



## DETERMINANTS AND IMPACT OF SOCIAL NETWORKING SITE USE ON UNIVERSITY STUDENTS' MENTAL HEALTH

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### ABSTRACT:

The study explored the social networking effects on students' mental health. The study mainly focused on how social networks affect a student's daily routine and the diversity of students in the Salem district. We conducted the study among 300 respondents using the systematic sampling method. We used a semi-structured interview schedule to collect the required data. The study found nearly one third of the students were female, and almost half the proportion of the students used social networks. There is a close association between gender and the duration of using social networks for 3–6 hours a day. More than one third of the students agree that social networking affects their lives and leads to depression; there is an association between duration of using social networks and mental health. The study concludes that age, gender, and duration of using social networks are the determining factors of students' mental health.

### KEYWORDS:

SOCIAL NETWORKS, STUDENTS, MENTAL HEALTH, DEPRESSION.

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### INTRODUCTION

In the contemporary time of computer-mediated communication, Social Networking Sites (SNS) are considered the major source for the propagation of public discourse content. In the present era, social networks act as a powerful catalyst for communication. The statistical report (Statista, 2024) expresses that in the year of 2010, the total number of social network users was 1 billion; in the year 2024, the total number of social network users was 4.76 billion. This report expresses that within a span of fourteen years, 3.76 billion social network users increased. The study by Emikley Baker (2019) emphasises that social network usage patterns may create specific pathways through which individuals maintain online platforms. One of these paths can be described by the use of a social network as a protecting factor, which provides the individual with a platform to engage with others. This act would become a risk factor, depending on the social circles and behaviours that the individual engages in. Instead, a social network may turn out to be a danger factor in the way it influences the individual's self-esteem, and later, as the individual develops, it may turn into a protective factor once the individual starts to use the online platforms for internally directed purposes.

According to Teens (2015), teenagers are avid users of

online social networking sites (SNS); approximately 71% of them used multiple SNS in 2015, with Facebook being the most commonly used. The study of Kanyinga (2015) focused largely on the regularity of using social networking sites. This particular study articulated that the quantity of time spent on online SNS (Social Networking Sites) had an effect on mental health difficulties in children and adolescents.

Boyd & Ellison's study reaffirmed the use of "network" instead of "networking.". One can view this shift in terminology from two distinct perspectives: The terminology 'networking' signifies a choice in social network but not their main focus nor the influence that distinguishes these sites from further types of CMC. On the other hand, they also empirically observed that SNS, as social network sites, specified the circumstance that such sites provide other services apart from networking. Interestingly, Alkis's (2017) study claimed that social network consumption patterns would derive various dimensions of anxiety, like self-evaluation anxiety, communication anxiety, privacy apprehension anxiety, and shared contentment anxiety.

The study by Haferkamp (2011) discussed the paradigm shift from Web 1.0, with its technological limitations, to

Web 2.0. The advancement of user-generated content and the growth of an online digital community provided a framework for the emergence of SNSs like My Space, Friendster, Facebook, Instagram, Twitter, LinkedIn, WhatsApp Messenger, etc.

In terms of structure, SNSs have become more user-friendly, providing functionalities for an extra detailed explanation of their users, like a profile photo and some background data (Haferkamp & Kremer, 2011). The study of Deborah Oyine Aluh (2014) presented a perspective suggesting there was no association between social network usage and social anxiety. On the other hand, the study emphasised the importance of conducting longitudinal studies to investigate whether social network usage is a risk factor for anxiety-related symptoms and illnesses. Many academic studies have empirically proven that WhatsApp is the most often used social network podium among the university students.

Thomas's (2009) study highlighted four vital communal processes that SNS can perform, like impression management, which deals with private, unique information. Friendship management is connected to impression management in that operators use widely displayed profiles of others to choose who they would like to include as friends on their list. Net construction narrates to the fonts that users show in the social community in which they contribute & separation of online and offline social networks, which is concerned with the degree to which the SNS becomes an essential part of the users' real life while offline. Social network sites enhance interpersonal relationships by creating new connections. Hardy's (2016) study observed that social systems provide platforms for fostering friendships through significant interactions, communications, or participation in social groups, allowing individuals to support each other informally.

Interestingly, Greg's (2017) study stated that even though the most used social networking site was Facebook, very few students used the sites for academic purposes. But the study argues that by using the Facebook platform, students can learn many new things about their studies beyond the classroom environment. Greg's study also reemphasised that social networks help connect people globally.

