Exploring the Relationship between Social Media influence and Prevalence of Depressive Symptoms among Undergraduate University Students in Lahore

Sidra Khalid

M.Phil Scholar, Department of Arts And Humanities, Superior University Lahore. Email: sidrakhalid470@gmail.com

Dr. Ismat Bano

Assistant professor Department of Arts and Humanities, Superior University Lahore. Email: ismatnawaz496@gmail.com

Received on: 05-04-2024 Accepted on: 08-05-2024

Abstract

The present study was intended to investigate the impact of social media on the incidence of depression among undergraduate students. The study was crosssectional quantitative. The population of the research comprised of undergraduate students at district Lahore universities. The population of this research included all boys and girls of undergraduate study. The study's sample consisted of 110 undergraduate students enrolled in Lahore universities, with an equal number of male and female students. Descriptive statistics including frequencies, percentages, means and standard deviations were applied to examine the information. The study's findings revealed that most participants display attitudes and behaviors that point to a high level of social media dependency. Interpersonal disputes have resulted from this dependency, as the majority of participants reported disagreements stemming from their use of social media. Furthermore, a lot of people stop what they're doing to check social media, which emphasizes how invasive it is. Overall, the participants' positive perspective was evident as they disagreed with emotions of futility and failure in life, thought that their quality of life was comparable to others', and voiced hope for the future. But a lot of participants also mentioned feeling depressed and having less social connection, which brings up some serious issues that need to be addressed. These results imply that although participants have significant mental health issues, they also have a lot of coping strategies and optimism. It is recommended to develop and implement educational programs within teacher training institutions to raise awareness about the potential consequences of smart phone addiction on life satisfaction. It may also be recommended to encourage deliberate and thoughtful use of social media and to raise public awareness of the detrimental effects of excessive use. Reducing reliance can be facilitated by creating self-regulation techniques and offering resources for tracking and restricting consumption. The intrusive nature of social media can be lessened by promoting frequent digital detoxification sessions. To further improve mental well-being,

resilience-building programs should be strengthened and good coping techniques should be encouraged. It's crucial to teach parents and offer counsel on good social media practices for young users.

Keywords: Depression, social media, comparable, undergraduate

Introduction

Social media plays a big role in everyday life in the modern world and will always do so. Thus, academics are now keeping an eye on this hugely popular topic. Adolescents and emerging adults are favored largely because they are more accustomed to technology and social media and consider it an essential part of their everyday lives (Chern & Huang, 2018; Primack et al., 2017). While research on social media's psychological effects is ongoing, there may be connections to depression, anxiety, and low self-esteem. In addition, several problems linked to compulsive Internet and social media use are impacting young people who were growing up when social media first emerged. Studies evaluating social media's impact on psychological health are still in their infancy and lack clarity because social media usage is a relatively recent phenomenon (Farah and Yanda, 2015). Emerging adults frequently struggle with social anxiety, which can be especially harmful because of the social contacts necessary for navigating the transitional challenges they will face. It is suggested that a study be conducted to ascertain whether social media use among youngsters and social anxiety are positively correlated.

In today's world, social media is omnipresent and has revolutionized interpersonal communication. Social media has grown rapidly over the past 20 years, encompassing various websites and applications that users of all ages worldwide utilize. Depression typically manifests during adolescence and early adulthood, and it is adversely related to social and health issues (Ewing et al., 2015). Even though depression is common, many university students who experience it go undetected because they do not feel the need for support or seek out therapeutic services (Moreno et al., 2011). Because of this, a large number of students struggle with depression and are oblivious to their need for support, which can lead to tragedies that could have been prevented. Young adults frequently use social media, and since social media use and depressive symptoms may be related, it could be helpful for the public to understand this relationship and take the appropriate precautions when using social media to avoid developing depression.

Objectives of the Study

- 1. To assess the extent of social media usage among undergraduate university students in Lahore.
- 2. To analyze the correlation between social media usage patterns and the prevalence of depressive symptoms.
- 3. To analyze the correlation between social media usage patterns and the prevalence of depressive symptoms.
- 4. To identify potential mitigating factors that could counteract the negative impact of social media on mental health.

Hypotheses of the Study

1. Higher levels of social media usage, including increased time spent on platforms and

frequent engagement with social media content, will be positively correlated with a higher prevalence of depressive symptoms among university students.

- 2. The number of connections or followers on social media platforms will be negatively correlated with the prevalence of depressive symptoms, suggesting a potential protective effect of larger social networks.
- 3. The number of connections or followers on social media platforms will be negatively correlated with the prevalence of depressive symptoms, suggesting a potential protective effect of larger social networks.

