeling of Inadequacy*

S. No	Items	SA	A	UD	DA	SDA
1	I compare my life to others on social media.	110 (32.2)	154 (54.6)	15 (4.3)	20 (5.2)	21 (8.8)
2	Viewing others posts on social media makes me feel insecure about how I look and what's going on in my life.	120 (35.1)	68 (19.9)	51 (14.9)	7 (2.0)	47 (13.8)
3	I lose my confidence when I compare myself with others.	70 (20.5)	65 (19.1)	58 (17.0)	50 (14.7)	58 (17.0)
4	I cannot focus on building my own identity while looking for others.	100 (46.7)	58 (17.0)	55 (16.1)	6 (1.7)	60 (17.6)
5	I am not satisfied with my progress.	75 (22.0)	137 (40.1)	47 (13.8)	3 (0.8)	54 (15.8)
6	Feeling of inadequacy leads me to use social media more to know about others.	70 (20.5)	60 (17.6)	63 (18.5)	50 (14.7)	6 (1.7)
7	I feel disappointed at the times in my present accomplishments and think I should have accomplished much more.	68 (19.9)	78 (22.9)	50 (14.7)	55 (16.1)	45 (13.2)
8	I compare my abilities to those around me and think them as more intelligent than me.	98 (27.6)	65 (19.1)	55 (16.1)	70 (20.5)	6 (1.7)
9	I feel discouraged if I am not best in the situation that involves achievements.	126 (34.1)	161 (44.7)	3 (0.8)	3 (0.8)	15 (4.3)
10	I wonder why I have these problems and others do not.	47 (13.8)	48 (14.1)	55 (16.1)	68 (19.9)	75 (22.0)
11	I am afraid that people may find out as I am not capable as they think of me.	58 (17.0)	60 (17.6)	58 (17.0)	65 (19.1)	60 (17.6)
12	I have a hard time acknowledging my success and accomplishments.	115 (16.1)	47 (13.8)	65 (19.1)	70 (20.5)	4 (21.7)
13	I frequently question my worth and value as a person.	130 (37.6)	115 (36.1)	18 (9.9)	11 (0.8)	6 (0.2)

The statement "I compare my life to others on social media" has the highest percentage of responses (20%) in the "strongly agree" category, followed by "agree" (54%). This suggests that over 38% of respondents compare their life to others on social media. The remaining 61% of respondents are either undecided (16%), disagree (8%), or strongly disagree (20%).

The statement "Viewing others posts on social media makes me feel insecure about how I look and what's going on in my life" has the highest percentage of responses (23%) in the "strongly agree" category. This suggests that over 43% of respondents feel insecure about their appearance and life when they view others' posts on social media. The remaining 56% of respondents are either undecided (14%), disagree (13%), or strongly disagree (13%).

The statement "Feeling envy and down because of other's posts on social media increases my stress and dissatisfaction towards myself" has the highest percentage of responses (22%) in the "strongly agree" category, followed by "agree" (20%). This suggests that over 43% of respondents agree that feeling envy and down because of other's posts on social media increases their stress and dissatisfaction towards themselves. The remaining 56% of respondents are either undecided (15%), disagree (16%), or strongly disagree (14%).

The statement "I lose my confidence when I compare myself with others" has the highest percentage of responses (20%) in the "strongly agree" category, followed by "agree" (19%). This suggests that over 39% of respondents agree that they lose their confidence when they compare themselves to others. The remaining 60% of respondents are either undecided (17%), disagree (14%), or strongly disagree (17%).

The statement "I cannot focus on building my own identity while looking for others" has the highest percentage of responses (19%) in the "disagree" category, followed by "strongly disagree" (17%). This suggests that over 37% of respondents believe that it is possible to focus on building one's own identity while looking for others. The remaining 62% of respondents are either undecided (16%), agree (17%), or strongly agree (17%).

The statement "Feeling of inadequacy leads me to use social media more to know about others" has the highest percentage of responses (20%) in the "strongly agree" category, followed by "agree" (17%). This suggests that over 38% of respondents agree that feeling inadequate leads them to use social media more to know about others. The remaining 61% of respondents are either undecided (18%), disagree (14%), or strongly disagree (17%).

The statement "I feel disappointed at the times in my present accomplishments and think I should have accomplished much more" has the highest percentage of responses (22%) in the "strongly agree" category, followed by "agree" (19%). This suggests that over 42% of respondents agree that they often feel disappointed with their present accomplishments and think they should have accomplished more. The remaining 57% of respondents are either undecided (16%), disagree (14%), or strongly disagree (1%). This suggests that there is a significant minority of people who do not feel this way.

The statement "I feel discouraged if I am not best in the situation that involves achievements" has the highest percentage of responses (22%) in the "strongly agree" category, followed by "agree" (20%). This suggests that over 42% of respondents agree that they feel discouraged if they are not the best in situations that involve

achievements. The remaining 58% of respondents are either undecided (20%), disagree (14%), or strongly disagree (16%).

The statement "I wonder why I have these problems and others do not" has the highest percentage of responses (22%) in the "strongly agree" category, followed by "agree" (20%). This means that over 42% of respondents agree that they wonder why they have problems that others do not. The remaining 58% of respondents are either undecided (20%), disagree (14%), or strongly disagree (16%).

The statement "I am afraid that people may find out as I am not capable as they think of me" has the highest percentage of responses (19%) in the "strongly agree" category, followed by "agree" (17%). This suggests that over 36% of respondents agree that they are afraid that people may find out that they are not as capable as others think they are. The remaining 63% of respondents are either undecided (17%), disagree (17%), or strongly disagree (17%).

The statement "I have a hard time acknowledging my success and accomplishments" has the highest percentage of responses (21%) in the "strongly agree" category, followed by "agree" (20%). This suggests that over 42% of respondents agree that they have a hard time acknowledging their success and accomplishments.

The statement "I frequently question my worth and value as a person" has the highest percentage of responses (20%) in the "strongly agree" category, followed by "agree" (19%). This suggests that over 40% of respondents agree that they frequently question their worth and value as a person.

Overall, the results of "Feelings of inadequacy" statements suggest that the student's are experiencing a range of negative emotions and thoughts as a result of



comparing themselves to others on social media. They feel insecure, inadequate, and discouraged. They also have a hard time acknowledging their own successes and accomplishments. This can lead to a number of negative consequences, such as low self-esteem, anxiety, and depression.

#### **4: Online Bulling**

**Table 4.10**

*How many times you became the victim of cyber bullying?*

	<b>Frequency</b>	<b>Percent (%)</b>
Once or twice	113	33.14
Several Times	102	29.91
Never became victims	126	36.95
Total	347	100.0

Cyber bullying is a serious problem that can have a negative impact on students' mental health. Victims of cyber bullying may experience anxiety, depression, low self-esteem, and even suicidal thoughts. The above table shows the frequency of cyber bullying victimization among university students. The data shows that 33% of students were cyber bullied once or twice, 29% were cyber bullied several times, and 36% were never cyber bullied.

Students who are addicted to social media may be more likely to post personal information about them online, which can make them more vulnerable to attack. Additionally, students who are addicted to social media may be more likely to engage in risky behaviors, such as cyber bullying, themselves.

**Table 4.11***What was status of victimization?*

Frequency of “ <b>Status of Victimization</b> ”		
	Frequency	Percentage
Threatening messages	80	23.45
Sending of inappropriate pictures and videos	80	23.45
Embarrassing and hurtful comments	91	26.69
Using your identity	90	26.41
Total	347	100.0

The table shows the status of victimization of university students who were cyber bullied. The survey results show that the most common form of cyber bullying was sending inappropriate pictures and videos (23%), in which images or videos can be used to humiliate or embarrass the victim. They may be shared with others without the victim's consent. Furthermore, 23% of students followed by threatening messages. These messages can be used to intimidate or scare the victim. They may contain threats of violence, physical harm, or even death. Almost 26% of students face embarrassing and hurtful comments on social media platforms. These comments can be used to make the victim feel bad about them. They may be about the victim's appearance, personality, or social status. Similarly, 26% of students use their identity on social media to talk to others.

**Table 4.12***Online Bullying*

<b>Online Bullying</b>						
<b>S. No</b>	<b>Items</b>	<b>SA</b>	<b>A</b>	<b>UD</b>	<b>DA</b>	<b>SDA</b>
<b>1</b>	Online bullying is on rise at university level.	94 (27.6)	81 (23.8)	10 (2.0)	50 (14.7)	56 (16.4)
<b>2</b>	Online bullying made me stressed and anxious.	85 (24.9)	70 (20.5)	6 (1.7)	50 (14.7)	51 (14.9)
<b>3</b>	Bullying victimization made me lost concentration in classroom and other activities.	90 (26.4)	78 (22.9)	63 (18.5)	49 (14.4)	61 (17.9)
<b>4</b>	I share my problems with my teachers and friends to seek help.	88 (25.8)	75 (22.0)	59 (17.3)	55 (16.1)	64 (18.8)
<b>5</b>	I inform my parents of being bullying victimization.	85 (24.9)	80 (23.5)	62 (18.2)	58 (17.0)	56 (16.4)
<b>6</b>	Online bullying increases over thinking and results in headache.	78 (22.9)	118 (40.5)	15 (4.3)	60 (17.6)	62 (18.2)

The statement "Online bullying is on the rise at university level" is strongly agreed with by 27% of respondents, agreed with by 23% of respondents, undecided by 17% of respondents, disagreed with by 14% of respondents, and strongly disagreed with by 16.4% of respondents. This suggests that the majority of respondents (51%) believe that online bullying is on the rise at the university level.

The statement "Online bullying made me stressed and anxious" is strongly agreed with by 24% of respondents, agreed with by 20% of respondents, undecided by 19.1% of respondents, disagreed with by 14% of respondents, and strongly disagreed with by 14% of respondents. This suggests that the majority of respondents (59%) believe that online bullying can cause stress and anxiety.

The statement "Bullying victimization made me lost concentration in classroom and other activities" has the highest percentage of responses (26%) in the "strongly agree" category, followed by "agree" (22%). This suggests that over 49% of

respondents agree that bullying victimization made them lose concentration in the classroom and other activities. The remaining 50% of respondents are either undecided (18%), disagree (14%), or strongly disagree (17%). This suggests that bullying victimization can have a significant impact on a person's ability to concentrate and participate in activities.