Many reviewed studies have also supported the view that internet dependence negatively impacts students' academic performance and emotional well-being; this undesirable effect is what Murja Idris (2018) concluded in her studies—that using social networking sites during study hours negatively impacts students' academic performance, typically affecting extreme internet users rather than all users.

Working sites have some consequences for the academic performance of pupils as they devote maximum time to them. Social networks often lead to multitasking, even though they can help students socialise and improve connectivity; however, they also increase cyberbullying, idealise drug manipulation, occasionally make students

unhappy, induce a fear of missing out, and ultimately lead to impatience.

According to WHO (World Health Report, 2004), mental health is a state of well-being in which individuals are aware of their capabilities, effectively address daily life challenges, perform well at work, and significantly contribute to their communities. Social networking plays a crucial role in the development of mental health problems. The quantity and quality of social relationships have an impact on mental health, health behaviour, physical health, and mortality risk (Cesar G-Escobar, Viera, 2018). Individuals who engage in more active activities, such as using social networks, tend to spend less time engaging in face-to-face interactions (Roge et al., 2020). Rogers, 2020).

For example, Escobar-Viera C. (2018) found no relationship between the amount of time spent on social networks and depression or between social network-related activities, such as the number of online friends and the number of "selfies". Their study observed that social network usage disturbs mental health based on how people see, perceive, and interrelate with their social network. Neira & Barbar's (2014) study found that although adolescents spent more time on social networks, there is no relationship between the frequency of social network use and depressed mood. Besides this relevant observation, the latest study by Wartberg, L. (2020) ensured that there is a significant association between gender difference and addiction to social networks and that more female students are found to be addicted to social networks than male students. Social networks contribute significantly to the emergence of mental health-related problems. Spending time on social network activities can positively affect mental health, but using these platforms can also harm the psychological health of their users. However, we have yet to determine the extent to which social network use impacts the public (Fazidakarim, 2020).

Spending more time on social networks is not associated with increased mental health problems or skewed development when examined at the individual level (Rogers, 2020). O'Keeffe's (2011) study concluded that increased usage patterns of social networks have exposed adverse effects on pupils' physical and psychological well-being, as well as family suitability. Furthermore, studies have linked excessive use to sleep deficiency, insomnia, and recurring illnesses. The Internet, social network users' relationships and communications, and their demonstrative experiences may show the difference between those who are doing well and those who are stressed. (Seabrook EM, 2016).

In the modern world, social networks significantly influence students' learning habits and assist them in achieving the necessary skills. education. The influence of social networks on supportive education is becoming increasingly significant. The connection between the good and bad aspects of social networks and students' willingness to learn for sustainable education (Jaffar Abbas, 2019) shows that using social networks can

negatively affect the mental health of young adults and that they might turn to social networks when dealing with tough emotions (Rasmussen, 2020).

According to Murja Idris (2018), psychosocial behaviour is understood as a reaction to how an individual acts and how mature his or her rapport is in the school/college environment or wherever the individual finds himself or herself because of the use of mobile phones, like iPads, tablets, laptops, etc. Significant attention has been given to the undesirable side of social networking sites, like cyberbullying, parent-child interactions, internet addiction, and the influence of social network use on sleep disturbance and academic performance. Psychosocial behaviour among pupils is extremely prejudiced by the use of social networking sites (Murja Idris, 2018).

**METHODOLOGY**

The study was executed to examine the consequences of social networking sites on students’ mental health. We conducted the study among university students in the Salem district who specialised in arts and sciences. For choosing a universe, certain criteria need to be fixed. The present study established its criteria based on evidence from previous reviews and the researcher's pilot study experience. Based on previous studies, the researcher has observed that students who regularly use social networks experience more psychological issues. The pilot study reveals that individuals who have been using social networks for more than a year have a more profound

