

Investigation of the Psychological Effects of Social Media Use Among Students in Minnesota, United State America

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ABSTRACT: *The study looked into the psychological effects of social media use among students in Minnesota, USA. Specifically, the study assessed the various psychological effects of social media on students in Minnesota and the United States of America. It investigated the impact of social media use on the psychological well-being of students in Minnesota, United States of America. The study adopted a descriptive survey research design. The sample for the study consisted of two hundred (200) students that were randomly selected using a simple random sampling technique. One research instrument tagged "Psychological Effects of Social Media Questionnaire" (PESMQ) was used to collect data for the study. The data collected were analysed using frequency counts and simple percentage analyses of covariance (ANCOVA). According to the study's findings, the psychological effects of social media use among students in Minnesota, United States of America include depression, stress, anxiety, emotional isolation, low self-esteem, memory loss, and self-harm. ca. The study's findings also revealed that the use of social media had a significant impact on the psychological well-being of students in Minnesota, United States of America. The study concluded that depression, stress, anxiety, emotional isolation, low self-esteem, memory loss, and self-harm are the psychological effects of social media use among students and that there is a significant effect of the use of social media on the psychological well-being of the students in Minnesota, United States of America.*

KEYWORDS: social media, students, use, online, psychological, effects, communication

INTRODUCTION

Over the years, social media has flooded most areas of our society. For youth, social media plays a particularly large part in their lives, as indicated by their extensive use of several social media platforms (Ofcom, 2018). Individuals use social media for many reasons, including entertainment, communication, and searching for information. Remarkably, youth and adults spend more time using online networking sites, e-games, texting, and other social media (Twenge and Campbell,

2019). Some authors (Dhir et al., 2018; Tateno et al., 2019) have suggested that social media has altered the forms of group interaction and its users' individual and collective behaviour worldwide. In addition, the use of social media and the types of platforms offered have increased at such a rapid pace that there is reason to believe that scientific knowledge about social media in relation to youth's health and well-being is scattered and incomplete (Orben, 2020).

Nevertheless, research findings have shown the potential negative effects of social media on mental health and well-being are frequently reported in traditional media (newspapers, radio, and TV) (Bell et al., 2015). Twenge and Campbell (2019) submitted that the use of social media has a negative impact on well-being, while Orben and Przybylski (2019) argued that the association between digital technology use and adolescent well-being is so small that it is more or less inconsequential. According to the World Health Organization (2017), people who have been using the internet for a long time have been shielded from dangers, and they are also concerned about a country's future issues. Pater and Mynatt (2017) depicted that social media causes hostile and unsafe conduct in this manner, which is harmful to the emotional well-being of a person, particularly for youngsters. The impact of internet-based life depends upon its use by an individual who utilises too much social media as well as whatever can be harmful to him. Parmar (2017) expressed that in the 21st century, youth have been investing their energy in various social contraptions, spending a normal 12–15 hours per day on stimulation media, including telephones, PCs, workstations, and TVs, among other gadgets. With the assistance of these gadgets, they use WhatsApp, YouTube, Facebook, Instagram, Twitter, and some others. (Olola, 2022).

Similarly, the number of online life clients has been steadily increasing, posing a genuine health risk to the psychological well-being of youth. Dangerous online life use was unequivocally and openly linked to increased depression side effects (Shensa et al. 2017). Thornicroft et al. (2016) proposed that online networking is important for children's lives because it has an incredible connection to people groups' emotional well-being, however, some speculative portrayal thought it as an extraordinary danger and perilous for human psychological wellness, also youth use social networking sites for digital harassing, similar to ridicule others, mimicry, and so on, as a result others lose their trust. It has small positive effects on online networking among the younger generation.

Miller et al. (2016) demonstrated that internet-based life alters the method for correspondence and socialisation while also preserving companionship. While becoming a development group has its advantages, on the other hand, investing their energy in society is hazardous to their emotional health. According to Len-Ros et al. (2016), social media is frequently used for long-term interpersonal communication bookkeeping, which is a serious risk for youth or adolescents because regular use of person-to-person communication bookkeeping can impact emotional wellness.

