Effect of Social Media Usage on Students' Mental Health at Higher Education Level

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ABSTRACT

The purpose of the study was to investigate the effects of social media on the mental health of University students using a positivist approach. It was a non-experimental, quantitative research design using a correlational research design. The population comprised students from the University of Okara, and a representative sample of 300 students was selected through a two-stage random sampling technique. The data were collected using two research instruments and then analyzed using inferential statistics such as the Pearson correlation coefficient, independent sample t-test and linear regression. The study shows that there is a strong, positive and significant correlation between student's mental health and their use of social media. The findings show that the importance of the educational stakeholder must be given more attention to the potential effects of social media on student's mental health.

Keywords: Social Media, Mental Health, University Students

INTRODUCTION

Social media (also social network) refers to tools and online platforms that can allow individuals to communicate and share information with others both personally and a company. The term mental health refers to the state of psychological well-being which allows a person to address the challenges in their lives as effectively as possible, to develop and identify skills, to learn and work efficiently, and to help others. The use of social media in today's culture has become an integral part of daily life particularly for students. It is growing in popularity due in part to factors such as the pandemic, leading to changes in educational systems. For example, studies on social media indicate that currently around 3 billion people use social media for communication (Iwamoto & Chun, 2020). However, the number of users has given increased time to social networking sites (since the statistics show that individuals spend an average of 2 hours on social network apps daily sharing photos and messages, updating status updates, tweeting, liking and reading a variety of social networks) (Abbott, 2017).

Social media's impact on students' lives is a hot topic for researchers. Chukwuere and Chukwuere (2017) elaborated that social media can have positive and negative effects on people's emotions. When a person

browsing social media without a specific goal, their emotions can change in response to the content they come across. This means that employed users can experience both positive and negative emotions. Because social media has become an inescapable part of everyday life, students spend endless hours on it. Iwamoto and Chun (2020) noted that students becoming immersed in social media content leads to self-evaluation against peers or develops unrealistic perceptions about self and others, which has severe emotional consequences.

Social media is a technological instrument that provides new learning opportunities by promoting the exchange of information between the users. As Bryer and Zavatarro (2011) pointed out, social media are instruments for improving social interaction, supporting collaboration, and helping people in different institutions to talk about issues. According to Nwangwa et al. (2014), social media is an umbrella term encompassing a broad range of online applications, such as social networking platforms, social bookmarking and sharing spaces, blogging and micro blogging technologies, virtual environments, e-conferencing applications, video and audio services, and e-project management systems. These online applications focus on user-centered interactions and are intended to be user-oriented. These internet applications are based on the principle of Web 2. 0 that people are empowered to create and share the content they produce.

Social media platforms can be efficiently utilized in Colleges of Education to equip prospective educators, enhancing their ability to embrace innovative techniques for knowledge dissemination, sharing information on emerging teaching strategies, and upholding professional teaching standards. Students' ways of absorbing and processing information vary due to individual differences and the types of media used to engage their senses. Instructional strategies are pivotal in determining the extent to which students assimilate knowledge. Incorporating social media into teacher preparation is vital in the 21st century, yet its effectiveness depends on the content, the learners' requirements, their interests, and the media's ability to captivate them. The choice of media enables students to actively participate and collaborate with their peers (Paul, 2017).

Recognizing social media necessitates a profound understanding of its significance and applications. Students' familiarity with social media platforms and their integration into pedagogical processes can significantly impact academic achievement. Social media represents a form of digital communication that facilitates interaction centered on shared interests and attributes. It functions as a conduit for social engagement through accessible and scalable publishing methods. By employing online technologies, social media transforms traditional media monologues into interactive social dialogues (Paul, 2017). These platforms advance the democratization of information and knowledge, converting individuals from passive consumers of content to active contributors (Joes, 2009). The strength of a nation is contingent upon the creativity, characteristics, mindsets, and aspirations of its populace (Awoniyo, 2001). It is impractical to anticipate a society to be both uninformed and liberated, especially in an era where social media plays a pivotal role in education. Although social media technology offers new educational opportunities, it also presents potential risks.