understanding of their consequences. Those who have used social media for over a year understand its effects better than those who have used it for less than a year. So, for the present research, 3 criteria were fixed for being a sample; they are (1) they should have the habit of using social networks for more than 1 year, (2) they should have the habit of visiting social networks at least once in a day, and (3) students should belong to Salem district (other district students are not considered). For the present study, 300 samples were chosen from the universe through the proportionate sampling method, i.e., 25 per cent of the samples (every fourth element) were taken from the universe. To find out the sample size, the researcher used Rankin’s formula. Sample Size (n) =  $N / (1 + \sigma^2 N)$ . The study focuses on the objectives of the role of social networks on their daily routine, especially in interaction and academic performance, to understand the consequences of social networks on their mental health. To identify the impact of social networks on students' mental health, the researcher used a Likert scale. Consists of 10 items and a 5-point scale, namely, strongly agree, agree, neutral, disagree, and strongly disagree. For Analysing the data, the researcher used a frequency table, a chi-square test, and an independent sample Z test. To bring out the more appropriate results, the researcher used SPSS software. obtain relevant information, the researcher adopted a semi-structured interview schedule.

**RESULTS**

**TABLE: 1**

**DEMOGRAPHIC PROFILE OF THE RESPONDENTS**

Personal profile		N=300	%
Age	17-20	204	68.00
	21-24	96	32.00
Gender	Male	201	67.00
	Female	99	33.00
Stream of Study	Arts	128	42.67
	Science	123	41.00
	Others	49	16.33
Living with	Parents	261	87.00
	Others	39	13.00
Type of family	Nuclear family	194	64.67
	Joint family	106	35.33
Monthly income	Up to 5000	134	44.67
	5001-10000	92	30.67
	10001-20000	43	14.33
	20001-30000	31	10.33

With respect to the respondent’s profile, the majority (68%) of the students belonged to the age group of 17–20

years; nearly one-third (32%) were in the age group of 21–24 years. Out of the 300 students, 201 respondents were male; the rest of the students (99) were female, i.e., nearly one third of the respondents were female. About 42.67 per cent of the students belonged to the arts stream, 41 per cent of the students belonged to the science stream, and 16.33 per cent of the students belonged to another stream (MBA, MCOM, etc.). A sizeable (87 %) proportion of the students live with their parents; the rest of the students (13 per percent) live in hostels; among them, some of them do not have parents. Nearly two-thirds (64.67%) of the students live in nuclear families, and more

than one-third (35.33%) of the students live in joint families, and that is also quite remarkable. 44.67 per cent of the respondent’s family’s monthly income was in the range of up to 5000, 30.67 per cent of the student’s family’s monthly income was in the range of 5001-10000, 14.33 per cent of the student’s family’s monthly income was in the range of 10001-20000, 10.33 per cent of the respondent’s family income was in the range of 20001-30000, and more than three-fourths (75.34%) of the students’ family income was in the range of 3000-10000.

TABLE: 2

ROLE OF SOCIAL NETWORKS ON THEIR DAILY ROUTINE

Role of social network on daily routine		N=300	%
Duration of using SN	Upto 3 hours	53	17.67
	4-6 hours	148	49.33
	More than 6 hours	99	33.00
Purpose of SN	Learn about oneself	37	12.33
	Present oneself	42	14.00
	Maintain relationships	115	38.33
	Facilitate social change	28	09.33
	Entertainment purpose	78	26.00
Used SN for educational purpose	Regularly	82	27.33
	Occasionally	102	34.00
	Never	116	38.67
Knowledge about employment opportunities through SN	Regularly	73	24.33
	Occasionally	98	32.67
	Never	129	43.00
learn new thing through social network	Regularly	75	25.00
	Occasionally	98	32.67
	Never	127	42.33
SN for daily usages	Regularly	62	20.67
	Occasionally	75	25.00
	Never	163	54.33

With regard to the role of social networks in their daily routine, a sizeable (82.33%) proportion of the students used social networks for more than 3 hours because most of the students were from urban backgrounds, so they did not have much time to spend there with friends, and so they spent more time on social networks. More than

one-third of the students (38.33%) used social networks to maintain relationships because they wanted to reciprocate with their friends and neighbours. But over a quarter (26%) of students use social media for fun because it calms them. 38.67 per cent of the students never used social networks for educational purposes, only using them

to maintain relationships with friends and for entertainment. However, more than one-third (34%) of the students occasionally used social networks for educational purposes, particularly during their examinations. They also stated that only during the time of examination did they have the habit of sharing study material through social networks; more than one fourth (27.33%) of the students regularly used social networks for educational purposes, and they stated that they have a separate group for sharing study material on a regular basis. More than two-fifths (43%) of the students never used social networks to get employment updates because, among the 43.00 per cent of the students, most of them do not have an idea about job portal websites, some of them do not have an interest in using social networks to know