Patel et al. (2016) pointed out that online networking is creating problems like uneasiness, sorrow, and dietary issues. Furthermore, the use of social media has become an increasingly difficult issue

for young people, as more of them invest their energy looking over social media applications and receive nothing in return, posing a significant risk to young people's mental health. It has been discovered that excessive use of social networking systems can cause increased misery, anxiety, pain, depression, and dissatisfaction with life, thus deteriorating psychological well-being (Woods and Scott, 2016). Social media use has been linked to increased depression (Lin et al., 2016). Unlike previous explanations, Townsend et al. (2016) considered how social media becomes a barrier to meeting people and that people typically live alone when they converse with others; as a result, their proclivity to live alone is an indication of stress, sadness, and self-deduction. As a result, research into the psychological effects of social media use among students in Minnesota, United States of America, is required.

Statement of Problem

Social media plays an important role in everyone's life because it's a source of entertainment, information, and so forth. Despite social media's critical role in society, students abuse it in one way or another, resulting in physical and mental health consequences. Hence, the need to investigate the psychological effects of social media use among students in Minnesota, United States of America, becomes imperative.

Research Question

What are the psychological effects of social media use among students in Minnesota, United State of America?

Hypothesis

There is no significant effect of the use of social media on the psychological being of the students in Minnesota, United State of America.

LITERATURE REVIEW

Social Media Engagement Theory

Social media engagement (SME) theory accounts for the role of technology as the underlying platform needed to facilitate social interactions among users that are globally and temporally distributed. Clearly, the rise of social media comes in large part from the evolution of technology to provide a unique user experience that enables users to connect in new ways that were never before possible. The central premise of SME theory is that higher user engagement leads to greater usage of the social media platform. Usage is defined as the frequency of a user's contribution, retrieval, and/or exploration of content within a social media site (Kankanhalli, Tan, & Wei, 2005; Li & Bernoff, 2008). The more *frequently* users take part in a variety of activities, the more valuable the social media platform becomes to the organisation and fellow users, resulting in the co-creation of value (Kankanhalli et al., 2005; Li & Bernoff, 2008). As such, the Social Media Engagement (SME) theory is considered good for studying the psychological effects of social media use among students in the study area.

Concept of social media

Since the inception of this technology, social media has been defined in a different context. It is difficult to provide a single definition incorporating all the technology and practises related to social media, partly because the technology is not limited by any specific scope, format, topic, audience, or source. (Treem et al., 2016). Appel et al. (2020) described social media as a technology-based system that is not entirely technological and in which a variety of interconnected actors, including individuals, businesses, organizations, and institutions, can engage in a variety of complex and varied behaviors, interactions, and exchanges. In addition, Kaplan and Haenlein (2010) defined social media as "a group of Internet-based applications that builds on the ideological and technological foundations of Web 2.0 and allows the creation and exchange of user-generated content." In terms of marketing, Cheung et al. (2020) described social media as a web tool used to create content tailored for each social media platform to increase interaction and advance business.

As a result, social media can be defined in terms other than online communication, such as marketing, politics, education, health, and essential human interaction (Bashir & Bhat, 2016). Building on these preexisting definitions and the concept to which this literature is tilted, we define social media as software-based digital technologies that typically take the shape of applications and websites and provide users the ability to communicate and receive digital content, including images, texts, videos, and other types of media content. A few examples of these apps are Facebook, Instagram, Twitter, Snapchat, and Tiktok. Snapchat's social media app is one of the most popular online activities, with approximately 4.6 billion people using the various platforms in 2022 and a worldwide consumption time of 147 minutes per day. Also, 2 million Snapchat messages are sent per minute (Statista, 2022).