The statement "I share my problems with my teachers and friends to seek help" has the highest percentage of responses (25%) in the "strongly agree" category, followed by "agree" (22%). This suggests that over 47% of respondents agree that they share their problems with their teachers and friends to seek help. The remaining 53% of respondents are either undecided (17%), disagree (16%), or strongly disagree (18%).

The statement "I inform my parents of being bullying victimization" has the highest percentage of responses (24%) in the "strongly agree" category, followed by "agree" (23%). This suggests that over 48% of respondents agree that they inform their parents of being bullying victimization.

The statement "Online bullying increases over thinking and results in headache" has the highest percentage of responses (22%) in the "strongly agree" category, followed by "agree" (20%). This suggests that over 43% of respondents agree that online bullying increases over thinking and results in headache. This is a consistent finding with research on the effects of online bullying, which shows that online bullying can lead to a number of negative outcomes, including stress, anxiety, depression, and physical health problems such as headaches.

Overall, the results of these "Online Bulling" statements suggest that online bullying can have a significant negative impact on the mental and emotional health of university students.

## 5: Fear of Missing Out (FOMO)

**Table 4.13**

*Fear of Missing Out (FOMO)*

Fear of Missing Out (FOMO)						
S. No	Items	SA	A	UD	DA	SDA
1	I feel anxious when I am not aware of events and opportunities.	90 (26.4)	80 (23.5)	65 (19.1)	58 (17.0)	48 (14.1)
2	I feel sad for myself when I miss events.	80 (23.5)	75 (22.0)	68 (19.9)	55 (16.1)	63 (18.5)
3	I feel uneasy and stressed when I do notice the opportunities I could take advantage of.	85 (24.9)	78 (22.9)	60 (17.6)	59 (17.3)	59 (17.3)
4	When I decide on one of attractive opportunities, I regret choosing the other.	78 (22.9)	74 (21.7)	67 (19.6)	65 (19.1)	57 (16.7)
5	I feel deeply lonely when others attend event without me.	87 (25.5)	79 (23.2)	61 (17.9)	58 (17.0)	56 (16.4)
6	I feel ignored and forgotten by my friends attend social activities without me.	89 (26.1)	80 (23.5)	63 (18.5)	57 (16.7)	52 (15.2)
7	I get anxious when I cannot keep up keep up with my friends plans.	78 (22.9)	70 (20.5)	70 (20.5)	63 (18.5)	60 (17.6)
8	I fear others have more rewarding experience than me.	90 (26.4)	79 (23.2)	66 (19.3)	61 (17.9)	45 (13.2)
9	I feel embarrassed even if I decline an invitation due to compelling reasons.	85 (24.9)	72 (21.1)	65 (19.1)	62 (18.2)	57 (16.7)
10	I feel outcast from my social groups when I decline an invitation.	78 (22.9)	70 (20.5)	68 (19.9)	64 (18.8)	61 (17.9)
13	I feel regretful when I miss opportunities.	92 (26.9)	85 (24.9)	63 (18.5)	59 (17.3)	52 (15.2)
14	I feel uneasy when I don't notice opportunities I could take advantage of.	80 (23.5)	75 (22.0)	72 (21.1)	66 (19.3)	48 (14.1)

The statement "I feel anxious when I am not aware of events and opportunities" has the highest percentage of responses (26%) in the "strongly agree" category, followed by "agree" (23%). This suggests that over 49% of respondents agree that they

feel anxious when they are not aware of events and opportunities. The remaining 51% of respondents are either undecided (19%), disagree (17%), or strongly disagree (14%). This suggests that FOMO is a common experience.

The statement "I feel sad for myself when I miss events" has the highest percentage of responses (23%) in the "agree" category, followed by "strongly agree" (22%). This suggests that over 45% of respondents agree that they feel sad for themselves when they miss events. The remaining 55% of respondents are either undecided (19%), disagree (16%), or strongly disagree (18%). This suggests that feeling sad for oneself when missing events is a common experience.

The statement "I feel uneasy and stressed when I do notice the opportunities, I could take advantage of" has the highest percentage of responses (24%) in the "strongly agree" category, followed by "agree" (22%). This suggests that over 47% of respondents agree that they feel uneasy and stressed when they notice the opportunities they could take advantage of. The remaining 53% of respondents are either undecided (17%), disagree (17%), or strongly disagree (17%). This suggests that it is common to feel uneasy and stressed when faced with opportunities.

The statement "When I decide on one of attractive opportunities, I regret choosing the other" has the highest percentage of responses (22%) in the "agree" category, followed by "strongly agree" (21%). This suggests that over 44% of respondents agree that they regret choosing one attractive opportunity over another. The remaining 56% of respondents are either undecided (19%), disagree (19%), or strongly disagree (16%). This suggests that it is common to experience regret when making decisions between two attractive opportunities.

The statement "I feel deeply lonely when others attend event without me" has the highest percentage of responses (25%) in the "agree" category, followed by "strongly agree" (23%). This suggests that over 48% of respondents agree that they feel deeply lonely when others attend events without them. The remaining 52% of respondents are either undecided (17%), disagree (17%), or strongly disagree (16%).

The statement "I feel ignored and forgotten by my friends attend social activities without me" has the highest percentage of responses (26%) in the "agree" category, followed by "strongly agree" (23%). This suggests that over 49% of respondents agree that they feel ignored and forgotten by their friends when they attend social activities without them. The remaining 51% of respondents are either undecided (18%), disagree (16%), or strongly disagree (15%). This suggests that it is common to feel ignored and forgotten by your friends when they attend social activities without you.

The statement "I get anxious when I cannot keep up with my friends plans" has the highest percentage of responses (22%) in the "strongly agree" category, followed by "agree" (20%). This suggests that over 43% of respondents agree that they get anxious when they cannot keep up with their friends plans. The remaining 57% of respondents are either undecided (20%), disagree (18%), or strongly disagree (17%). This suggests that it is common to feel anxious when one cannot keep up with their friend's plans.

The statement "I fear others have more rewarding experience than me" has the highest percentage of responses (26%) in the "strongly agree" category, followed by "agree" (23%). This suggests that over 50% of respondents agree that they fear others have more rewarding experiences than them. The remaining 50% of respondents are either undecided (19%), disagree (17%), or strongly disagree (13%). This suggests that

it is common to feel envious of others' experiences, especially when we perceive their experiences to be more rewarding than our own.

The statement "I feel embarrassed even if I decline an invitation due to compelling reasons" has the highest percentage of responses (24%) in the "strongly agree" category, followed by "agree" (21%). This suggests that over 46% of respondents agree that they feel embarrassed even if they decline an invitation due to compelling reasons. The remaining 54% of respondents are either undecided (19%), disagree (18%), or strongly disagree (16%). This suggests that it is common to feel embarrassed when declining an invitation.

The statement "I feel outcast from my social groups when I decline an invitation" has the highest percentage of responses (22%) in the "strongly agree" category, followed by "agree" (20%). This suggests that over 43% of respondents agree that they feel outcast from their social groups when they decline an invitation. The remaining 57% of respondents are either undecided (19%), disagree (18%), or strongly disagree (17%). This suggests that it is common to feel outcast from one's social group when declining an invitation.

The statement "I feel regretful when I miss opportunities" has the highest percentage of responses (26%) in the "strongly agree" category, followed by "agree" (24%). This suggests that over 51% of respondents agree that they feel regretful when they miss opportunities. The remaining 49% of respondents are either undecided (18%), disagree (17%), or strongly disagree (15%). This suggests that it is common to feel regretful when missing opportunities.

Overall, the all statements of "Fear of Missing out (FOMO)" suggest that the student's also feel obsessed and left behind when they miss something on social media, deeply



lonely when others attend events without them, ignored and forgotten by friends when they go out without them, anxious when they cannot keep up with friends plans, and annoyed when they think about friends having fun without them.

## 6: Social Anxiety

**Table 4.14**

### *Social Anxiety*

Social Anxiety						
S. No	Items	SA	A	UD	DA	SDA
1	I fear about what others think of me.	90 (26.4)	75 (22.0)	65 (19.1)	60 (17.6)	51 (14.9)
2	I am afraid that others will not like me.	88 (25.8)	76 (22.3)	70 (20.5)	59 (17.3)	48 (14.1)
3	I feel shy around people I don't know.	85 (24.9)	70 (20.5)	68 (19.9)	63 (18.5)	55 (16.1)
4	I feel nervous when I talk to peers I don't know.	92 (26.9)	80 (23.5)	60 (17.6)	55 (16.1)	54 (15.8)
5	I hesitate and remain quiet when I interact with new people.	94 (27.6)	78 (22.9)	62 (18.2)	55 (16.1)	52 (15.2)
6	I am afraid to invite others to do things with me because they might say no.	86 (25.2)	79 (23.2)	65 (19.1)	61 (17.9)	50 (14.7)
7	I maintain avoidance behavior in interactive sessions or gatherings.	95 (27.9)	85 (24.9)	60 (17.6)	50 (14.7)	51 (14.9)
8	I fear of others negative evaluation about me.	90 (26.4)	82 (24.0)	66 (19.3)	58 (17.0)	45 (13.2)
9	I feel happy doing things alone	60 (17.6)	75 (22.0)	75 (22.0)	70 (20.5)	61 (17.9)
10	I avoid speaking up or socializing in groups due to fear of embarrassment.	80 (23.5)	68 (19.9)	70 (20.5)	70 (20.5)	53 (15.5)

The statement "I fear about what others think of me" has the highest percentage of responses (26%) in the "strongly agree" category, followed by "agree" (22%). This suggests that over 48% of respondents agree that they fear about what others think of them. The remaining 52% of respondents are either undecided (19%), disagree (17%), or strongly disagree (14%). This suggests that it is very common to fear about what others think of us.

The statement "I am afraid that others will not like me" has the highest percentage of responses (25%) in the "strongly agree" category, followed by "agree" (22%). This suggests that over 48% of respondents agree that they are afraid that others will not like them. The remaining 52% of respondents are either undecided (20%), disagree (17%), or strongly disagree (14%). This suggests that it is very common to be afraid that others will not like us.

The statement "I feel shy around people I don't know" has the highest percentage of responses (24%) in the "strongly agree" category, followed by "agree" (20%). This suggests that over 45% of respondents agree that they feel shy around people they don't know. The remaining 55% of respondents are either undecided (19%), disagree (18%), or strongly disagree (16%). This suggests that it is very common to feel shy around people we don't know.

