

The Impact Of Social Media On Psychological Well-Being Among University Students Of Karachi, Sindh, Pakistan

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Abstract

Background: Almost, there are 2.5 billion social media users in the world with 68.3% of users active on Facebook, Twitter, Instagram, etc. Social media use is turning into addictive behavior that might be prompting a decrease in other social activities, exercises, studies/work/job, relational connections, and mental prosperity. The objectives of this study are to identify the pattern of social media use among university students of Karachi and to determine the effect of the addictive use of social media on the psychological well-being of university students.

Methodology: Cross-sectional survey was carried out on a sample of 353 university Students of the business management department of SZABIST, University, Karachi, Pakistan. Participants were recruited using a convenience sampling technique in which questionnaires were sent through a link to the targeted population. The questionnaire included information on demographics, social media use, quality of life, and sleep disturbance, and a section on standard tools for Depression, Anxiety, and Stress [DASS-21]. The data were analyzed by using Excel and SPSS.

Results: Most study participants were male 231 (65.4%), 223 (63.2%) were in their final year and 186 (52.7%) were in the BBA program. The majority used WhatsApp 336 (95.2%), followed by Facebook used by 276 (78.2%), Instagram 253 (71.7%), Twitter 145 (41.1%), and Games 131 (37.1%). A mean score of 14.76 indicated “extremely severe” was suffering from depression, a 13.77 mean score indicated “extremely severe” of the total participants had anxiety, and a 15.14 mean score indicated “Severe” was suffering from stress.

Conclusion: Our study showed a high prevalence of anxiety, depression, and stress among university students. It is also observed that anxiety, stress, depression, and disturbance in sleep quality are influenced by students’ use of various social media platforms.

Keywords: Depression, Anxiety, Stress, Quality of Life, University Student, Karachi, Pakistan.

Introduction

Social media in this recent time has become a crucial aspect of studies considering the latest technological developments and their utilization during the last few decades (Andreassen, 2016).

A group of webs puts together applications that work with respect to the philosophical and technological establishments of the Web that permits the creation and trade of user-produced content. Social media suggest the arrangement of

administrations and applications for individuals to communicate with others utilizing network technologies. Inside web-based media are online networks and organized gaming (Fuchs, C., 2021). Almost, there are 2.5 billion social media users in the world with 68.3% of users active on Facebook through the Internet. In a country such as the US, where there is critical market penetration, more than 75% of the population has an online media profile going on. On average, 216 minutes each week are spent on social media applications including Facebook, Twitter, Instagram, etc. (McNamara, C., 2018).

Although this innovation has been related to numerous positive aspects, for example, amusement, facilitation of business, intellectual expertise advancement, social capital, and social collaboration, concerns have been raised regarding extreme use, specifically, the users' potential turning out to be highly "dependent on" utilizing such technologies. In the given context, addictive use is described as "being heavily concerned about online activities, driven by a wild inspiration to perform the conduct, and giving huge time and exertion to it that it impedes other significant aspect related to life (Pontes, H. M., 2017; Greenfield, D., 2007). Texting, blogging, informal social network sites messaging are whole types of social media. Social media use is turning into risky conduct that might be prompting a decrease in mental prosperity as "an extensive worry about social media, being driven by a solid inspiration to utilize social media, and committing so much time and exertion to social media use that it disables other social exercises, studies/work/job, relational connections, and mental prosperity. Surely, extensive media usage addiction is well-defined by the American Society and Psychiatric Association as a critical, long-lasting illness of mind incentive, stimulus, retention, and other integrated circuit that prompts organic trademark, mental, social, and divine appearances. Further,

mental issues, and specifically passionate issues, for example, nervousness and discouragement, additionally increment the danger of building up dependence (Peper, E., & Harvey, R., 2018). Unreasonably captivating in specific practices may help facilitate the sentiments of uneasiness or unhappiness, however, may likewise cause or worsen side effects of depression and nervousness because of their adverse results. Several empirical studies have highlighted the relationship between anxiety, depression, and symptoms of addictive technological behaviors (Dieris-Hirche, J., 2017).