Psychological Effects and Usage of social media

Psychosocial behaviour is seen as the response or reaction of how an individual behaves and develops his or her relationship in the school environment or anywhere the person finds himself or herself as a result of the use of mobile phones, iPads, tablets, laptops, and other internet services. Reasonable attention has been given to the negative side of social networking sites, such as cyberbullying, parent-child interactions, internet addiction, and the influence of social media use on sleep disturbance and academic performance. Suhail and Bargees (2006) conducted a study on the effect of social networking in Pakistan using the Internet Effect Scale (IES) to determine the effect of some factors, specifically those that include behavioural issues, educational problems, internet abuse, interpersonal problems, and psychological issues, as well as their consequences. The result of the studies showed that social media networking has both positive and negative advantages for its users. The connectivism between spare times spent on the internet showed tremendous impact; the time spent on the internet has affected students' interpersonal, academic, psychological, and physical factors. Also, it is recommended that the use of the internet may perhaps be used to enhance academic performance among students.

Most adolescents come across different levels of negative experiences through SNSs, and the ferocity of online bullying is exacerbated. Some adolescents may be more exposed to develop at-risk indicators of internet addiction than others, while others may be experiencing other psychological symptoms and syndromes such as depression, ADHD symptoms, or aggression (Shapiro & Margolin, 2014). Akhtar (2013) revealed that immoderate usage of the internet can result in addiction among students, which could lead to poor academic attainment. The author opined that internet addiction can cause a reduction in time spent on studies, a fundamental drop in grades, low interest in extracurricular activities, and a loss of interest in lessons. Furthermore, Internet addiction among adolescents has been related to psychological and intellectual problems, which include anxiety, despair, and loneliness. As a result, other studies on social media networking have shown excellent academic interaction and supported net usage among students. However, the negative impact of social media has outweighed its tremendous aspects. Thus, excessive utilisation of social media has shown a negative effect on students' physical, psychological, as well as family fitness. Furthermore, excessive use has been linked to sleep deprivation, insomnia, and chronic illnesses (O'keeffe and Pearson, 2011). Social media platforms provide students with new opportunities and challenges to express their individual worth to the world (their likes and dislikes) and receive immediate feedback. Most of the students express their views to both known and unknown recipients. They widely share their views with varying degrees of accuracy, honesty, and openness that were previously private or reserved for selected individuals. Students can also join internet or social groups reflecting aspects of their personalities they wish to discover or develop (Kolek & Saunders, 2008).

With respect to psychosocial development, the use of social media has influenced matters such as individuality formation and social skill advancement. There are positive aspects of social media use among students, and there are also many negative effects concerning the use of such gadgets. Since their introduction, social networking sites have drawn the attention of many adolescents and university students, as observed by Lenhart and Madden (2007). The manner in which these sites are paving their way through the educational setting cannot be overemphasised, hence the belief that these sites have even more potential for the improvement of teaching, learning, and sharing of information among learners and educators (Ferdig, 2007).

Generally, students are sent to school to learn but are exposed to numerous experiences that impact their behavior. One of the goals of education is to influence behaviour in a desirable direction, so that one behaves in accordance with society's accepted values and norms. Thus, learning is a behavioural change that manifests in cognitive reasoning, physical development, manipulative skills, and growth in values and interests. All these changes depend on individual differences, the home background, and the school setting. According to Oluwatoyin (2011), educators view social media as encouraging negative traditional literacy abilities (writing, grammar, vocabulary), which will be largely disruptive to learners' reading skills required in the school environment.