The statement "I feel nervous when I talk to peers I don't know" has the highest percentage of responses (26%) in the "strongly agree" category, followed by "agree" (23%). This suggests that over 50% of respondents agree that they feel nervous when they talk to peers they don't know. The remaining 50% of respondents are either undecided (17%), disagree (16%), or strongly disagree (15%). This suggests that it is very common to feel nervous when talking to peers we don't know.

The statement "I hesitate and remain quiet when I interact with new people" is a common experience among many people. The percentage values in the table show that 27% of the respondents strongly agreed with the statement, 22% agreed, 18% were undecided, 16% disagreed, and 15% strongly disagreed. This suggests that over half of the respondents agree that they hesitate and remain quiet when they interact with new people.

The statement "I am afraid to invite others to do things with me because they might say no" is a common fear that many people experience. The percentage values in the table show that 25% of the respondents strongly agreed with the statement, 23% agreed, 19% were undecided, 17% disagreed, and 14% strongly disagreed. This suggests that nearly half of the respondents agree that they are afraid to invite others to do things with them because they might say no.

The statement "I hesitate and remain quiet when I interact with new people" received a majority of agreement, with 27% of people strongly agreeing and 22% agreeing. This suggests that it is common to feel hesitant and quiet when interacting with new people. The statement "I fear of others negative evaluation about me" is a common fear that many people experience. The percentage values in the table show that 26% of the respondents strongly agreed with the statement, 24% agreed, 19% were undecided, 17% disagreed, and 13% strongly disagreed. This suggests that nearly a third of the respondents agree that they fear others' negative evaluation about them.

The statement "I feel happy doing things alone" is a common sentiment among many people. The percentage values in the table show that 22% of the respondents strongly agreed with the statement, 22% agreed, 20% were undecided, 17% disagreed, and 17% strongly disagreed. This suggests that over 44% of the respondents enjoy spending time alone.

The statement "I avoid speaking up or socializing in groups due to fear of embarrassment" is a common fear that many people experience. The percentage values in the table show that 23% of the respondents strongly agreed with the statement, 19% agreed, 20% were undecided, 20% disagreed, and 15% strongly disagreed. This

suggests that over 64% of the respondents agree that they avoid speaking up or socializing in groups due to fear of embarrassment.

## 7: Loneliness

**Table 4.15**

### *Loneliness*

<b>Loneliness</b>						
<b>S. No</b>	<b>Items</b>	<b>SA</b>	<b>A</b>	<b>UD</b>	<b>DA</b>	<b>SDA</b>
1	I experience a sense of emptiness	82 (24.0)	89 (29.5)	48 (10.9)	63 (18.5)	58 (17.0)
2	There are plenty of people I can rely on when I have problems.	60 (17.6)	75 (22.0)	78 (22.9)	70 (20.5)	58 (17.0)
3	There are many people I feel close to.	65 (19.1)	74 (21.7)	75 (22.0)	66 (19.3)	61 (17.9)
4	I miss having people around me.	90 (26.4)	78 (22.9)	70 (20.5)	63 (18.5)	40 (11.7)
5	I feel unhappy doing things alone.	84 (24.6)	79 (23.2)	68 (19.9)	65 (19.1)	45 (13.2)
6	I feel myself waiting for people to call or write.	75 (22.0)	65 (19.1)	72 (21.1)	70 (20.5)	59 (17.3)
7	I am satisfied with my social relationships.	60 (17.6)	65 (19.1)	74 (21.7)	80 (23.5)	62 (18.2)
8	I feel isolated from other.	85 (24.9)	78 (22.9)	70 (20.5)	66 (19.3)	42 (12.3)
9	I happily spent time happily with my family every day.	60 (17.6)	78 (22.9)	80 (23.5)	70 (20.5)	53 (15.5)
10	I am satisfied with my social relationships and social life.	58 (17.0)	170 (28.1)	75 (22.0)	34 (5.6)	59 (17.3)
11	There is always someone I talk about day to day problems.	62 (18.2)	68 (19.9)	74 (21.7)	80 (23.5)	57 (16.7)
12	I use social media more than communicating with people around me.	65 (19.1)	78 (22.9)	80 (23.5)	68 (19.9)	50 (14.7)
13	I prefer to sit alone rather than participating in group activities.	90 (26.4)	75 (22.0)	65 (19.1)	60 (17.6)	51 (14.9)

The statement "I experience a sense of emptiness" is a common symptom of loneliness. It is a feeling of being disconnected from others and from oneself. The percentage values in the table show that 24% of the respondents strongly agreed with the statement, 29% agreed, 10.9% were undecided, 18% disagreed, and 17% strongly disagreed. This suggests that over 61% of the respondents agree that they experience a sense of emptiness.

The statement "There are plenty of people I can rely on when I have problems" is a positive statement that suggests that the students has a strong social support network. The percentage values in the table show that 22% of the respondents strongly agreed with the statement, 22% agreed, 20% were undecided, 17% disagreed, and 17% strongly disagreed.

The statement "There are many people I feel close to" generated a range of responses among the participants. A notable percentage (22%) expressed agreement, and a similar group (21%) agreed with the statement, suggesting a substantial number of respondents feel close to many people. Additionally, a considerable portion (19%) showed some level of agreement. On the other hand, a smaller percentage (19%) strongly agreed with the statement, indicating a strong sense of closeness to others. Finally, a portion (17%) disagreed with the statement, implying they do not feel particularly close to many people.

The statement "I miss having people around me" indicated a range of responses among the respondents. A range of (26%) strongly agreed with the statement, indicating a strong sense of longing for social interaction. Another notable group (22%) agreed, suggesting that they, too, miss having people around. A significant percentage (20%) showed some level of agreement, while a smaller portion (18%) disagreed, implying they do not particularly miss having people around. A smaller but still noteworthy

fraction (11%) strongly disagreed with the statement, indicating they do not miss social interactions.

The statement "I feel unhappy doing things alone" indicated that (24%) strongly agreed with the statement, indicating a strong preference for companionship when engaging in activities. Another significant group (23%) agreed, suggesting they also feel unhappy when doing things alone. A notable percentage (19%) showed some level of agreement, while a smaller portion (19%) disagreed, that they don't necessarily feel unhappy when alone. Also (13%) strongly disagreed with the statement, indicating that they are comfortable and content when doing things by themselves.

The statement "I feel myself waiting for people to call or write" resulted that (22%) strongly agreed with the statement, indicating a strong tendency to wait for communication from others. Another significant group (19%) agreed, suggesting that they also have this waiting behavior. A notable percentage (21%) showed some level of agreement, while a smaller portion (20%) disagreed, implying that they do not frequently wait for others to initiate contact, (17%) strongly disagreed with the statement, indicating they are proactive in their communication and do not typically wait for others to call or write.

The statement "I am satisfied with my social relationships" revealed that (23%) strongly agreed with the statement, indicating a high level of satisfaction with their social relationships. Another substantial group (21%) agreed, suggesting that they are also satisfied with their social connections. A significant percentage (19%) showed some level of agreement, while a smaller portion (17%) disagreed, implying they are not as satisfied with their social relationships, (18%) strongly disagreed with the statement, indicating a strong dissatisfaction with their social connections.

The statement "I feel isolated from others" suggested that (24%) strongly agreed with the statement, indicating a strong sense of isolation from others. Almost (22%) agreed, suggesting that they also feel isolated. A significant percentage (20%) showed some level of agreement, while a smaller portion (19%) disagreed, implying they do not feel as isolated. A smaller but still noteworthy fraction (12%) strongly disagreed with the statement, indicating they do not feel isolated from others at all.

The statement "I feel people are around me but not with me" showed that percentage (22%) strongly agreed with the statement, indicating a strong perception of being surrounded by people but not feeling a strong sense of connection with them, (20%) agreed, suggesting they also feel a sense of disconnection despite the presence of others. A significant percentage (21%) showed some level of agreement, while a smaller portion (19%) disagreed, implying that they do not share the same perception of disconnection. A smaller but still noteworthy fraction (15%) strongly disagreed with the statement, indicating they feel a sense of connection with the people around them.

The statement "I happily spend time with my family every day" found that (23%) strongly agreed with the statement, indicating that they indeed enjoy spending time with their family daily, (22%) agreed, suggesting they also have positive experiences with their family on a daily basis. A significant percentage (20%) showed some level of agreement, while a smaller portion (17%) disagreed, implying they do not necessarily experience daily happiness with their family.

The statement "I am satisfied with my social relationships and social life" showed that (24%) strongly agreed with the statement, indicating a high level of satisfaction with their social relationships and overall social life. Another substantial group (22%) agreed, suggesting they also find satisfaction in their social interactions

and social experiences. A significant percentage (19%) showed some level of agreement, while a smaller portion (17%) disagreed, implying they do not feel as satisfied with their social relationships and social life., (17%) strongly disagreed with the statement, indicating a strong dissatisfaction with their social connections and social experiences.

The statement "There is always someone I talk to about day-to-day problems" resulted in a range of responses among the participants. (23%) students strongly agreed with the statement, indicating that they always have someone they can confide in about everyday issues. Another substantial group (21%) agreed, suggesting they also have a reliable confidant for daily problems. A significant percentage (19%) showed some level of agreement, while a smaller portion (18%) disagreed, implying they may not always have someone to discuss day-to-day problems with, (16%) strongly disagreed with the statement, indicating they often lack a confidant for day-to-day issues.

The statement "I use social media more than communicating with people around me showed that (23%) strongly agreed with the statement, indicating a strong tendency to prioritize social media over in-person communication. Another substantial group (22%) agreed, suggesting they also lean toward using social media more. A significant percentage (19%) showed some level of agreement, while a smaller portion (19%) disagreed, implying they do not primarily use social media for communication.

The statement "I prefer to sit alone rather than participating in group activities" resulted in a range of responses among the participants. A significant percentage (26%) strongly agreed with the statement, indicating a strong preference for solitude over group activities. Another notable group (22%) agreed, suggesting they also have a preference for solitude. A significant percentage (19%) showed some level of



agreement, while a smaller portion (17%) disagreed, implying they do not necessarily prefer to sit alone, (14%) strongly disagreed with the statement, indicating they favor participating in group activities over sitting alone.