Most of the young generation in today's time use social media extensively. The current estimates show that 80% of the total young people relied upon tablets, laptops, and Smartphones. Accordingly, individuals around the globe have become hyper-associated and occasionally ever detached from technology and the internet. Nevertheless, not exclusively are there is a range of types of technology; there are various ways that individuals are connected through technology socially. Based on the quickly growing environment of digital media and the functions of networking sites increase over time and because of new platforms expansion, the research focus is needed on the platforms which are presently being used by the youth and their effect on their psychological well-being (Müller, K. W., 2016). Social media use has turned into an addiction that resulted in a decrease in other social and healthy activities such as exercises, studies, work, in-person interaction with family and friends, and individual mental prosperity among the young generation. Therefore, the objectives of this study are to identify the pattern of social media use among university students of Karachi and to determine the effect of the addictive use of social media on the psychological well-being of university students.

Methods

Study design and population

A cross-sectional study design was used. The students including the first year to the final year of Master of Business Administration (MBA) and Bachelor of Business Administration (BBA) from of business administration department of Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST) Karachi, Sindh, Pakistan were invited to participate in the study. The research was conducted in December 2020 – January 2021. In this research, an online Google survey was used, this method permitted us to reach the required sample size in Covid 19 times where the online classes approach started by the university. A Google link to the questionnaire was released with the help of social media support WhatsApp, and Facebook Messenger.

Research Questions

The study focused on the following research questions:

Is there any relationship between social media use and the psychological well-being of students?
How did addictive social media behavior affect the psychological well-being of students?

Hypothesis

Null Hypothesis 1: There is no association between social media and the psychological well-being of students.

Alternate Hypothesis 1: There is an association between social media and the psychological well-being of students.

Null Hypothesis 2: There is no effect of social media behavior on anxiety, depression, and quality of sleep among students.

Alternate Hypothesis 2: There is an effect of social media behavior on anxiety, depression, and quality of sleep among students.

Sample size and sampling technique

A sample was selected from the population of 4200 students including the first year to the final year of MBA and BBA students enrolled in the

business administration department of the SZABIST Karachi campus. The sample size was calculated by using the software Open Epi version 3

(www.openepi.com/Menu/OE_Menu.htm)

(Sullivan, K. M., 2009). In 353 (with a 5% margin of error) responses were submitted via Google link. We used the convenience sampling method through a structured questionnaire on the pattern of social media use and the effect of addictive use of social media on student well-being with the help of the DASS 21 scale.

Eligibility Criteria

All students of business administration that are currently enrolled in BBA and MBA at SZABIST Karachi from the first semester to the final semester are included in the study. Students that are recently pass out from BBA and MBA Programs and those who are not willing to fill out the questionnaire/ not willing to participate in the study were excluded.

Variables

For the research data requirement social media and its platforms with spending time on specific apps, frequently checking social medial accounts, and most usable platforms with other demographic variables such as age, gender university, year and business administration program serve as independent variables. Psychological Well-Being such as quality sleep, stress, anxiety, and depression serve as dependent variables. Five-point Sleep Disturbance scale has been used in which 1 represents “Never”, 2 represents “Rarely”, 3 represents “Sometimes”, 4 represents “Often”, and 5 represents “Always”. Four Point DASS-21 scoring system has been used to measure the stress, anxiety, and depression level in which level shows 1 represents “Never”, 2 represents “Sometimes”, 3 represents “Often”, and 4 represents “Always”. Five Point DASS-21 scores have been used to measure the Stress, Anxiety, and Depression

Levels in which 1 represents “Normal”, 2 represents “Mild”, 3 represents “Moderate”, 4 represents “Severe” and 5 represents “Extremely Severe”.

Ethical Considerations

After getting approval from the Institutional Ethics Review Board (IERB) of SZABIST Karachi campus. Participants were considered in the study after taking consent and explaining the purpose of the study and their right to withdraw from the research without any potential harm. Their confidentiality was ensured before the commencement of the research.

Results

In our research, our respondents were mostly male 231 (65.4%). The majority 92 (26.1%) were 23 years old. Most of the respondent’s students fall between ages 22 to 25 in our research. In our study 319 (90.4%) were single. Most of the

respondents were in their final year 223 (63.2%) in our Study, 186 (52.7%) were in the BBA program, and 167 (47.3%) were in the MBA Program.