METHOD

The study adopted a descriptive survey research design. A descriptive survey aims at describing the distribution of a phenomenon in a population and thereby establishing the facts. The study population comprised students in Minnesota and the United States of America. The sample for the study consisted of two hundred (200) students that were randomly selected using a simple random sampling technique. One research instrument tagged "Psychological Effects of Social Media Questionnaire" (PESMQ) was used to collect data for the study. The instrument has three sections. Section A contained items on the socio-demographic information of the respondents; Section B contained seven items on the various psychological effects of social media used by the respondents based on a Likert scale of "strongly agree," "agree," "disagree," and "strongly disagree"; and Section C contained seven items on the usage of social media by the respondents based on a projective rating scale of "always," "sometimes," and "never." The questionnaires were administered to the respondents and later retrieved from them for data analysis. The data collected were analysed using frequency counts, simple percentages, and analysis of covariance (ANCOVA).

Purpose of the Study

The primary goal of the study is to look into the psychological effects of social media use among students in Minnesota, United States of America. Specifically, the study's objective is to assess the various psychological effects of social media on students in Minnesota, United States of America, and examine the effect of the use of social media on the psychological well-being of the students in Minnesota, United States of America.

Significance of the Study

The study would provide practical information on the various psychological effects of social media and their effects on the psychological well-being of students in Minnesota, USA. The study will help parents and guardians ensure that their wards are appropriately monitored as far as the use of social media is concerned. The study's findings would help to expand the frontiers of knowledge and serve as a catalyst for future research.

Analysis**Table 1:** Descriptive analysis of socio-demographic information of the respondents in Minnesota, United State of America

S/N	Variables	Frequency (f)	Percentage (%)
1.	Gender		
	Male	91	45.5
	Female	109	54.5
2.	Age Bracket		
	10-12 years	48	24.0
	13-15 years	72	36.0
	16-19 years	80	40.0

N = 200

Results in Table 1 showed the descriptive analysis of socio-demographic information of the respondents in Minnesota, United State of America. Considering gender, it can be gathered from the Table that 45.5% of the respondents are males while 54.5% are females. In the same light, 24.0%, 36.0%, and 40.0% are in the age brackets of 10-12 years, 13-15 years, and above 16-19 years respectively in the study area.

Research Question: What are the psychological effects of social media use among students in Minnesota, United State of America?

Data collected on the various psychological effects of the use of social media were subjected to descriptive analysis of frequency and percentage to answer this research question. The results are presented in Table 2.

Table 2: Descriptive analysis of the various psychological effects of social media use among students in Minnesota, United State of America

S/N	Items	Frequency (f)	Percentage (%)
1.	Depression	174	87.0
2.	Stress	169	84.5
3.	Anxiety	155	77.5
4.	Emotional isolation	170	85.0
5.	Low self-esteem	145	72.5
6.	Memory loss	140	70.0
7.	Self-harm	142	71.0

N = 200

Results in Table 2 showed the descriptive analysis of psychological effects of social media use among students in Minnesota, United State of America. It can be deduced from the Table that 87.0%, 84.5%, 77.5%, 85.0%, 72.5%, 70.0% and 71.0% of the students submitted that depression, stress, anxiety, emotional isolation, low self-esteem, memory loss and self-harm respectively are

the psychological effects of social media use among students in Minnesota, United State of America.

Hypothesis

There is no significant effect of the use of social media on the psychological being of the students in Minnesota, United State of America.

In order to test for this hypothesis, data collected on the psychological effects and the use of social media among students were subjected to analysis of covariance (ANCOVA). The result is presented in Table 3.

Table 3: Analysis of covariance (ANCOVA) of the effect of the use of social media on the psychological being of the students in Minnesota, United State of America

Tests of Between-Subjects Effects

Dependent Variable: P*E

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	31.757 ^a	16	1.985	.720	.027	.590
Intercept	10676.328	1	10676.328	3870.969	.000	.955
S*M	31.757	16	1.985	.720	.027	.590
Error	504.723	183	2.758			
Total	23606.000	200				
Corrected Total	536.480	199				

R Squared = .059 (Adjusted R Squared = -.023)

(F = 0.720; p < 0.05)

Results in Table 3 showed that there was significant effect of the use of social media on the psychological being of the students in Minnesota, United State of America (F = 0.720; p < 0.05). Hence, the null hypothesis that states that there is no significant effect of the use of social media on the psychological being of the students in Minnesota, United State of America is hereby rejected. The partial eta squared value of 0.590 actually accounted for 59.0% effect size of the use of social media on the psychological being of the students in Minnesota, United State of America.