Significance of the Study

This study is significant because it has the potential to clarify the intricate relationship between social media use and mental health, providing information that will benefit academics as well as legislators, educators, mental health specialists, and the general public. By empirically examining the prevalence of depressive symptoms among undergraduate students in Lahore and elucidating the role of social media influence, this research aims to contribute valuable knowledge to the field of mental health.

Delimitations of the Study

Due to time and research constraints, this study was limited to Lahore universities. The University of the Punjab, Government College University for Women, Superior University, and University of Lahore.

Literature Review

In recent years, the pervasive influence of social media on individuals' lives has become increasingly apparent, with its impact extending to various aspects of mental health. Among the most concerning consequences is the association between social media use and depressive symptoms, particularly among young adults, including undergraduate university students. This comprehensive literature review aims to synthesize existing research on the relationship between social media influence and the prevalence of depressive symptoms among undergraduate university students in Lahore, Pakistan. By exploring this topic in depth, we can gain insights into the unique challenges faced by students in this cultural context and identify potential avenues for intervention and support. Some studies have found a negative correlation between social media use and depressive symptoms. Lin et al. (2016) looked at the relationship between 1,787 young adults in the US who utilized social media and depressed symptoms in a correlational analysis. The age range of the participants was 19 to 32 years old, with 50.3% being female. A questionnaire assessing the participants' use of social media and symptoms of depression was answered by the subjects. The results show that people who visited social media sites regularly during the week and spent more hours on social media during the day were extensively more inclined to expertise depressive symptoms than people who didn't spend the same time on social media.

Primack et al. (2017) study examined the relationship between young adults' use of Facebook, Instagram, and Twitter and their complaints of anxiety and depression in the United States. The total number of participants in the study was 1,768 and they ranged in age from 19 to 32. According to the study's findings, people who self-reported experiencing more

symptoms of depression utilized more social media. Furthermore, people who used more social media platforms also reported having more anxiety symptoms. Social media has also been connected to an increase in depression (Norton, 2020). According to Bashir and Bhat (2017), excessive social media use can lead to anxiety, which in turn might induce depression. Numerous studies have discovered that, while the quality of the relationship matters, more social engagement on the Internet is associated with a higher risk of depression. Norton (2020) claims that extended periods spent on Twitter and Facebook can worsen depression; in a similar vein, depressed individuals tend to avoid social situations and spend more time online. According to research by Simsek et al. (2019), high school students frequently resort to social media for solace from the stress of university admission tests. This can result in social media addiction. Hou et al. (2019) found a negative link between academic achievement, mental health, and social media addiction in a related study. In a related study, Azizi et al. (2019) showed that students' excessive reliance on social media has a notable detrimental effect on their academic achievement in a cross-sectional study. It was also discovered that men were more likely than women to become internet addicts.

Moreover, certain signs of depression could be harmful to an individual's academic performance. It may be tough to attend or stay awake in class if you are tired or have sleep issues. Lack of interest and persistent melancholy might be obstacles to a student's ability to learn and perform well in their coursework. In 2010, Asdaque, Khan, and Rizvi conducted a study with one hundred undergraduate students from two Pakistani federal universities. Despite occurring in the same geographical area, the study looked at the impact of internet use on academic achievement and discovered a negative association between the two. Due to the social media networking websites not being named or emphasizing the times of day when they have the greatest usage, college students did badly. Because of the wealth of online information available, social media use has been proven to provide significant value in numerous studies examining its effects (Aligwe et al., 2017; Apuke, 2016; Fasae and Adegbilero-Iwari, 2016).

There is inconsistent evidence in the literature about how to link the use of social media and psychological consequences such as depression. The link is complex and may involve several psychological, social, behavioral, and individual components, as stated by Baker and Algorta (2016). Whether social media is beneficial or detrimental to mental health and well-being may depend on the level of social parameters in the social network site (SNS) environment (Seabrook et al., 2016). Cyberbullying and depression have been linked in studies on child and teenage populations (Hamm et al., 2015). Media utilization in a goal-directed manner for personal fulfillment and satisfaction bears similarities to addiction, as per the uses and gratification theory (Lin, 2016; Kuss & Griffiths, 2011). According to a study, people who used social media more frequently were more likely to experience depression. Addiction can be applied to any behavior—including social networking that meets these six criteria. According to Griffiths, addictive behavior is typified by six essential elements: recurrence, mood modulation, withdrawal symptoms, priority, tolerance, and conflict (Guedes et al., 2016).

Research Methodology Research Design

This study employs a cross-sectional quantitative research design. The quantitative method helps to get numerical findings which give more precise results, and these results can also be generalized because it covers a larger audience, unlike the qualitative method. A "research strategy to collect and analyze data in the form of numbers" is known as quantitative research (Daniel, 2016).