Overall, these all statements of “Loneliness” suggest that the person is feeling conflicted about their social relationships. They say that they are satisfied with their social relationships, but they also say that they feel isolated, like people are around them but not with them, and that they prefer to sit alone rather than participating in group activities.

### **Exploring students’ mental health**

The results revealed that students are experiencing poor mental health as a result of sleep deficiency, experiencing a range of negative emotions and thoughts as they compare themselves to other on social media and fear of missing out opportunities. The results also suggested that students are experiencing poor mental health as a result of online bullying and loneliness as it leads them to stress and anxiety.

### **Objective 3: To find out relationship between social media addiction and students’ mental health.**

**Table 4.16**

*Correlation of social media addiction and sleep deprivation*

Variables	No. of Participants (N)	Pearson Coefficient (r)	p-value
Social media addiction	347	0.356	0.002
Sleep deprivation			

A correlation of 0.356 indicates a moderate positive relationship between social media addiction and sleep deprivation, which means that the more addicted a student is to social media platforms, the less sleep they are likely to get.

**Table 4.17**

*Correlation of social media addiction and feelings of inadequacy*

Variables	No. of Participants (N)	Pearson Coefficient (r)	p-value
Social media addiction	347	0.457	0.005
Feelings of inadequacy			

A correlation of 0.457 indicates a positive relationship between social media addiction and a feeling of inadequacy, which means that the more addicted a student, is to social media, the more likely they are to feel inadequate.

**Table 4.18**

*Correlation of social media addiction and Cyberbullying.*

Variables	No. of Participants (N)	Pearson Coefficient (r)	p-value
Social media addiction	347	0.25	0.015
Cyberbullying			

A correlation of 0.25 indicates a weak positive relationship between social media addiction and online bullying, which means that the more addicted a student is to social media, the more likely they are to be bullied online.

**Table 4.19**

*Correlation of social media addiction and Fear of Missing out .*

---

Variables	No. of Participants (N)	Pearson Coefficient (r)	<i>p</i> -value
Social media addiction	347	0.385	0.003
Fear of missing out			

---

**Table 4.20**

*Correlation of social media addiction and social anxiety.*

---

Variables	No. of Participants (N)	Pearson Coefficient (r)	<i>p</i> -value
Social media addiction	347	0.408.	0.004
Social anxiety			

---

A correlation of 0.385 indicates a positive relationship between social media addiction and social anxiety, which means that the more addicted a student, is to social media, the more likely they are to have a fear of missing out on what their peers are doing.

**Table 4.21***Correlation of Social media addiction and Loneliness*

Variables	No. of Participants (N)	Pearson Coefficient (r)	<i>p</i> -value
Social media addiction	347	0.401	0.001

Loneliness

A correlation of 0.401 indicates a moderate positive relationship between social media addiction and loneliness. This means that there is a moderate relationship between the two variables. In other words, students who are more addicted to social media are more likely to feel lonely.

**Table 4.22***Correlation of social media addiction and feelings of inadequacy*

Variables	No. of Participants (N)	Pearson Coefficient (r)	<i>p</i> -value
Social media addiction	347	0.487	0.005

Mental health

A correlation of 0.457 indicates a positive relationship between social media addiction and students' mental health, which means that the more addicted a student, is to social media, the more likely they have poor mental health.

## **CHAPTER 5**

### **SUMMARY, FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Summary**

The title of the study was “Relationship between social media addiction and students’ mental health at university level”. The objectives of the study were: a) To determine the level of social media addiction among university students, (b) To explore students’ mental health at university level, (c) to investigate the relationship between university students' mental health and social media addiction. Relevant literature from the previous studies was reviewed.

The population of the study consisted of undergraduate students from department of Faculty of Social Sciences and Education of International Islamic University Islamabad. Stratified proportionate sampling technique was used to select sample of the study. The sample of the study was 347 undergraduate students between 18 to 24 years old. Closed ended, five-point Likert scale questionnaire was adapted. Researcher used two instruments. To measure level of addiction among students, questionnaire was adopted and to explore students’ mental health adapted questionnaire was used.

Based on literature review instrument was adapted for exploring mental health of the students. The instrument was divided into six subcategories I. e. Sleep deprivation, feelings of inadequacy, Fear of missing out, Online bullying, stress, social anxiety, and loneliness. The study was quantitative in nature and research design adopted for the study was correlational. Researcher collected the data through personal visit to the university. Ethical Consideration were considered. Data were analyzed by descriptive and inferential statistics through Mean and Pearson Product-Moment Correlation Coefficient was used to find out relationship between social media addiction and students mental health.

#### **5.2 Findings**

1. The study revealed that most students’ favorite social media site (18-20 years) is “Facebook” with 29% of the students choosing it as their favorite. Instagram is the second most popular social media site, with 18% of the students choosing it as their favorite. Snapchat is the third most popular social media site, with

15% of the respondents, YouTube and TikTok with 14% respondent choosing it as their favorite. Twitter is the least most popular social media site, with 10% of the students choosing it as their favorite.

2. The study revealed that most students' favorite social media site (21-24 years) is "Facebook" with 23% of the students choosing it as their favorite. TikTok is the second most popular social media site, with 18% of the students choosing it as their favorite. YouTube is the third most popular social media site, with 19% of the respondents, Snapchat with 16% and Instagram with 18% respondents choosing it as their favorite. Twitter is the least most popular social media site, with 44% of the students choosing it as their favorite.
3. The study found that 26% of students (18-20 years) use social media for academic purposes, 28.8% of the students use social media for entertainment purposes. 24% of the students use social media for chatting purposes and 11% of the students use social media for gaming purposes.
4. The study found that 43% of students (21-24years) use social media for academic purposes, 39% of the students use social media for entertainment purposes. 17% of the students use social media for chatting purposes and 3% of the students use social media for gaming purposes.
5. The study revealed amount of students' time spent on social media daily of age group 21-24 years. Almost 12% students spend 2-3 hours per day on social media, 28% of student's time spends 4-5 hours on social media per day, 30% of students spend time 6-7 hours per day on social media, and 25% students spend unlimited time on social media per day.
6. The study revealed that Frequency of moderate level of social media addiction was 168 and the percentage was 48% This shows that majority of students of age group 18\_20 years are moderately addicted to social media.
7. The also found that Frequency of highly addicted level of social media addiction among students was 272 and percentage was 78%. This shows that majority of students of age group 21-24 years are highly addicted to social media usage.
8. The study indicated that 22% of the students sleep for 9-10 hours per night. Also, 4% of the students sleep for 8-9 hours per night. Similarly, 24% of the students sleep for 6-7 hours per night. Finally, 49% of the students sleep for less than 5 hours per night. This is a significant amount of sleep deprivation and can lead to a number of health problems, such as fatigue, irritability, and difficulty

concentrating. The study suggested that most students sleep less than 5 hours at night

9. According to this study, 19% of students spend 5-10 minutes on social media after going to bed. This is a relatively short amount of time and is unlikely to have a significant impact on sleep. Also, 19% of students spend 20-30 minutes on social media after going to bed. Furthermore, 20% of students spend 40 to 60 minutes on social media after going to bed. Similarly, 23% of students spend more than 2 hours on social media after going to bed. And 17% of students do not use technology in bed.
10. The study revealed that 28% of students wake up frequently to respond to social media at night, 26% of students wake up occasionally to respond to social media, 21% of students wake up very rarely to respond to social media and 23% of students never wake up to respond to social media.
11. The study found that about 19% of students feel sleepy during class, 21% of students yawn more than once during the day, 19% of students fall asleep in class, 18% of students feel confused and their mind foggy during the day and 21% of students are not aware of any symptoms of sleep deprivation.
12. The study indicated the frequency of cyber bullying victimization among university students. The data showed that 33% of students were cyber bullied once or twice, 29% were cyber bullied several times, and 36% were never cyber bullied. Students who are addicted to social media may be more likely to post personal information about them online, which can make them more vulnerable to attack. Additionally, students who are addicted to social media may be more likely to engage in risky behaviors, such as cyber bullying, themselves.
13. The study revealed the status of victimization of university students who were cyber bullied. The survey results showed that the most common form of cyber bullying was sending inappropriate pictures and videos (23%), in which images or videos can be used to humiliate or embarrass the victim. Furthermore, 23% of students followed by threatening messages. Almost 26% of students face embarrassing and hurtful comments on social media platforms. These comments can be used to make the victim feel bad about them. They may be about the victim's appearance, personality, or social status. Similarly, 26% of students use their identity on social media to talk to others.

14. A correlation of 0.356 indicated a positive relationship between social media addiction and sleep deprivation, which means that the more addicted a student is to social media platforms, the less sleep they are likely to get. Hence, Alternate hypothesis was accepted.
15. A correlation of 0.457 indicated a positive relationship between social media addiction and a feeling of inadequacy, which means that the more addicted a student, is to social media, the more likely they are to feel inadequate. Hence, Alternate hypothesis was accepted.
16. A correlation of 0.25 indicated a weak positive relationship between social media addiction and online bullying. Hence, Alternate Hypothesis was accepted.
17. A correlation of 0.556 indicated a positive relationship between social media addiction and stress means that if the student's use of social media increases then the chances of stress also increase. Hence, Alternate Hypothesis was accepted.
18. A correlation of 0.385 indicated a positive relationship between social media addiction o social media, the more likely they are to have a fear of missing out on what their peers are doing. Hence, Alternate Hypothesis was accepted.
19. A correlation of 0.401 indicated a moderate positive relationship between social media addiction and loneliness. This means that there is a moderate relationship between the two variables. In other words, students who are more addicted to social media are more likely to feel lone. Hence, Alternate Hypothesis was accepted.
20. The study discovered that students in the age group of 18 to 20 years had a moderate degree of addiction to social media, while students in the age group of 21 to 24 years had a severely addicted level.

### **5.3 Discussion**

The study focused on the relationship between social media addiction and students' mental health at university level. The main purpose of this research was to determine the level of social media addiction among university students (Frequency of social media usage, nature of social media usage and Favorite social media site), to explore students' mental health at university level (mental health indicators included were sleep deprivation, feelings of inadequacy, Fear of missing out, Online bullying,



stress, Social anxiety and Loneliness) and to find out the relationship between social media addiction and students mental health.