DISCUSSION

According to the study's findings, the psychological effects of social media use among students in Minnesota, United States of America include depression, stress, anxiety, emotional isolation, low self-esteem, memory loss, and self-harm. The results corroborate the findings of Deepa and Priya (2020), who carried out a study on the impact of social media on the mental health of students. They found out that depression, stress, emotional isolation, and anxiety are the psychological effects of the use of social media among learners in the study area. The study's findings also revealed that the use of social media had a significant impact on the psychological well-being of

students in Minnesota, United States of America. The findings are consistent with those of Talatu and Murja (2018), who investigated the impact of social media on secondary school students' psychosocial behaviour and academic performance. It was conducted in Batagarawa Local Government, Katsina State, Nigeria. According to the study's findings, social media use has a negative impact on psychosocial behaviour and academic performance.

CONCLUSION

The study concluded that depression, stress, anxiety, emotional isolation, low self-esteem, memory loss, and self-harm are the psychological effects of social media use among students and that there is a significant effect of the use of social media on the psychological well-being of the students in Minnesota, United States of America.

Recommendations

Based on the findings of the study, the following recommendations were raised.

1. Parents and guardians should pay more attention to their wards' usage of mobile phones, and other internet services to ensure proper as well as positive utilization.
2. Students should be properly guided, and informed on the negative influence of social mediasites so that they mostly use them for academic progress in other to minimize the negativeaspects.
3. Guardians, educators and policymakers need to educate students on effective usage and time management, thereby placing a check on students' activities both in the school and at home, in other not to spend valuable time on irrelevant activities while using the social media.
4. The school authorities should have a strict rule on the use of handheld devices during school hours. Students should be taught the importance of using educative websites instead of entertainment sites, and to explore the best practices of social media sites rather than the negative side of it.
5. Educational psychologists should get the students informed and warned about pornography, sexing, cyber-bullying, fraud, online theft so as not to fall victims or commit cyber-crimes and to overcome identity crises.

References

- Akhtar, N. (2013). Relationship between internet addiction and academic performance among university undergraduates. *Educational Research and Reviews*. 8(19), 1793-1796.
- Appel, H., Gerlach, A. L., and Crusius, J. (2020). The interplay between Facebookuse, social comparison,envy, and depression. *Curr. Opin. Psychol.* 9, 44–49.doi: 10.1016/j.copsyc.2015.10.006
- Bell, V., Bishop, D. V., and Przybylski, A. K. (2015). The debate over digitaltechnology and young people. *BMJ* 351:h3064. doi: 10.1136/bmj.h3064
- Deepa, M. & Priya, V. K. (2020). Impact of social media on mental health of students. *International Journal of Scientific and Technology Research*. Vol. 9 (3).