The respondents often check social media, if we look around the table; most of the respondents are shown her/his interest to check social media several times a day which is 307 (87%) students are dominant in our study and spend time per app on social media frequently. If we look at the timing spending per app; most of the respondents are between 60 minutes to 120 minutes which is 101 (28.6%) and 147 (41.6%) respectively. The acceptance to thinking about spending a lot of time in which Yes response was given by 247 (70.0%) and No response of students was 106 (30%). Hence, it’s shown that university students are more likely to spend a lot of time thinking about social media. The descriptive characteristics of study participants are shown in Table 1.

Table 1. Descriptive characteristics of the study participants, university students of Karachi, Sindh, Pakistan.

	Frequency	Percentage%
Gender		
Male	231	65.4
Female	122	34.6
Age		
20	1	0.3
21	4	1.1
22	57	16.1
23	92	26.1
24	78	22.1
25	71	20.1
26	38	10.8
27	10	2.8
28	2	0.6
Marital status		
Single	319	90.4
Married	34	9.6

University year		
First Year	44	12.5
Second Year	21	5.9
Third Year	65	18.4
Final Year	223	63.2
University program		
BBA	186	52.7
MBA	167	47.3
Often check social media		
Once a day	6	17
Several times a day	307	87
Once a week	3	0.8
several times a week	20	5.7
Several times a month	17	4.8
Time spends per App on social media		
30 minutes	8	2.3
60 minutes	101	28.6
120 minutes	147	41.6
180 minutes	24	6.8
> 180 minutes	73	20.7
Thinking to spend on social media		
Yes	247	70
No	106	30

Figure 1. Type of Social Media platforms used by University Students in Karachi, Sindh Pakistan.

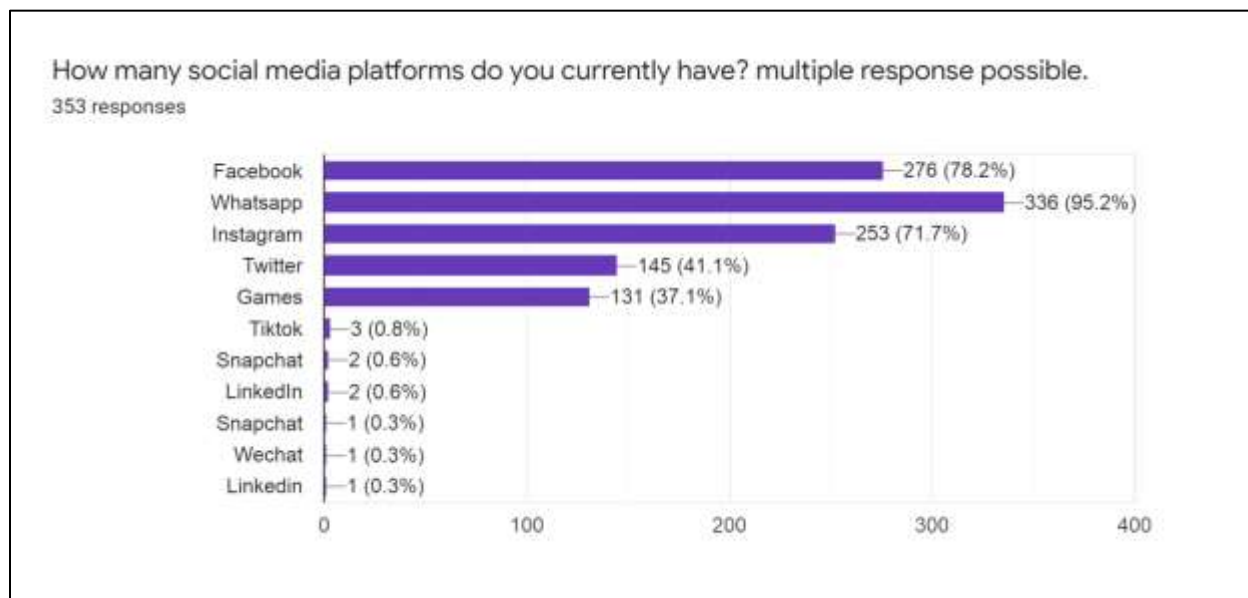


Figure 1 shows the number and type of different social media platforms used by university students. More than one social media platform is used by different students. The majority use WhatsApp 336 (95.2%), followed by Facebook used by 276 (78.2%), Instagram 253 (71.7%), Twitter 145 (41.1%), and Games 131 (37.1%). Other social media platforms used by a few students include TikTok, Snapchat, LinkedIn,

Snapchat, and WeChat which make 10 (2.9%) respectively. We also asked about students' favorite social media platforms. Students have more than one favorite platforms on social media as Facebook indicated 221 (62.6%), WhatsApp 302 (85.6%), Instagram 219 (62%), Twitter 116 (32.9%), Games 98 (27.8%), and Snapchat indicated as favorite social media platform by 2 (0.6%) respectively.