Social media can be divided into six categories: collaborative projects like Wikipedia, weblogs and microblogs such as Twitter, content-sharing platforms like YouTube, social networking sites such as Facebook, virtual game worlds like World of Warcraft, and virtual social environments like Second Life. Social media accommodates individual learning preferences by recognizing learners' aptitudes, whether they adapt quickly or slowly, their favored methods, the materials they engage with, and the contexts in which they learn. According to Cain (2011), utilizing social media as an educational resource can offer substantial benefits for the instruction of 21st-century learners, promoting positive psychological effects, as it has significantly influenced how students engage and exchange ideas online.

Research Objectives

Following were research objectives of the study to:

1. examine the effect of social media on students' mental health at university level.
2. Investigate relationship between social media and students' mental health at university level.
3. Find out differences in social media and students' mental health at university level with regard to gender.

Research Questions

Following were research questions of the study:

1. What is the effect of social media on students' mental health at university level?
2. What is relationship between social media and students' mental health at university level?
3. Is there a difference in social media and students' mental health at university level with regard to gender?

LITERATURE REVIEW

The global increase in information and communication technology (ICT) over the past few years has affected how people engage with social media, impacting all areas of society. Many individuals now depend on the internet, smartphones, and other devices, particularly students, who are greatly influenced by these technological advancements. Karpinski (2009) found that nearly two-thirds of students reported using social media while in class, studying, or completing homework. Furthermore, platforms like Facebook, YouTube, Twitter, and Instagram can have harmful effects, often distracting students and causing them to delay their work. Karpinski (2009) also noted a continual decline in academic success among students who frequently engage with social networking sites. This was supported by the research of Kirschner and Karpinski (2010), which showed a significant negative relationship between Facebook use and academic performance. They found that students who are active on Facebook tend to study fewer hours each week compared to their peers who do not use the platform, resulting in lower average GPAs.

The study revealed that students who frequently use Facebook and Twitter to communicate and share information with their friends often have less time for their studies. Similarly, Oberst (2010) pointed out that social media can lead to negative behaviors in students, such as procrastination, and can heighten the likelihood of using drugs and alcohol. Nonetheless, many students spend several hours each day on social media platforms like Facebook, Instagram, and Twitter. According to research by Mutua (2011), there are clear trends in how young people aged 7 to 24 in Kenya, Uganda, and Tanzania access and use the internet for communication and entertainment. The study found that 35% of the individuals surveyed in this region had internet access, with percentages of 49% in Kenya, 30% in Tanzania, and 26% in Uganda. This data is particularly important concerning the secondary school age group. Social media allows students to access music, video games, and videos, leading them to spend considerable time enjoying music and browsing online on their easily accessible mobile devices.

Social media serves a variety of purposes, including communication, fun, and work-related activities (Clemmitt, 2013). However, the increased use of social media has led to a range of effects, notably in finance, behavior, and personal mental well-being (Lenhart, 2018). As social media has a growing impact on several aspects of a person's life, it becomes increasingly important to conduct further research on its effects on mental health (Clemmitt, 2013). Despite the expanding research on the effects of social media on mental health, there remain significant drawbacks, especially in relation to the demographics studied. Many research efforts focus predominantly on younger individuals, particularly those in Generation Z (Cipolletta et al. , 2017; Hanna et al. , 2017). Various forms of social media have experienced a growth in user numbers (Clemmitt, 2013). Yet, as its popularity and use continue to grow, research indicates that

social media may negatively impact the mental health of individuals (McLean Hospital, 2020). The term social media generally refers to websites and apps that allow communication, interaction, content sharing, and collaboration. This definition covers numerous platforms, with social networking being a major aspect that involves using these sites to build and maintain interpersonal relationships. Platforms such as Facebook, Instagram, and Twitter have been created to meet different social media needs. These platforms are particularly important for this study due to their large global user bases: Facebook has 7. 6 billion monthly users, Instagram counts 1 billion users, and Twitter attracts 31 million users daily (Walton, 2022).