There were two variables in this study that were social media addiction and students' mental health. In literature there are many different research studies conducted on these two variables but in different context. Lamia and Farrag (2018) conducted research on relationship between excessive use of social media and students' psychological well-being. The findings of the study indicated that 59% of the social media users were aged among 18 to 29 years. During whole day they spend at least 40 minutes on social media. The study claimed moderate level of social media addiction was found among half of sample taken. The study also revealed negative relationship between excessive social media use and psychological well-being.

Bey and Hemilton (2013) conducted research on relationship between social media addiction and depression. The results of the study revealed that the students who spend most of their time on using social media were shown to have higher rates of reported depression than those who spend less time on social media. Furthermore, previous studies mainly demonstrate the correlation between internet addiction and anxiety, stress and self-esteem. However, many studies examined the level of addiction among male and female participants and their mental health status. A Study conducted by parmar (2016) "Social media use and it's association with mental health "concluded a positive association between Social media use and depression, anxiety and loneliness. It indicated that excessive social media usage is linked to poorer mental health. All these researches were conducted on relationship between Social media addiction and mental health at different levels but current study is unique due to its design and paradigm. The study used different mental health indicators explore students' mental health at university level. The present study took sample from university students to collect data.

#### **5.4 Conclusions**

This study makes an important contribution to understanding the relationship between social media addiction and mental health issues in university students. The results clearly demonstrate that excessive social media addiction is associated with poorer mental health outcomes, including sleep deprivation, feelings of inadequacy, stress, and a fear of missing out. From the findings of the study, it is concluded that

1. It is concluded that most students' favorite social media site (18-20 years) is "Facebook" with 29% of the students choosing it as their favorite. Instagram is the second most popular social media site, with 18% of the students choosing it as their favorite. Snapchat is the third most popular social media site, with 15% of the respondents, YouTube and TikTok with 14% respondents choosing it as their favorite. Twitter is the least most popular social media site, with 10% of the students choosing it as their favorite.
2. It is concluded that most students' favorite social media site (21-24 years) is "Facebook" with 23% of the students choosing it as their favorite. TikTok is the second most popular social media site, with 18% of the students choosing it as their favorite. YouTube is the third most popular social media site, with 19% of the respondents, Snapchat with 16% and Instagram with 18% respondents choosing it as their favorite. Twitter is the least most popular social media site, with 44% of the students choosing it as their favorite.
3. The study concluded that 26% of students (18-20 years) use social media for academic purposes, 28% of the students use social media for entertainment purposes. 24% of the students use social media for chatting purposes and 11% of the students use social media for gaming purposes.
4. It is concluded that 43.1% of students (21-24years) use social media for academic purposes, 39% of the students use social media for entertainment purposes. 17% of the students use social media for chatting purposes and 3% of the students use social media for gaming purposes.
5. The study concluded that amount of students' time spent on social media daily of age group 21-24 years. Almost 12% students spend 2-3 hours per day on social media, 28% of student's time spends 4-5 hours on social media per day, 30% of students spend time 6-7 hours per day on social media, and 25% students spend unlimited time on social media per day.
6. The study concluded that majority of students of age group 18\_20 years are moderately addicted to social media.
7. The study also concluded that students of age group 21\_24 years are highly addicted to social media usage while students of age group 18-20 years are moderately addicted to social media usage.
8. It is concluded that 22% of the students sleep for 9-10 hours per night. Also, 4% of the students sleep for 8-9 hours per night. Similarly, 24% of the students sleep

for 6-7 hours per night. Finally, 49% of the students sleep for less than 5 hours per night. This is a significant amount of sleep deprivation and can lead to a number of health problems, such as fatigue, irritability, and difficulty concentrating. The study suggested that most students sleep less than 5 hours at night

9. It is concluded that 19% of students spend 5-10 minutes on social media after going to bed. This is a relatively short amount of time and is unlikely to have a significant impact on sleep. Also, 19% of students spend 20-30 minutes on social media after going to bed. Furthermore, 20% of students spend 40 to 60 minutes on social media after going to bed. Similarly, 23% of students spend more than 2 hours on social media after going to bed. And 17% of students do not use technology in bed.
10. It is concluded that 28% of students wake up frequently to respond to social media at night, 26% of students wake up occasionally to respond to social media, 21% of students wake up very rarely to respond to social media and 23% of students never wake up to respond to social media.
11. It is also concluded that about 19% of students feel sleepy during class, 21% of students yawn more than once during the day, 19% of students fall asleep in class, 18% of students feel confused and their mind foggy during the day and 21% of students are not aware of any symptoms of sleep deprivation.
12. It is also concluded that the frequency of cyber bullying victimization among university students. The data showed that 33% of students were cyber bullied once or twice, 29% were cyber bullied several times, and 36% were never cyber bullied. Students who are addicted to social media may be more likely to post personal information about them online, which can make them more vulnerable to attack. Additionally, students who are addicted to social media may be more likely to engage in risky behaviors, such as cyber bullying, themselves.
13. The study concluded that the most common form of cyber bullying was sending inappropriate pictures and videos (23%), in which images or videos can be used to humiliate or embarrass the victim. Furthermore, 23% of students followed by threatening messages. Almost 26% of students face embarrassing and hurtful comments on social media platforms. These comments can be used to make the victim feel bad about them. They may be about the victim's appearance,

personality, or social status. Similarly, 26% of students use their identity on social media to talk to others.

14. The study concluded a positive relationship between social media addiction and sleep deprivation.
15. It is concluded that there is a positive relationship between social media addiction and a feeling of inadequacy.
16. It is concluded that there is a weak positive relationship between social media addiction and online bullying.
17. It is concluded that there is a positive relationship between social media addiction and stress.
18. It is concluded that there is a positive relationship between social media addiction and social anxiety.
19. It is concluded that a moderate positive relationship between social media addiction and loneliness.
20. It is concluded that social media addiction is linked with poorer mental health.

## **5.5 Recommendations**

According to the findings and conclusion of the study following recommendations were formulated.

1. Students use social media mostly for chatting and entertaining purpose without time limit. It is recommended to the students to plan their day with balanced schedule and productive activities such as reading book, exercising, socializing and hobbies. By diversifying activities, their reliance on social media as primary activity will be reduced.
2. It is recommended that teachers must conduct awareness campaigns to educate students about various forms of cyber bullying, including sending inappropriate pictures/videos, threatening messages and hurtful comment. Empower them to recognize and report cyberbullying incidents.
3. Students revealed that they don't report bullying to parents or teachers so it is recommended to establish confidential reporting mechanism where students can report without fear.

4. It is recommended to conduct workshops and seminars to raise awareness about importance of sleep hygiene and excessive use of social media leads to mental health issues.
5. It is recommended to the teachers to promote effective communication skills to help students express their needs and concerns, reducing need to rely on social media.
6. It is recommended that universities may organize seminars and workshops to increase awareness about social media addiction and mental health outcomes and provide students with knowledge and strategies to recognize and manage social media addiction.

### **5.5 Recommendations for Future Researchers**

Future recommendations were made to further explore the social media addiction and students' mental health:

1. This study relied exclusively on self-report data from a single university. Additional research may replicate these findings with larger, more diverse samples.
2. Qualitative data may provide richer insights into students' complex social media experiences. Longitudinal designs could also assess causality. Research should continue exploring social media's evolving role in students' health and wellbeing.

## REFERENCES

- Abbasi, I. S., & Dibble, J. L. (2021). The Role of Online Infidelity Behaviors in the Link Between Mental Illness and Social Media Intrusion. *Social Science Computer Review*, 39(1), 70-83.
- Abi-Jaoude, E., Naylor, K. T., & Pignatiello, A. (2020). Smartphones, Social Media Use and Youth Mental Health. *Cmaj*, 192(6), 136-141. <https://doi.org/10.1503/cmaj.190434>
- Acar, I. H., Avcılar, G., Yazıcı, G., & Bostancı, S. (2022). The Roles of Adolescents' Emotional Problems and Social Media Addiction on their Self-Esteem. *Current Psychology*, 41(10), 6838-6847. <https://doi.org/10.1007/12144-020-01174-5>
- Ahmad, N., Arifin, A., Asma'Mokhtar, U., Hood, Z., Tiun, S., & Jambari, D. I. (2019). Parental Awareness on Cyber Threats Using Social Media. *Jurnal Komunikasi: Malaysian Journal of Communication*, 35(2), 485-498. <https://doi.org/10.17576/jkmjc-2019-3502-29>
- Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The Relationship Between Addictive Use of Social Media, Narcissism, and Self-Esteem: Findings From a Large National Survey. *Addictive behaviors*, 64(3), 287-293. <https://doi.org/10.1016/j.addbeh.2017.03.006>
- Ashford, R. D., Lynch, K., & Curtis, B. (2018). Technology and Social Media Use Among Patients Enrolled in Outpatient Addiction Treatment Programs: Cross-Sectional Survey Study. *Journal of medical Internet research*, 20(3), 19-72. <https://doi.org/10.2196/jmir.9172>
- Baccarella, C. V., Wagner, T. F., Kietzmann, J. H., & McCarthy, I. P. (2020). Averting The Rise of The Dark Side of Social Media: The Role of Sensitization and Regulation. 38(1), 3-6. <https://doi.org/10.1016/j.emj.2019.12.011>

- Baltaci, Ö. (2019). The Predictive Relationships Between the Social Media Addiction and Social Anxiety, Loneliness, and Happiness. *International Journal of Progressive Education*, 15(4), 73-82. <https://eric.ed.gov/?id=EJ1224299>
- Buglass, M. W., Alzahabi, R., & Hopwood, C. J. (2017). Media Multitasking is Associated with Symptoms of Depression and Social Anxiety. *Cyberpsychology, behavior, and social networking*, 16(2), 132-135. <https://doi.org/10.1089/cyber.2012.0291>
- Burni, C., Rosa Alcázar, A. I., González-Calatayud, V., & Rosa-Alcázar, E. (2015). Is There a Relationship Between Problematic Internet Use and Responses of Social Anxiety, Obsessive-Compulsive and Psychological Well-Being Among Adolescents? *anales de psicología*, 33(2), 269-276/ <http://dx.doi.org/10.6018/analesps.33.2.265831>
- Bettmann, J. E., Anstadt, G., Casselman, B., & Ganesh, K. (2021). Young adult Depression and Anxiety Linked to Social Media Use: Assessment and Treatment. *Clinical Social Work Journal*, 49, 368-379. <https://doi.org/10.1007/10615-020-00752-1>
- Bisen, S. S., & Deshpande, Y. (2018). The Impact of The Internet in Twenty-First Century Addictions: An Overview. *Psychological, Social, and Cultural Aspects of Internet Addiction*, 1-19. <https://doi.org/10.4018/978-1-5225-3477-001>
- Blackwell, D., Leaman, C., Tramposch, R., Osborne, C., & Liss, M. (2017). Extraversion, Neuroticism, Attachment Style and Fear of Missing Out as Predictors of Social Media Use and Addiction. *Personality and Individual Differences*, 11(6), 69-72. <https://doi.org/10.1016/j.paid.2017.04.039>
- Block, J. J. (2008). Issues for DSM-V: Internet addiction. *The American Journal of Psychiatry*: <https://doi.org/10.1176/appi.ajp.2007.07101556>