Population

This research was a survey study of undergraduate students at district Lahore universities. The population of this research included all boys and girls of undergraduate study.

Sample and Sampling Technique

This research focused on 110 undergraduate university students enrolled in Lahore universities, with an equal number of male and female students. A random sampling method was utilized to gather data from a diverse sample of students. Participants were recruited through online platforms and campus announcements.

Table. 1
Demographic Information of Students

| Universities | Samples | Gender |
|----------------------|---------|-------------|
| Government College | 32 | F=32 |
| University for | | |
| Women | | |
| University of the | 24 | M=12, F=12 |
| Punjab | | |
| Superior University | 30 | M=15, F=15 |
| University of Lahore | 24 | M=12, F=12 |
| Total | 110 | M=39, F= 71 |

Research Instrument

The data collection instrument; four point Likert scale questionnaire having 18 items was adopted by the Harvard School of PHQ9 tool for access to Social Media Use and Depression symptoms.

Analysis and Results

Table. 2
Descriptive Analysis of the Students' Responses of Problematic Social Media Use

| Items | Mean | Standard Deviation |
|---|------|-----------------------|
| I frequently think about it even when I'm not using social media. | 1.72 | 1.12 |
| I frequently utilize social media with no specific purpose. | 1.39 | .83 |
| Because of my social media usage, I've had disagreements with other people. | 3.30 | 1.07 |

Exploring the Relationship between Social Media influence and Prevalence of Depressive Symptoms among Undergraduate University Students in Lahore

| Whenever I want to check social media, I stop whatever else I'm doing. | 3.28 | 1.13 |
|--|------|------|
| Using social media makes me feel connected to other people. | 3.43 | .99 |
| I fail to monitor my usage of social media. | 3.60 | .81 |
| I get worried at the idea of not being able to use social media. | 1.80 | 1.17 |
| I've been unable to reduce my usage of social media. | 1.50 | .90 |

It was analyzed that most of the participants (80%) agreed and some participants (10%) disagreed regarding the statement: I frequently think about it even when I'm not using social media. The mean score (1.72) and Standard deviation (1.12) showed that the participants are in favor of the statement. Most of the participants (83.3%) agreed and some participants (10%) disagreed regarding the statement: I frequently utilize social media with no specific purpose. The mean score (1.39) and Standard deviation (.83) showed that the participants are in favor of the statement. Most of the participants (77.2%) agreed and some participants (14.5%) disagreed regarding the statement: Because of my social media usage, I've had disagreements with other people. The mean score (3.30) and Standard deviation (1.07) showed that the participants are in favor of the statement. Most of the participants (81.8%) agreed and some participants (12.7%) disagreed regarding the statement: Whenever I want to check social media, I stop whatever else I'm doing. The mean score (3.28) and Standard deviation (1.13) showed that the participants are in favor of the statement. Most of the participants (80%) agreed and some participants (6.3%) disagreed regarding the statement: Using social media makes me feel connected to other people. The mean score (3.43) and Standard deviation (.99) showed that the participants are in favor of the statement. Most of the participants (81.8%) agreed and some participants (6.36%) disagreed regarding the statement: I fail to monitor my usage of social media. The mean score (3.60) and Standard deviation (.81) showed that the participants are in favor of the statement. Most of the participants (80%) agreed and some participants (11.8%) disagreed regarding the statement: I get worried at the idea of not being able to use social media. The mean score (1.80) and Standard deviation (1.17) showed that the participants are in favor of the statement. Most of the participants (78.1%) agreed and some participants (10.9%) disagreed regarding the statement I've been unable to reduce my usage of social media. The mean score (1.50) and Standard deviation (.90) showed that the participants are in favor of the statement.

Table.3

Descriptive Analysis of the Students' Responses of Social Comparison

| Items | Mean | Standard Deviation |
|---|------|-----------------------|
| I frequently assess my life achievements by comparing them to those of others. | 1.53 | .92 |
| I attempt to find out what other people think about something if I want to learn more about it. | 1.41 | .86 |
| I'm constantly very aware of how my actions compare to those of others. | 3.31 | 1.11 |
| I frequently make comparisons between my loved ones' and others' lives. | 2.16 | .79 |
| I'm constantly curious about what other people might do in a comparable circumstance. | 2.11 | .72 |
| I don't compare myself to other people too much. | 3.25 | 1.11 |
| I evaluate my work by comparing it to that of others to determine how well I performed. | 2.22 | .73 |
| I frequently look to see what other people who deal with comparable issues to mine think. | 2.11 | .73 |
| I enjoy discussing shared experiences and perspectives with people. | 1.39 | .88 |
| I assess my life by comparing it with the lives of others. | 3.06 | 1.25 |
| I frequently compare my social performance such as my popularity or social skills with those of other people. | 1.81 | 1.09 |