As social media has become more popular, earlier research has focused on understanding how it influences users. The findings indicate that social media could have an effect on users' mental health (Robinson & Smith, 2020). Many studies have concentrated on individuals aged 18 to 23, likely because this age group constitutes a large portion of social media users (Clemmitt, 2013). However, the effects of social media on those outside this age range remain poorly understood, resulting in limited broader conclusions for various age groups. Given the ongoing rise in social media use, it is important to examine its potential effects and lasting impact. This study aims to investigate the experiences of two distinct generations, Millennials (born 1981-1995) and Generation Z (born 1996-2012), as they engage with social media in different ways and to analyze the variances in their experiences. Since its creation, social media has evolved into a dynamic and ever-expanding trend (Clemmitt, 2013). Originally developed to improve social interaction, creators have aimed to attract more users by incorporating various types of media (Clemmitt, 2013). It has become one of the most interesting and accessible ways to connect and communicate with others.

Depression is a condition that affects mental health, marked by a long-lasting feeling of sadness or reduced interest in activities. This can cause major issues in daily living. It might happen as one episode or several different times. People with depression may experience tiredness, a lack of interest, being easily annoyed, a drop in appetite, and, in extreme situations, thoughts of suicide. The impact of depression differs greatly from person to person, with some experiencing mild effects while others face severe challenges (MedlinePlus Medical Encyclopedia, 2020).

Effect of Social Media on Mental Health

Research shows that using social media is connected to various mental health problems, including anxiety, depression, low self-esteem, and overall poor well-being (Ashford, 2017; Hardy & Castonguay, 2018; Hussain & Griffiths, 2018). These findings reveal that the kinds of content and the interactions that occur on social media have a direct influence on mental health and overall wellness. While young individuals are particularly at risk, adults also face serious mental health challenges related to social media usage. Ashford (2017) found that social media can lead to feelings of loneliness, insecurity, jealousy, and increased depression. When people compare their lives to the posts of others, they might create distorted views, which can result in sadness and low mood (Ashford, 2017). For example, individuals might judge their own worth by the number of likes and followers others receive, feel excluded from events, or compare their everyday lives to others' perfect images. Consequently, social media can have a substantial effect on vulnerable groups, like those already struggling with mental health issues, potentially making their conditions worse.

Brailovskaia et al. (2020) conducted a study on how social media influences the mental health of German students using surveys. They found that Twitter is linked to higher levels of anxiety, depression, and stress. They suggested this might be because Twitter is less interactive than other platforms, which could limit its benefits for mental health. However, another long-term study found that people with little face-to-face social support who used Twitter experienced fewer signs of depression (Cole et al., 2018). This study indicated that Twitter provides a way to connect with others and receive online support, which can be helpful. Positive interactions on Twitter were related to lower depression symptoms (Cole et al., 2018).

METHODS AND PROCEDURES

Research Design

Creswell and Creswell (2017) explain that quantitative research is mainly divided into two types: intervention research and non-intervention research. Intervention research includes experimental designs, while non-intervention research covers survey and correlational designs. This study focused on correlational research, which is a part of quantitative research. Correlational designs aim to link variables so that one can predict the outcomes of another. The research involved only university students and looked at factors like social media and mental health. The objective was to investigate how social media affects students' mental health. The study was quantitative, correlational, and non-experimental.

Population and Sampling Procedure

In Pakistan, there are different types of universities, which include professional educational institutions that offer professional training to students to acquire the necessary skills and knowledge in their field of study. Moreover, there are general universities in Pakistan that offer a wide variety of courses since all government and private sector educational institutions are classified under universities by the Higher Education Commission (Government of Pakistan, Higher Education Commission, 2010). In Punjab province, there are thirty-two general universities. As such, the general population of this study comprises all university students studying in these general universities. The population was used to select the study's sample at random (Siddique et al., 2021; Siddique et al., 2023). The sample was taken from University of Okara in Punjab, Pakistan. This study used a two-stage sampling technique to select the sample. In the first stage, 4 departments were randomly selected from the University of Okara which comprised 2 departments from the social sciences and 2 departments from natural sciences. In stage two, all students from the randomly selected departments were taken into account for the sample. There are about six hundred students in the departments selected for the study (social sciences and natural sciences). Half of them were selected, approximately 300 students from the University of Okara.