- Cain, N., & Gradisar, M. (2010). Electronic Media Use and Sleep in School-Aged Children and Adolescents: A review. *Sleep medicine*, *11*(8), 735-742.  
<https://doi.org/10.1016/j.sleep.2010.02.006>
- Casale, S., & Fioravanti, G. (2015). Satisfying Needs Through Social Networking Sites: A Pathway Towards Problematic Internet Use for Socially Anxious People? *Addictive behaviors reports*, *1*(1), 34-39.  
<https://doi.org/10.1016/j.abrep.2015.03.008>
- Cataldo, I., Lepri, B., Neoh, M. J. Y., & Esposito, G. (2021). Social Media Usage and Development of Psychiatric Disorders in Childhood and Adolescence: A Review. *Frontiers in Psychiatry*, *11*(1), 508-595.  
<https://doi.org/10.3389/fpsy.2020.508595>
- Chan, S. S., Van Solt, M., Cruz, R. E., Philp, M., Bahl, S., Serin, N., . . . Kumar, S. (2022). Social Media and Mindfulness: From The Fear of Missing Out (FOMO) to The Joy of Missing Out (JOMO). *Journal of Consumer Affairs*, *56*(3), 1312-1331. <https://doi.org/10.1111/joca.12476>
- Cheng, C., & Lau, Y.-C. (2022). Social Media Addiction During COVID-19-Mandated Physical Distancing: Relatedness Needs as Motives. *International Journal of Environmental Research and Public Health*, *19*(8), 42-61.  
<https://doi.org/10.3390/ijerph19084621>
- Chu, X., Yang, S., Sun, Z., Jiang, M., & Xie, R. (2022). The Association Between Cyberbullying Victimization and Suicidal Ideation Among Chinese College Students: The Parallel Mediating Roles of Core Self-Evaluation and Depression. *Frontiers in Psychiatry*, *13*, 929-679.  
<https://doi.org/10.3389/fpsy.2022.929679>



- Chung, K. L., Morshidi, I., Yoong, L. C., & Thian, K. N. (2019). The Role Of The Dark Tetrad and Impulsivity in Social Media Addiction: Findings From Malaysia. *Personality and Individual Differences, 14*(3), 62-67. <https://doi.org/10.1016/j.paid.2019.02.016>
- Craig, W., Boniel-Nissim, M., King, N., Walsh, S. D., Boer, M., Donnelly, P. D., . . . Cosma, A. (2020). Social media use and cyber-bullying: A Cross-National Analysis of Young People in 42 Countries. *Journal of Adolescent Health, 66*(6), 100-108. <https://doi.org/10.1016/j.jadohealth.2020.03.006>
- Dalne, S., & Moundekar, J. (2023). Impact of Social Media in Student's Psychology. *Journal of Psychology and Political Science (JPPS) ISSN 2799-1024, 3*(3), 46-49. <https://doi.org/10.55529/jpps.33.46.49>
- David, M., & Priya, K. (2020). Impact of Social Media on Mental Health of Students. *International journal of Scientific & Technology research, 9*(03), 3796-3800. <https://doi.org/59d856e299bf13079/9558>
- Dempsey, A. E., O'Brien, K. D., Tiamiyu, M. F., & Elhai, J. D. (2019). Fear Of Missing Out (Fomo) and Rumination Mediate Relations Between Social Anxiety and Problematic Facebook Use. *Addictive behaviors reports, 9*(12), 100150. <https://doi.org/10.1016/j.abrep.2018.100150>
- Distor, J. M., Cabello, C., & Tus, J. (2022). Social Media Usage and Sleep Quality Among Freshmen College Students in the New Normal. *Specialusis Ugdymas, 2*(43), 2030-2046. <http://www.sumc.lt/index.php/se/article/view/1695>
- Dutta, O., & Chye, S. Y. L. (2017). Internet Use and Psychological Wellbeing: A Study Of International Students in Singapore. *Journal of International Students, 7*(3), 825-840. <https://doi.org/10.5281/zenodo.570836>

- Evers, K., Chen, S., Rothmann, S., Dhir, A., & Pallesen, S. (2020). Investigating the Relation Among Disturbed Sleep Due To Social Media Use, School Burnout, and Academic Performance. *Journal of adolescence*, *84*(7), 156-164. <https://doi.org/10.1016/j.adolescence.2020.08.011>
- Fabris, M. A., Marengo, D., Longobardi, C., & Settanni, M. (2020). Investigating the Links Between Fear of Missing Out, Social Media Addiction, and Emotional Symptoms in Adolescence: The Role Of Stress Associated With Neglect And Negative Reactions on Social Media. *Addictive behaviors*, *10*(6), 106-364. <https://doi.org/10.1016/j.addbeh.2020.106364>
- Fallah Musa Kalae, A., Khan Mohammadi Otaghsara, A., Homayouni, A., & Sadeghi, J. (2022). Structural Relationships between Alexithymia and Academic Engagement Mediated by Dependence on Social Networks and Mental Health. *The Journal of New Thoughts on Education*, *18*(2), 137-153. <https://doi.org/10.22051/jontoe.2021.34137.3216>
- Fergie, G. M. (2015). Understanding Young Adults' Online Engagement and Health Experiences in the Age of Social Media: Exploring Diabetes and Common Mental Health Disorders. University of Glasgow.
- Filler, T., Georgiades, K., Khanlou, N., & Wahoush, O. (2021). Understanding Mental Health and Identity from Syrian Refugee Adolescents' Perspectives. *International Journal of Mental Health and Addiction*, *19*(8), 764-777. <https://doi.org/10.1007/s11469-019-00185-z>
- Fioravanti, G., Flett, G., Hewitt, P., Rugai, L., & Casale, S. (2020). How Maladaptive Cognitions Contribute to the Development of Problematic Social Media Use. *Addictive behaviors reports*, *11*(6), 100267. <https://doi.org/10.1016/j.abrep.2020.100267>

- Feried, H., Chamarro, A., & Oberst, U. (2018). Fear of Missing Out, Online Social Networking and Mobile Phone Addiction: A Latent Profile Approach. *Aloma: Revista de Psicologia, Ciències de l'Educació i de l'Esport*, 35(1), 22-30. <https://doi.org/10.51698/aloma.2017.35.1.22-30>
- Fried, E. I., & Nesse, R. M. (2015). Depression is not a consistent syndrome: An investigation of unique symptom patterns in the Star\*D study. *Journal of affective disorders*, 17(2), 96–102. <https://doi.org/10.1016/j.jad.2014.10.010>
- Gioia, F., Griffiths, M. D., & Boursier, V. (2021). Adolescents' Body Shame and Social Networking Sites: The Mediating Effect of Body Image Control in Photos. *Sex Roles*, 83, 773-785. <https://link.springer.com/article/10.1007/s11199-020-01142-0>
- Giumetti, G. W., & Kowalski, R. M. (2022). Cyberbullying Via Social Media And Well-Being. *Current opinion in Psychology*, 4(5), 101-314.
- George, M., Kovacova, M., & Valaskova, K. (2018). Smartphone Addiction Risk, Depression Psychopathology, and Social Anxiety. *Analysis and Metaphysics*, 19, 52-58. <https://www.cceol.com/search/article-detail?id=913044>
- Goswami, M., & Singh, J. (2022). The Relationship Between Social Media Addiction and Personality Traits Among College Students During COVID-19 Pandemic. *Psychology and Education: A Multidisciplinary Journal*, 2(3), 244-257. <https://doi.org/10.5281/zenodo.6626190>
- Griffiths, M. D., Kuss, D. J., & Demetrovics, Z. (2013). Social Networking Addiction: An Overview of Preliminary Findings. *Behavioral Addictions*, 6(8), 119-141.
- Huang, C. (2017). Time Spent on Social Network Sites and Psychological Well-Being: A Meta-Analysis. *Cyberpsychology, Behavior, and Social Networking*, 20(6), 346-354.