the employment status, nearly one-third (32.67%) of the students occasionally used social networks to get employment updates, and nearly one-fourth (24.67%) of the students regularly used social networks for getting employment updates. Among them, they have a separate group to share employment-related details. 42.33 per cent of the students never used social networks to learn new things; nearly one third (32.67%) of the students used social networks to learn new things; and one fourth (25%) of the students used social networks to learn new things. More than half (54.33%) of the students never used social networks for daily tasks; one fourth (25%) occasionally did so for activities like using Google Pay or reading e-newspapers; and more than one fifth (20.67%) regularly relied on them for such tasks.

**TABLE: 3**

**ASSOCIATION BETWEEN GENDER, LIVING WITH AND DURATION OF USING SOCIAL MEDIA**

Variables		Duration of using social media			Total (N=300)	Result
		Up-to 3 hours	4-6 hours	More than 6 hours		
Gender	Male	11	113	77	201	$\chi^2=62.31, df=2, p=0.00001(s)$
	Female	42	35	22	99	
Resides with	Parents	46	138	46	231	$\chi^2=12.55, df=2, p=0.0019(s)$
	Others	07	10	61	79	

Table data reveals the relationship between gender and the duration of social network usage, indicating that there is a significant correlation between these two factors. The table concludes that there is an association between gender and duration of using social networks; 46.92 per cent of the female students have the habit of using social networks for up to 3 hours or less than 3 hours, while only 05.47 per cent of the male students used social networks for up to 3 hours or less than 3 hours. More than half the proportion (56.22%) of the male students used social networks for 4-6 hours, whereas 35.35 per cent of the female students used social networks for 4-6 hours. Nearly two-fifths (38.31%) of the male students used social

networks for more than 6 hours; only 22.23 per cent of the female students used social networks for more than 6 hours. The table concludes that male students spend more time on social networks than female students.

Regarding student residents, over half (52.87%) of the students living with their parents use social networks for 4–6 hours, while those living away from their parents use them for more than 6 hours. Students living away from their parents spend less time on social networks due to the absence of alternative entertainment options, leading them to spend more time on these platforms. There is an association between students' living arrangements and the duration of their social network usage.

**TABLE: 4**

**GENDER AND FAMILIAL CONFLICT**

Gender	Gender and familial conflict				
	Mean	Standard deviation	Z value	Significance	Result
Male	3.01	1.01	4.42	0.0001	Significance
Female	2.39	1.25			

The analysis of data shows that there is a significant association between gender and familial conflict; the mean score of the male students on familial conflict is 3.01, whereas the female students' mean score on familial conflict was 2.39. Therefore, the analysis indicates that

more female students believe that social networking contributes to familial conflict compared to male students, as they perceive that female students have more domestic responsibilities than their male counterparts. Hence, they face many familial conflicts while using social networks,

and they agree that social networking leads to familial conflict.

**TABLE: 5**

**DURATION OF USING SOCIAL NETWORKS AND SOCIAL NETWORKS USAGE LEADS TO ADDICTION TO SOCIAL NETWORKS**

Opinion of respondents on high social networks usage leads to addiction						
Duration of using social networks	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
Upto 3 hours	7 (13.21%)	9 (16.98%)	11 (20.75%)	12 (22.64%)	14 (26.42%)	53
4-6 hours	28 (18.92%)	49 (33.11%)	20 (13.51%)	30 (20.27%)	21 (14.19%)	148
More than 6 hours	28 (28.28%)	26 (26.26%)	18 (18.18%)	15 (15.15%)	12 (12.12%)	99
Total	63	84	49	57	47	300
$\chi^2=15.86$	DF= 8		P=0.04(s)			

The table reveals the association between duration of using social networks and the respondent's opinion on high usage of social networks that leads to addiction to social networks, up to 3 hours of using social networks. More than one fourth (26.42%) of the respondents strongly disagree with the high usage of social networks; however, among users of social networks, this perspective differs. 28.28 per cent of the respondents strongly agree that high usage of social networks leads to addiction. The table concludes by highlighting that there is an association between duration of use and addiction to social networks.