Data Collection Methods

Data were collected using an adapted Bergen Social Media Addiction Scale (BSMAS) completed by students. The BSMAS assesses the amount of time and frequency of use on Twitter, Facebook, and Instagram. It consists of six self-report items using a 5-point Likert scale and is adapted from the Bergen Facebook Addiction Scale (Andreassen, Pallesen, & Griffiths, 2017). Another questionnaire with a 5-point Likert scale assessed students' mental health. The study involved distributing two survey questionnaires to university students. The data collection process commenced after participants received a clear understanding of the researcher's identity and objectives, research objectives, explanations about the survey's benefits and any risks, and assurance of confidentiality and anonymity. Before starting the experiment, each participant's written consent was obtained. Finally, the researcher obtained written approval from the university authorities. A total of 300 students participated in the study. After receiving their written consent, the researcher provided each student with a self-administered questionnaire containing all relevant study information, including their personal information and consent.

DATA ANALYSIS

The relationship between university students' mental health and their use of social media was investigated using inferential statistics such as the Pearson correlation coefficient (Pearson r). The effect of social media

on students' mental health was evaluated using a linear regression analysis. Moreover demographic traits like gender were examined using an independent sample t-test.

Analysis and Interpretation of Data

Table 1

Correlation between Social Media and Students' Mental Health

Variables	*N*	*r*-value	*Sig.*
Social Media	300	.861**	.000
and Students' Mental Health			

** *p* < .001 (2-tailed)

Table 1 illustrates the relationship between social media usage and students' mental health. The findings indicate a significant positive correlation, with a Pearson correlation coefficient of *r* = .861**, derived from a sample of 300 participants and a significance level of p < .001.

Table 2

Effect of Social Media on Students' Mental Health

Variables	*B*	*t*-value	*Sig.*	Model *R* Square
Social Media and Students' Mental Health	.861	29.16	.001	.740

Table 2 presents the findings of the linear regression analysis, revealing an R^2 value of .740. This indicates that 74.0% of the variance in students' mental health is explained by social media use. The beta coefficient is .861, which is statistically significant at *p* = .001. These results underscore a strong and significant relationship between social media use and students' mental health, with a *β* value of .861 and a significance level of *p* = .001.

Table 3

Gender Wise Comparison in Social Media and Students' Mental Health

Variables	Gender	*N*	*M*	*SD*	*t*	*df*	*P*
Social Media &	Male	107	137.07	17.50	2.20	262.04	.000
	Female	193	131.96	22.00			
Students' Mental Health	Male	107	71.19	9.46	2.97	257.46	.000
	Female	193	67.51	11.60			

Table 3 provides a comparison of the mean scores for social media usage and students' mental health across genders using an independent samples t-test. The findings indicated a statistically significant difference between the genders, with p = .05.

DISCUSSION

This study's results are consistent with previous research that highlights the negative effects of increased social media use on mental health (Ashford, 2017; Hardy & Castonguay, 2018; Hussain & Griffiths, 2018). Specifically, the findings indicate that mental health issues like anxiety, depression, and low self-esteem are associated with heavy social media use. These findings align with those in the recent literature (Ashford, 2017; Hardy & Castonguay, 2018; Hussain & Griffiths, 2018). According to earlier research, social media use may help people from different backgrounds connect with others who share their needs or backgrounds and face fewer barriers to mental health care (Andrews et al., 2018; Henderson et al., 2013; Naslund & Riefer, 2018; Naslund et al., 2017; Grove, 2019; Lattie et al., 2019). This study found that mental health professionals believe social media can improve mental health by fostering connections for people who might otherwise find it difficult to interact with others and by enhancing social support, even though it did not directly link participant responses to increased access to mental health care.

CONCLUSION

The purpose of the study was to investigate the impact of social media on university students' mental health. This study used a positivist paradigm, which is quantitative and non-experimental. For the investigation, a correlation research framework was used. A representative sample of 300 students was selected using a two-step random sampling technique, and the participants were all enrolled students at the University of Okara. Two research tools were used to gather the data, and descriptive and inferential statistics like linear regression, the independent sample t-test, and the Pearson correlation coefficient were used for analysis. The findings demonstrated a strong and noteworthy positive relationship between students' mental health and social media use. Additionally, notable differences between male and female students were found in their use of social media and mental health outcomes. The study confirmed that social media has a significant effect on college students' mental health. These results provide verifiable evidence of social media's impact on students' mental health and could lead educational leaders to view emotional intelligence as a critical component of both academic achievement and general well-being.

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