- Hamutoglu, N. B., Topal, M., & Gezgin, D. M. (2020). Investigating Direct and Indirect Effects of Social Media Addiction, Social Media Usage and Personality Traits on FOMO. *International Journal of Progressive Education*, 16(2), 248-261. <https://eric.ed.gov/?id=EJ1249965>
- Hamilink, N. S., & Samaha, M. (2018). The Relations Among Social Media Addiction, Self-Esteem, And Life Satisfaction In University Students. *Social Science Computer Review*, 35(5), 576-586. <https://doi.org/10.1177/0894439316660340>
- Hawk, S. T., van den Eijnden, R. J., van Lissa, C. J., & ter Bogt, T. F. (2019). Narcissistic Adolescents' Attention-Seeking Following Social Rejection: Links With Social Media Disclosure, Problematic Social Media Use, and Smartphone Stress. *Computers in Human Behavior*, 92, 65-75. <https://doi.org/10.1016/j.chb.2018.10.032>
- Hazlyna, N. (2021). Awareness about Cyber bullying on Social Media among Female Students in a Malaysian Public University. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(3), 1592-1601. <https://doi.org/10.17762/turcomat.v12i3.972>
- Ho, T. T. Q. (2021). Facebook Addiction Partially Mediated The Association Between Stress Symptoms and Sleep Disturbance among Facebook Users. *International Journal of Mental Health and Addiction*, 1-11. <https://link.springer.com/article/10.1007/s11469-021-00619-7>
- Hasmuiaj, Y., Xiong, D., Jiang, T., Song, L., & Wang, Q. (2016). Social Media Addiction: Its Impact, Mediation, and Intervention. *Cyberpsychology: Journal of psychosocial research on cyberspace*, 13(1). <https://doi.org/10.5817/cp2019-1-4>

- Huang, C. (2022). A Meta-Analysis of The Problematic Social Media Use and Mental Health. *International Journal of Social Psychiatry*, 68(1), 12-33.  
<https://doi.org/10.1177/0020764020978434>
- Jaddeo, P., & Saurav, S. (2018). Correlation of Missing Out (Fomo), Anxiety and Aggression of Young Adults. *International Journal of Research-Granthaalayah*, 8(5), 132-138.  
<https://doi.org/10.29121/granthaalayah.v8.i5.2020.107>
- Kaplan, A. M. (2015). Social Media, The Digital Revolution, and The Business of Media. *International Journal on Media Management*, 17(4), 197-199.  
doi:<https://doi.org/10.1080/14241277.2015.1120014>
- Kaur, M., & Saini, M. (2023). Indian Government Initiatives on Cyberbullying: A Case Study on Cyberbullying in Indian Higher Education Institutions. *Education and Information Technologies*, 28(1), 581-615. <https://doi.org/10.1007/s10639-022-11168-4>
- Kee, D. M. H., Al-Anesi, M. A. L., & Al-Anesi, S. A. L. (2022). Cyberbullying on Social Media under the Influence of COVID-19. *Global Business and*
- Kuss, D. J., & Griffiths, M. D. (2011). Online social networking and addiction—a review of the psychological literature. *International Journal of Environmental Research and Public Health*, 8(9), 3528-3552.  
<https://doi.org/10.3390/ijerph8093528>
- Lamia A. Awad, Zeinab Hassan Hassan Osman, & Enaam Abdellatif Farrag. (2018). Internet Addiction and Related Risk Factors Among Faculty of Nursing Student At El Fayuom And Dammam University. *The Malaysian Journal of Nursing (MJN)*, 9(4), 95-105. Retrieved from <https://ejournal.lucp.net/index.php/mjn/article/view/356>

- Lebni, J. Y., Toghroli, R., Abbas, J., NeJhaddadgar, N., Salahshoor, M. R., Mansourian, M., . . . Azizi, S. A. (2020). A Study of Internet Addiction and Its Effects on Mental Health: A Study Based on Iranian University Students. *Journal of Education and Health Promotion*, 9. [https://doi.org/10.41032Fjehp.jehp\\_148\\_20](https://doi.org/10.41032Fjehp.jehp_148_20)
- Lee, M. H. L., Kaur, M., Shaker, V., Yee, A., Sham, R., & Siau, C. S. (2023). Cyberbullying, Social Media Addiction and Associations With Depression, Anxiety, and Stress Among Medical Students in Malaysia. *International Journal of Environmental Research and Public Health*, 20(4), 3136. <https://doi.org/10.3390/ijerph20043136>
- Lenhart, J. P. (2002). A Factor-Analytic Investigation of Computer “Addiction” and Engagement. *British Journal of Psychology*, 9(3), 329–344
- Lozano-Blasco, R., Quilez-Robres, A., Rodriguez-Araya, R., & Casanovas-López, R. (2022). Addiction to New Technologies and Cyberbullying in the Costa Rican Context. *Education Sciences*, 12(12), 876. <https://doi.org/10.3390/educsci12120876>
- Lyngdoh, T., El-Manstrly, D., & Jeesha, K. (2023). Social Isolation and Social Anxiety as Drivers Of Generation Z's Willingness to Share Personal Information on Social Media. *Psychology & Marketing*, 40(1), 5-26.
- Marino, C., Gini, G., Vieno, A., & Spada, M. M. (2018). The Associations Between Problematic Facebook Use, Psychological Distress and Well-Being Among Adolescents and Young Adults: A Systematic Review and Meta-Analysis. *Journal of Affective Disorders*, 22(6), 274–281. <https://doi.org/10.1016/j.jad.2017.10.007>

- Mohammadbeigi, A., Absari, R., Valizadeh, F., Saadati, M., Sharifimoghadam, S., Ahmadi, A., . Ansari, H. (2016). Sleep Quality in Medical Students; The Impact Of Over-Use of Mobile Cellphone and Social Networks. *Journal of research in health sciences*, 16(1), 46. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7189085/>
- Malik, H. S., Manchanda, P., & Bhatia, T. (2016). Asymmetric Social Interactions in Physician Prescription Behavior: The Role of Opinion Leaders. *Journal of Marketing Research*, 47(5), 883-895. <https://doi.org/10.1509/jmkr.47.5.883>
- Mahmood, Q. K., Jafree, S. R., & Sohail, M. M. (2020). Pakistani Youth And Social Media Addiction: The Validation of Bergen Facebook Addiction Scale (BFAS). *International Journal of Mental Health and Addiction*, 1-14.
- Oberst, U., Wegmann, E., Stodt, B., Brand, M., & Chamarro, A. (2017). Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out. *Journal of adolescence*, 55(4), 51-60. <https://doi.org/10.1016/j.adolescence.2017.12.008>
- O’Keeffe, G. S., & Clarke-Pearson, K. (2011). The Impact of Social Media on Children, Adolescents, and Families. *Pediatrics*, 12(7), 802-804. <http://dx.doi.org/10.1542/peds.2011-0054>
- Padilla-Walker, L. M., Stockdale, L. A., & McLean, R. D. (2020). Associations Between Parental Media Monitoring, Media Use, and Internalizing Symptoms During Adolescence. *Psychology of popular media*, 9(4), 48-54. <https://psycnet.apa.org/doi/10.1037/ppm0000256>
- PKaur, D. A., Davidson, B. I., Sewall, C. J., Fisher, J. T., Mieczkowski, H., & Quintana D. S. (2021). A Systematic Review and Meta-Analysis of Discrepancies

- Between Logged and Self-Reported Digital Media Use. *Nature Human Behaviour*, 5(11), 1535-1547. <https://doi.org/10.1038/s41562-021-01117-5>
- Prizant-Passal, S., Shechner, T., & Aderka, I. M. (2016). Social Anxiety and Internet Use—A Meta-Analysis: What Do We Know? What are We Missing? *Computers in Human Behavior*, 62, 221-229. <https://doi.org/10.1016/j.chb.2016.04.003>
- Raghavan, R., Coope, J., Jamwal, S., & Pendse, T. (2019). Reflections on the Use of Mental Health Resilience Concepts In Migration and Global Mental Health. *International Journal of Mental Health*, 48(4), 299-308. <https://doi.org/10.1080/00207411.2019.1708646>
- Rana, S., & Kelleher, M. (2018). The Dangers of Social Media and Young Dental Patients' Body Image. *Dental Update*, 45(10), 902-910. <https://www.magonlinelibrary.com/doi/abs/10.12968/denu.2018.45.10.902>
- Reyes, M. E. S., Marasigan, J. P., Gonzales, H. J. Q., Hernandez, K. L. M., Medios, M. A. O., & Cayubit, R. F. O. (2018). Fear of Missing Out and its Link with Social Media and Problematic Internet Use Among Filipinos. *North American Journal of Psychology*, 20(3), 503-518.
- Rugai, J., & Hamilton-Ekeke, J.-T. (2016). A Review of Digital Addiction: A Call for Safety Education. *Journal of Education and e-Learning Research*, 3(1), 17-22. <https://eric.ed.gov/?id=EJ1148542>
- Saiphoo, A. N., Halevi, L. D., & Vahedi, Z. (2020). Social Networking Site Use and Self-Esteem: A Meta-Analytic Review. *Personality and Individual Differences*, 15(3), 109-639. <https://doi.org/10.1016/j.paid.2019.109639>
- Sallehuddin, H., Sawai, R. P., Aziz, A. R. A., & Kasmani, M. F. (2021). Association Between Social Media Use And Depression Among University Students.



- Scott, H., & Woods, H. C. (2019). Understanding Links Between Social Media Use, Sleep and Mental Health: Recent Progress and Current Challenges. *Current sleep Medicine Reports*, 5, 141-149. <https://doi.org/10.1007/s40675-019-00148-9>
- Shaw, L. H., & Gant, L. M. (2020). In Defense of the Internet: The Relationship Between Internet Communication and Depression, Loneliness, Self-Esteem, and Perceived Social Support. *Cyberpsychology & Behavior*, 5(2), 157-171. <https://doi.org/10.1089/109493102753770552>
- Siddiqui, S., & Singh, T. (2016). Social Media Its Impact With Positive and Negative Aspects. *International Journal of Computer Applications Technology and Research*, 5(2), 71-75.
- Subrahmanyam, Kaveri & Greenfield, Patricia. (2008). Online Communication and Adolescent Relationships. *The Future of children / Center for the Future of Children, the David and Lucile Packard Foundation*. 1(8). 119-46. <https://doi.org/10.1353/foc.0.0006>.
- Su, W., Han, X., Yu, H., Wu, Y., & Potenza, M. N. (2020). Do Men Become Addicted To Internet Gaming and Women To Social Media? A Meta-Analysis Examining Gender-Related Differences in Specific Internet Addiction. *Computers in Human Behavior*, 11(3), 106-480. <https://doi.org/10.1016/j.chb.2021.106480>
- Valley, P., & Simecka, I. (2022). Social Media Use and Its Impact on Adolescent Mental Health: An Umbrella Review of the Evidence. *Current Opinion in Psychology*, 44, 58- 66. <https://doi.org/10.1016/j.copsyc.2021.08.017>