- Dhir, A., Yossatorn, Y., Kaur, P., and Chen, S. (2018). Online social media fatigue and psychological wellbeing—a study of compulsive use, fear of missing out, fatigue, anxiety and depression. *Int. J. Inf. Manag.* 40, 141–152. doi: 10.1016/j.ijinfomgt.2018.01.012
- Ferdig, R. (2007). *Editorial: examining social software in teacher education. Journal of Technology and Teacher Education*, 15(1), 5-10.
- Kaplan, A. M., and Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Bus. Horiz.* 53, 59–68. doi: 10.1016/j.bushor.2009.09.003
- Kolek, E. A., & Saunders, D. (2008). Online disclosure: An empirical examination of undergraduate facebook profiles. *NASPA Journal*, 45(1), 1-5.
- Lenhart, A., & Madden, M. (2007). *Social networking websites and teens: An overview. Pew Internet and American Life Project Report*. Retrieved from [Online]: http://www.pewinternet.org/PPF/r/198/report_display.asp
- Len-Ríos, M.E., Hughes, H.E., McKee, L.G. and Young, H.N., (2016). Early adolescents as publics: A national survey of teens with social media accounts, their media use preferences, parental mediation, and perceived Internet literacy. *Public Relations Review*, 42(1), pp. 101-108.
- Miller. et.al. (2016). *How the world changed social media*. UCL Press (p. 286).
- Ofcom (2018). *Children and Parents: Media Use and Attitudes Report*. Warrington: Ofcom.
- O’Keeffe, G. S. & Pearson, K. C. (2011). The impact of social media on children, adolescents and families. *American Academy of Paediatrics*, 127(4) 45-52.
- Oluwatoyin, A. E. (2011). *ICT, CGPA: Consequences of social networks in an internet driven learning society*. Retrieved from *International Journal of Computer Trends & Technology*: 2(2) 9-14: <http://www.internationaljournals/srg.org>
- Orben, A. (2020). Teenagers, screens and social media: a narrative review of reviews and key studies. *J. Soc. Psychiatry Psychiatr. Epidemiol.* 55, 407–414. doi: 10.1007/s00127-019-01825-4
- Olola, T. M. (2022). *Social Media Use among Adolescents in North Dakota, USA*. Budapest International Research and Critics Institute Journal. Vol. 5(4), pp. 30654-30660
- Orben, A., and Przybylski, A. K. (2019). The association between adolescent wellbeing and digital technology use. *Nat. Hum. Behav.* 3, 173–182. doi: 10.1038/s41562-018-0506-1
- Pater, J. and Mynatt, E.D., (2017). *Defining Digital Self-Harm*. In CSCW, ISBN: 978-1-4503-4335-0 (pp. 1501-1513).
- Shensa, A., Escobar-Viera, C.G., Sidani, J.E., Bowman, N.D., Marshal, M.P. and Primack, B. A. (2017), “Problematic social media use and depressive symptoms among US young adults: a nationally representative study”, *Social Science & Medicine*, 182, 150-157.
- Shapiro, A. L. & Margolin, G. (2014). *Growing up wired: Social networking sites and adolescent psychosocial development*. Retrieved from *Clin Child Psychol Rev.* 17(1)_18: doi: 10.1007/s10567-013-0135-1
- Suhail, K. & Bargees, Z. (2006). Effects of Excessive Internet Use on Undergraduate Students in Pakistan. *Cyber Psychology and Behaviour*, 9 (3). 139-152

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- Talatu, I. U. & Murja, I. (2018). Influence of social media on psychological behaviour and academic performance of secondary school students. *Journal of Education and Entrepreneurship*. Vol 5 (2), 36 -46.
- Thornicroft. et al., (2016). Evidence for effective interventions to reduce mental-health-related stigma and discrimination. *The Lancet*, 387(10023), pp.1123-1132.
- Townsend, L. et.al.(2016). Building virtual bridges: How rural Micro-Enterprises develop social capital in online and Face-to-Face settings. 56(1), pp.29-47.
- Tateno, M., Teo, A. R., Ukai, W., Kanazawa, J., Katsuki, R., Kubo, H., et al. (2019). Internet addiction, smartphone addiction, and hikikomori trait in Japanese young adult: social isolation and social network. *Front. Psychiatry* 10:455. doi: 10.3389/fpsyt.2019.00455
- Twenge, J. M., and Campbell, W. K. (2019). Media use is linked to lower psychological well-being: evidence from three datasets. *Psychiatr. Q.* 90, 311–331. doi: 10.1007/s11126-019-09630-7
- Woods, H. C., and Scott, H. (2016). Sleepy teens: social media use in adolescence is associated with poor sleep quality, anxiety, depression and low self-esteem. *J. Adolesc.* 51, 41–49. doi: 10.1016/j.adolescence.2016.05.008