Table 2. The proportion of university students' responses on different categories of Depression, Anxiety, and Stress scale.

	Frequency	Percentage
Stress		
Never	97	27.40%
Sometime	135	38.10%
Often	89	25.40%
Always	32	9.10%
Total	353	100.00%
Anxiety		
Never	135	38.10%
Sometime	122	34.70%
Often	69	19.50%
Always	27	7.60%

Total	353	100.00%
Depression		
Never	108	30.50%
Sometime	127	36.10%
Often	90	25.70%
Always	28	7.70%
Total	353	100.00%

Table 2 shows the frequency and percentage of the respondent's responses in every category of the DASS scale. Four Point DASS-21 scales have been used to measure the stress, anxiety, and depression levels in which the stress level shows 1 represents "Never", 2 represents "Sometimes", 3 represents "Often", and 4 represents "Always". So, 97 respondents which is 27.4% show a response to Never, 135 respondents which is 38.1% show sometime, 89 respondents which is 25.4% show often, and in the last 32 respondents which is 9.1% show always. In anxiety level shows 1 represents "Never", 2 represents "Sometimes", 3 represents "Often", and 4 represents "Always". So, 135 (38.1%) respondents showed the response Never, 122 respondents which are 34.7% show sometime, 69 respondents which are 19.5% show often, and in last 27 respondents marked which is 7.6%

showed always, and In Depression Level in 1 represents "Never", 2 represents "Sometimes", 3 represents "Often", 4 represents "Always". So, 108 respondents which is 30.5% show a response to Never, 127 respondents which is 36.1% show sometime, 90 respondents which is 25.7% show often, and in the last 28 respondents which is 7.7% show always.

Table 2 indicates that one category sometimes is highly marked which is 135 respondents and 38.1% on the stress side. The mostly never and sometimes side category is highly marked which is 135 and 122 respondents and 38.1% and 34.7% in the anxiety side and mostly never and sometimes side category is highly marked which is 108 and 127 respondents and 30.5% and 36.1% so this show that stress, anxiety, and depression level among university students.

Table 3. Level of Depression, Anxiety and Stress among university students of Karachi, Sindh, Pakistan.

DASS 21 SCORE			
	DEPRESSION SCORE	ANXIETY SCORE	STRESS SCORE
	14.76	13.77	15.14

	Depression	Anxiety	Stress
Normal	0 - 4	0 - 3	0 - 7
Mild	5 - 6	4 - 5	8 - 9
Moderate	7 - 10	6 - 7	10 - 12
Severe	11 - 13	8 - 9	13 - 16
Extremely Severe	14 +	10 +	17 +

The above DASS-21 score table 3 suggests the scoring ranges from Normal to Extremely Severe with the Mean score values in every category. Five-point DASS-21 scores have been used to measure the Stress, Anxiety, and Depression level in which 1 represents “Normal”, 2 represents “Mild”, 3 represents “Moderate”, 4 represents “Severe” and 5 represents “Extremely Severe”. The analysis from 353 respondents

shows the mean value of depression is 14.76 which indicates “extremely severe” the mean value of anxiety is 13.77 which indicates “extremely severe” and the mean value of stress is 15.14 which indicates “Severe”. The result of respondents shows high levels of Depression, Anxiety & Stress among students due to extensive use of social media.

Figure 2. Disturbance in sleep quality due to the use of social media among university students of Karachi, Sindh, Pakistan.