**DISCUSSIONS**

The study explores the association between the duration of using social networks and mental stress, indicating that an increase in social network usage correlates with an increase in mental stress. The study finding is matched with the adolescents who were habituated to spending their valuable time on SNS, who had a greater level of mental distress, deprived self-rated mental health, and suicidal ideas. (Sampasa, 2015)

Age, gender, and the length of time the student spent using social networks determined their mental health. The finding is similar in that personalities and social influence processes emerged as important predictors of both Facebook use and the frequency of Facebook usage. Emotional constancy, extroversion, scrupulousness, and averages were associated with problematic Facebook use, while gender, group norms, and social uniqueness determined regularity (Marino, 2016).

A greater number of students faced depression problems. The finding is matched with social media; depression depends upon the duration of using social media per day, visits per day and frequency of visits on social media was associated with depression. (Lin Ly, 2016).

More students faced behaviour change, especially in the

17-20 age group. Behaviour change is a key part of health. Moreover, social media is significantly cheaper, more cost-effective, and easier to use compared to conventional media. Similarly, the use of social media will lead to behavioural changes in the respondents' 17-20 age group (Emmanuel Olorunleke, 2016).

More students agree that academic social networks affect academic performance; this finding is associated with a phenomenon known as social media addiction, where pupils exhibit a moderate level of addiction, and male students show a higher level of addiction compared to their female counterparts. The finding is matched with Seyyed Mohson Azhizi (2019); in his study, he found that more students stated that the usage of social networks affects academic performance.

Age, gender, and length of use of social networks determined the student's mental health. The finding is also reflected in Marino's (2016) studies; the study expresses that personalities and social effect processes arose as important prophets of Facebook use and Facebook use regularity. Emotional constancy, extroversion, scrupulousness, and averages revealed problematic Facebook use, while gender, group norms, and social uniqueness determined regularity. The present study reveals that more 17-20-year-old students faced behaviour change, whereas Emmanuel Olorunleke (2016), in his study, expressed that behaviour change is a key part of health. Moreover, social media is significantly cheaper, more cost-effective, and easier to use compared to conventional media. Using social media will lead to behavioural changes.

The findings of the study are similar to those of the present study because they indicate an association between the duration of social network use and addiction. The study finding is matched with Ramesh Mashthi (2018), which stated that social media addiction was detected in over one

third of the themes, almost correspondingly spread, and most of them had a mild addiction. Counselling on the healthy use of technology for social media users is urgently needed, which implies that essential lawmaking actions, such as establishing an age limit for social media use, should be considered. Wilson (2010) also stressed the connection between certain personality traits and increased social network usage, which could potentially lead to addiction. Extroversion and introspection are notable because they relate to more typical social network participation online.

### CONCLUSION:

Social networks play a very vital role among the youth community, especially among college students. On the other side, it leads to various levels of psychological implications as well. The study discovered that three major factors primarily determine the students' mental health: age, gender, and the duration of their social network use. (1) Age—because in the study area, there are two kinds of age groups. The study focused on two age groups: 17-20 and 21-24. The researcher observed that the 17-20 age group faced a higher level of stress than the 21-24 age group because the 21-24 age group had better mental stability than the 17-20 age group (2). Generally, male students spent more time on social networks than female students, which led to them experiencing more mental health problems; in contrast, female students used social networks with restrictions, resulting in fewer mental health issues. The study also found that even though female students were engaged in social networks for fewer hours, they mostly faced familial conflict while using them than male students (3). The duration of using social networks leads to mental health problems. If the duration of using social networks is shorter, it indicates that mental health problems are less severe; conversely, if the duration increases, the severity of mental health problems also rises.

### SUGGESTIONS

1. Colleges can come up with awareness programs for mental health and social media addictions.
2. College students can reduce their social media use by spending time with their parents.
3. Students can approach counselling centres (psychologists) while facing social media addiction/behaviour change.
4. One can focus on physical activities to reduce the excessive use of social media.
5. To prevent social media addiction, parents can restrict their children's use of social media.

### LIMITATION OF THE STUDY

The study was carried out only among 300 students, so it can be problem in generalization. The study was executed only in Salem district, so there is a lack of heterogeneity in the sample.

### IMPLICATIONS:

We conducted the study to understand the effects of social networks on students' mental health. The study concluded that social networks contributed to the alienation of students from their studies, societal relationships, and connections with friends, neighbours, and parents. The study found a close association between students' age, gender, duration of social network use, and their mental health problems.

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On behalf of all authors, the corresponding author states that there is no conflict of interest.

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