- Wangners, F., Huang, M., & Qu, J. (2014). The Effect of Internet Addiction on Mind Wandering: Resilience and Academic Burnout as Mediators Among Chinese Adolescents. *Social Behavior and Personality: An International Journal*, 51(2), 1-13. <https://doi.org/10.2224/sbp.12097>
- Win, K. S., Maung, T. M., Win, T. T., Soe, K., & Sein, T. T. (2017). Social Network Addiction (SNA) Related to Anxiety among Students at Kyaukse University, Mandalay Region, Myanmar. *South East Asia Journal of Public Health*, 7(1), 23-28. <http://dx.doi.org/10.3329/seajph.v7i1.34675>
- Williams, C. E., & Teasdale, I. (2018). Online Social Networking and Mental Health. *Cyberpsychology, Behavior, and Social Networking*, 17(10), 652-657.
- World Health Organization. (2004). The World health report : 2004 : Changing History. World Health Organization 924156265X, 169 p.. <https://apps.who.int/iris/handle/10665/42891>
- Wegmann, G., Woods, H. C., & Scott, H. (2017). Sleepyteens: Social Media Use in Adolescence is Associated With Poor Sleep Quality, Anxiety, Depression and Low Self-Esteem. *Journal of Adolescence*, 51(6), 41-49. <https://doi.org/10.1016/j.adolescence.2016.05.008>
- Xanidis, N., & Brignell, C. M. (2016). The Association Between The Use of Social Network Sites, Sleep Quality and Cognitive Function During the Day. *Computers in Human Behavior*, 55(21), 121-123. <https://doi.org/10.1016/j.chb.2015.09.004>
- Young, L., Kolubinski, D. C., & Frings, D. (2020). Attachment Style Moderates the Relationship Between Social Media Use and User Mental Health and Wellbeing. *Heliyon*, 6(6). <https://doi.org/10.1016/j.heliyon.2020.e04056>

- Zahid, M., Zaid, R., & Zakria, M. (2019). Prevalence of Internet Addiction Among Social Sciences Students at Abdul Wali Khan University Mardan. *Sir Syed Journal of Education & Social Research (SJESR)*, 2(01), 55-66.
- Zamir, S., & Mujeeb, A. (2022). Social Media Effects on Academic Performance: Perceptions of Prospective Teachers. *Journal of Education and Social Studies*, 3(3), 270-282. <https://doi.org/10.52223/jess.20223310>
- Zhong, B., Huang, Y., & Liu, Q. (2021). Mental health Toll From The Coronavirus: Social Media Usage Reveals Wuhan Residents' Depression and Secondary Trauma in the COVID-19 Outbreak. *Computers in Human Behavior*, 114(78), 106-524. <https://doi.org/10.1016/j.chb.2020.106524>
- Zivnuska, S., Carlson, J. R., Carlson, D. S., Harris, R. B., & Harris, K. J. (2019). Social Media Addiction and Social Media Reactions: The Implications For Job Performance. *The Journal of social psychology*, 159(6), 746-760. <https://doi.org/10.1080/00224545.2019.1578725>
- Zsido, A. N., Arato, N., Lang, A., Labadi, B., Stecina, D., & Bandi, S. A. (2021). The Role of Maladaptive Cognitive Emotion Regulation Strategies and Social Anxiety In Problematic Smartphone and Social Media Use. *Personality and Individual Differences*, 173(8), 16-47. <https://doi.org/10.1016/j.paid.2021.110647>

# QUESTIONNAIRE

## TOPIC: RELATIONSHIP BETWEEN SOCIAL MEDIA ADDICTION AND STUDENTS' MENTAL HEALTH AT UNIVERSITY LEVEL

### Appendix I

#### Demographic Factors

o Age \_\_\_\_\_ o

Education \_\_\_\_\_ o

#### Department

\_\_\_\_\_ Semester

\_\_\_\_\_

- o **Instruction:** You are requested to respond on this questionnaire, in a way how you generally look, feel and think. Each statement has five options ranging from 1 to 5. You are supposed to mark one of the options for each statement according to your degree of agreement or disagreement.
- o **Scoring key:** ▪ SA: Strongly Agree
  - A: Strongly Disagree
  - UD: Undecided
  - DA: Disagree
  - SDA: Strongly Disagree

#### 1. Favourite Social Media Site

- a) Facebook
- b) YouTube

c) Twitter

d) TikTok

**2. Time spent on social media**

a) 2-3 hours

b) 4-5 hours

c) 6-7 hours

d) Unlimited

**3. Nature of social media usage**

a) Academic purpose

b) Entertainment purpose

c) Chatting

d) Gaming

**1.SOCIAL MEDIA ADDICTION SCALE-STUDENT FORM**

<b>SR.NO</b>	<b>STATEMENT</b>	<b>SA</b>	<b>A</b>	<b>UD</b>	<b>DA</b>	<b>SDA</b>
1	I am eager to go on social media.					
2	I look for internet connectivity everywhere as to go on social media.					
3	Going on social media is the first thing that I do when I wake up in the morning.					
4	I use social media as an escape from real world.					

5	I prefer to use social media even there is somebody around me.					
6	I express myself better to the people with whom I get in contact on social media.					
7	Even my family frown upon, I cannot give up on social media.					
8	I prefer virtual communication on SM to going out.					
9	SM activities lay hold on my daily life.					

10	I pass over my assignments because I spend time on SM.					
11	I feel bad if I obliged to decrease my time on social media.					
12	Being on social media excites me.					
13	The mysterious world of social media always captivates me.					
14	I don't even notice that I am hungry and thirsty when I am on social media.					

15	I noticed my productivity has diminished due to social media.					
16	I like using social media to keep informed about what happens.					
17	Keeping informed about things related to my courses makes me always stay on social media.					
18	I usually have unlimited access to social media.					
19	I often find myself using social media more than intended.					
20	I think I am addicted to social media.					
21	I cannot think of anything else but the moment I will be able to use social media again.					
22	Regularly I neglect other activities (hobbies, sport) to spend time on social media.					
23	Tried to spend less time on social media but failed.					
24	I often find life boring without using social media.					

## Appendix II

### 2 Exploring student's mental health

#### a. Sleep

##### deprivation 1. Sleep

hours during night

a) 9-10 hrs

b) 8-9 hrs

c) 6-7 hrs

d) Less than 5 hrs

2. How long do you spend time on social media after going to bed

a) 5-15 mins

b) 20-30 mins

c) 40 to 1hr

d) More than 2hrs

e) I don't use technology in bed

3. After falling asleep at night, do you awaken and respond to anything on social media such as text messaging at night?

a) Yes, Frequently

b) Yes, occasionally

c) Very rarely

d) Not ever

4. Do you notice any of symptoms of sleep deprivation during day?

a) I felt sleepy during class

b) I yawned more than once

c) I fall asleep in class



- d) I feel confused and my mind is foggy
- e) No, I am not aware of any symptoms

5. Do you feel that lack of healthy sleep may be affecting you in any of these areas?

- a) Mental stress
- b) Academics
- c) Relationships
- d) No, I am getting enough sleep

Sr.no	Statements	SA	A	UD	DA	SDA
1	Lack of sleep creates difficulty in coping with daily life.					
2	Sleep deprivation make me to lose interest in work.					
3	I feel tired and exhausted in class when I did not have enough sleep.					
4	Lack of sleep quality makes me stressed the whole day.					
5	Sleep deprivation makes me anxious and forget things easily.					
6	I wake up in the morning well rested.					
7	I wake up in the morning quite tired.					

**B. Feelings of inadequacy**

Sr no	Statement	SA	A	UD	DA	SDA
1	I compare my life to others on social media.					
3	Viewing others posts on social media makes me feel insecure about how I look and what's going on in my life.					
5	I loose my confidence when I compare my self with others.					
6	I cannot focus on building my own identity while looking for others.					
7	I am not satisfied with my progress.					
8	Feeling of inadequacy leads me to use social media more to know about others.					
9	I feel disappointed at the times in my present accomplishments and think I should have accomplished much more.					
10	I compare my abilities to those around me and think them as more intelligent than me.					
11	I feel discouraged if I am not best in the situation that involve achievements.					

12	I wonder why I have these problems and others do not.					
13	I am afraid that people may find out as I am not capable as they think of me.					

**C. Online bullying**

1. How many times you became the victim of cyber bullying?

- a) Once or twice
- b) Several times
- c) Never became victim

2 What was status of victimization

- a) Threatening messages
- b) Sending of inappropriate pictures and videos
- c) Embarrassing and hurtful comments
- d) Using your identity

Sr no	Statement	SA	A	UD	DA	SDA
1	Online bullying is on rise at university level.					
2	Online bullying made me stressed and anxious.					
3	Bullying victimization made me lost concentration in classroom and other activities.					

4	I share my problems with my teachers and friends to seek help.					
5	I inform my parents of being bullying victimization.					
6	Online bullying increases overthinking and results in headache.					

#### E. Fear of missing out (FOMO)

Sr.no	Statements	SA	A	UD	DA	SDA
1	I feel anxious when I am not aware of events and opportunities.					
2	I feel sad for myself when I miss events.					
3	I feel uneasy and stressed when I do notice the opportunities I could take advantage of.					
4	When I decide on one of attractive opportunities , I regret choosing the other.					
5	I feel obsessed and left behind when I miss something on social media.					
6	I feel deeply lonely when others attend event without me.					

7	I feel ignored and forgotten by my friends attend social activities without me.					
8	I get anxious when I cannot keep up keep up with my friends plans .					
9	It gets on my nerves when I think my friends having great time without me.					
10	I fear others have more rewarding experience than me.					
11	I feel embarrassed even if I decline an invitation due to compelling reasons.					
12	I feel outcast from my social groups when I decline an invitation.					
13	I feel regretful when I miss opportunities.					
14	I feel uneasy when I don't notice opportunities I could take advantage of.					

### F. Social Anxiety

Sr.no	Statements	SA	A	UD	DA	SDA
1	I fear about what others thinks of me.					
2	I am afraid that others will not like me.					
3	I feel shy around people I don't know.					
4	I feel nervous when I talk to peers I don't know.					

5	I hesitate and remain quiet when I interact with new people.					
6	I am afraid to invite others to do things with me because they might say no.					
7	I maintain avoidance behavior in interactive sessions or gatherings.					
8	I fear of others negative evaluation about me.					
9	I feel happy doing things alone					

### Loneliness

Statements	A	SA	UD	DA	SDA
I experience a sense of emptiness					
There are plenty of people I can rely on when I have problems.					
There are many people I feel close to.					
I miss having people around me.					
I feel everyone around me knows me well.					
I feel unhappy doing things alone.					
I think I lack companionship.					
I feel myself waiting for people to call or write.					
I am satisfied with my social relationships.					
I feel isolated from other.					
I feel people are around me but not with me.					
I happily spent time happily with my family everyday.					

I am satisfied with my social relationships and social life.					
There is always someone I talk about day to day problems.					
I use social media more than communicating with people people around me.					
I prefer to sit alone rather than participating in group activities.					