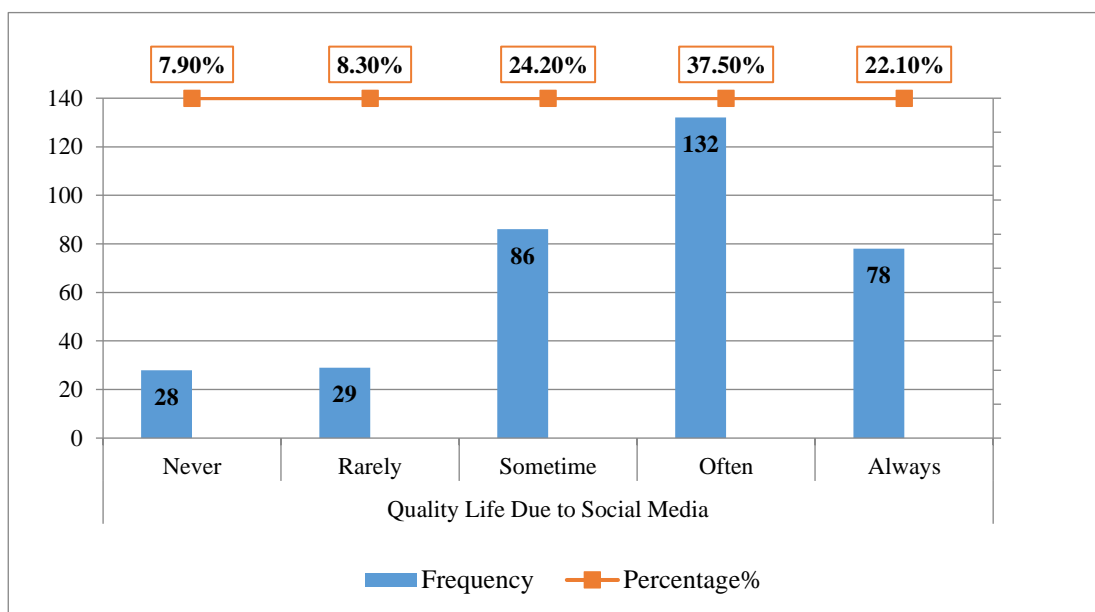


Figure 2 shows the disturbance in sleep quality due to the use of social media among university students in Karachi, Sindh, Pakistan. Five-point Sleep Disturbance scale has been used in which 1 represents “Never”, 2 represents “Rarely”, 3 represents “Sometimes”, 4 represents “Often”, and 5 represents “Always”. So, 28 respondents which are 7.9% show a response of Never, 29 respondents show Rarely which is 8.3%, 86 respondents which is 24.2% show sometime, 132 respondents which is 37.5% show often, and last 78 respondents which is 22.1% show always. In most respondents are in one often category 132 (37.5%) so this shows that quality sleep is affected using social media in students’ daily routines. Most of the respondents reported a positive relationship between social media and stress, anxiety, depression, and quality sleep.

In our research, we also asked students if they have shared information on their symptoms with anyone in the family or friends. About 39.9% said they did not share any information with anyone, 51% of respondents said that they discuss it with friends, and 9.1% of respondents discussed the issue with family. We also asked about the treatment of their issues and contact with a physician. The majority 90.9% did not consult with any physician and only 9.1% of respondents discussed the issue with physicians.

Discussion

The objective of this research is to develop the latest insight into social media and its likely adverse consequences on the student’s emotional state, distress, uneasiness & stress, and sleep quality in the current scenario. It has been determined through this research that people who are using several social media secure high scores on the Depression Anxiety and Stress (DASS 21) scale. The current study found that the number of social media outlets one used daily has a

significant, positive correlation with scores on the DASS21 subscale.

Other studies have previously associated linked problematic social media use with depression and anxiety, and the individuals who perceived their own addictive behaviors, especially with those related specifically related to online content. These were more likely to experience psychological distress and decreases in self-esteem (Casale, S., 2022). The correlation between depression and perception of addiction nearly reached a significance stage at an alpha of .058, but this result has not been extended to anxiety. Another study on students of private medical school showed the same results as that of most other medical students having a high rate of depression, anxiety, and stress due to using social media (Lenhart, A., 2010). Over 70% of adolescents use SNSs, the extensive use of various social media platforms including Facebook, Instagram, Twitter, and WhatsApp by the younger population has been declared as likely to have with increased significant utilization rate and at greater risk of social media distress in accordance with current and past research works. This significance might be explained by research which states that Facebook offers an overwhelmingly positive impression of one’s Facebook friends which prompts comparisons which in turn elevates the risk of negative self-appraisal, which over prolonged periods of time increases the individual’s likelihood of developing depression (Blease, C. R., 2015). Depression rates among adolescents and young adults were shown to significantly increase drastically high depending on how they used these platforms (Nguyen, C. T. T., 2022). Many individuals within this age group use mainly some form of social media, making it a great place to look for a correlation between rising trends in poorer psychological well-being. A previous study implicated stated that social media has contributed to increased immense

anxiety levels due to users' tendencies to quantify relationships and gain real-time access to social events that the individual does not belong to, is not part of which can have potentially resulted in prolonged social anxiety that proves (Markham, M. J., 2016). This significant finding falls in accordance with prior literature in that it supports the basis that using more social media platforms correlates with anxiety scores. These results may be due to and formed the basis that the excessive use of multiple platforms may contribute to greater levels of FOMO (Fear of Missing Out), which may be a contributor to higher levels of social anxiety (Baker, Z. G., 2016). Some previous research also displayed evidence evident of the fact that less sleep resulted in a greater susceptibility to stress due to extensive usage of social media platforms. These previous research studies emphasized the imperative of a stress variable being included in this study as social media screens tend to be the first and last thing users look at before and after sleep.

The recent times, the word depression is a main point of view among specialists. Depression today time realized in young people as an aim of media speculation. Some views show that social media is partially a burden on youth. Once perceive students at university attending and sit on chairs in the classroom with their heads down viewing their Smartphone from student enter in classroom or end of the class and break times, students frequently message, snap, search, or look at their phones instead of talking with students or friends next to them. In the modern study, almost 135 students at the university participated as part of the class education enhancement evaluation. Nearly all stated that they multi-task even though it would be better to emphasize the essential assignment and only change the emphasis after the assignment is done. Inappropriately, multitasking may more exactly be described as "semi-tasking" or doing double as much half as well. such as multitasking has been

described as falling into a few categories: without digital multitasking talking while eating, cross-media multitasking messaging while watching TV, and single-device multitasking messaging while playing smartphone games (Reinecke, L., 2017). The decision is still especially disputable on whether online media is causing harm to teenagers' psychological well-being. Up until now, research on the subject matter has been restricted (Griffiths, M., 2000). A few studies demonstrated that connecting online with sensibly measured gatherings can be helpful for teenagers while other researchers drive the conclusion that social media use prompts increments in stress, nervousness, and sadness (Wilcox, K., & Stephen, A. T., 2013). Digital addiction subsequently responds to the unusual improvements our rewarding ways to nervous systems are motivated when they respond to documents and instant and rewarded by SMS audio recordings and videos etc.

These findings such result had been determined based on they may be due to participants experiencing a lack of proper sleep due to social media usage at bed sleeping time on beds particularly if they have a high number of social media platforms accessible to them to engage with before they go to sleep. This act could be resulting in has enormous impact including increased stress levels which is in line with research into stress and sleep deprivation (Minkel, J. D., 2012). This study also showed an association between quality of life and sleep quality with Depression Anxiety and Stress high scores. An alternative explanation for these findings may be having a higher number of social media apps on one's Smartphone is likely to increase or enhance the number of "push notifications" generated by the apps which may in turn lead to a feeling of pressure to continually respond to these notifications.

Conclusions

In any case, the possibly hazardous results that far-reaching utilization of social media can have on its user's psychological well-being are a well-recorded and meriting academic concern. We identified that every other student these days has been operating social platforms for various purposes including socializing, academic and educational purposes. Many of the students are also active on Facebook and YouTube for diverse purposes too. If students start to make use of these platforms sensibly and in a stable way, then their health would remain unaffected. Another finding is that large numbers of users are not aware of the terms and conditions of the various social platforms/networks being used by them. Furthermore, we also determine the positive outcomes in the academic activities of the students using these platforms.

It is suggested that research in the future must focus on producing depth insight through social media questionnaires. Moreover, it would surely be proven beneficial to discover the factors associated with addictive social media use. It is recommended that universities should organize awareness sessions on the negative impact of social media use for students and individual-level counseling services may be provided to mitigate the risk associated with intense social media use.

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