It was analyzed that most of the participants (76.3%) agreed and some participants (12.7%) disagreed regarding the statement: I frequently assess my life achievements by comparing them to those of others. The mean score (1.53) and Standard deviation (.92) showed that the participants are in favor of the statement. Most of the participants (82.7%) agreed and some participants (14.5%) disagreed regarding the statement: I attempt to find out what other people think about something if I want to learn more about it. The mean score (1.41) and Standard deviation (.86) showed that the participants are in favor of the statement. Most of the participants (82.7%) disagreed and some participants (10%) agreed regarding the statement: I'm constantly very aware of how my actions compare to those of others. The mean score (3.31) and Standard deviation (1.11) showed that the participants were not in favor of the statement. Most of the participants (61.8%) disagreed and some participants (24.5%) agreed regarding the statement I frequently make comparisons between my loved ones' and others' lives. The mean score (2.16) and Standard deviation (.79) showed that the participants were not in favor of the statement. Most of the participants (68.1%) disagreed

and some participants (20.9%) agreed regarding the statement: I'm constantly curious about what other people might do in a comparable circumstance. The mean score (2.11) and Standard deviation (.73) showed that the participants were not in favor of the statement. Most of the participants (77.2%) agreed and some participants (16.3%) disagreed regarding the statement: I don't compare myself to other people too much.. The mean score (3.25) and Standard deviation (1.11) showed that the participants are in favor of the statement. Most of the participants (73.6%) disagreed and some participants (18.1%) agreed regarding the statement: I evaluate my work by comparing it to that of others to determine how well I performed. The mean score (2.22) and Standard deviation (.73) showed that the participants were not in favor of the statement. Most of the participants (71.8%) disagreed and some participants (21.8%) agreed regarding the statement: I frequently look to see what other people who deal with comparable issues to mine think. The mean score (2.11) and Standard deviation (.73) showed that the participants were not in favor of the statement. Most of the participants (88.1%) agreed and some participants (6.36%) disagreed regarding the statement: I enjoy discussing shared experiences and perspectives with people. The mean score (1.39) and Standard deviation (.88) showed that the participants are in favor of the statement. Most of the participants (81.8%) agreed and some participants (15.4%) disagreed regarding the statement: I assess my life by comparing it with the lives of others. The mean score (3.06) and Standard deviation (1.25) showed that the participants are in favor of the statement. Most of the participants (70.9%) agreed and some participants (13.6%) disagreed regarding the statement: I frequently compare my social performance such as my popularity or social skills with those of other people. The mean score (1.80) and Standard deviation (1.09) showed that the participants are in favor of the statement.

Table.4

Descriptive Analysis of the Students' Responses of Depressive Symptoms

| Items | Mean | Standard Deviation |
|--|------|-----------------------|
| Things that normally don't annoy me troubled me. | 2.49 | 1.24 |
| I had a weak appetite and did not feel like eating. | 1.51 | .89 |
| I believed that even with support from my friends and family, I was unable to overcome my sadness. | 2.08 | .59 |
| I thought my quality was on balance with that of others. | 3.24 | 1.07 |
| I found it difficult to focus on what I was doing. | 1.39 | .77 |
| I was depressed. | 3.48 | .84 |
| I thought that all I did was attempt. | 1.99 | .53 |

Exploring the Relationship between Social Media influence and Prevalence of Depressive Symptoms among Undergraduate University Students in Lahore

| I am hopeful for future. | 1.37 | .88. |
|---|------|------|
| I believed that my life had been in failure | 2.16 | .92 |
| I didn't talk as much as usual. | 1.50 | .84 |

It was analyzed that most of the participants (64%) agreed and some participants (30.9%) disagreed regarding the statement: Things that normally don't annoy me troubled me. The mean score (2.49) and Standard deviation (1.24) showed that the participants are in favor of the statement. Most of the participants (75.4%) agreed and some participants (30.9%) disagreed regarding the statement: I had a weak appetite and did not feel like eating. The mean score (1.51) and Standard deviation (.89) showed that the participants are in favor of the statement. Most of the participants (83.6%) disagreed and some participants (13.6%) agreed regarding the statement: I believed that even with support from my friends and family, I was unable to overcome my sadness. The mean score (2.08) and Standard deviation (.59) showed that the participants were not in favor of the statement. Most of the participants (72.7%) agreed and some participants (18.1%) disagreed regarding the statement: I thought my quality was on balance with that of others. The mean score (3.24) and Standard deviation (1.07) showed that the participants are in favor of the statement. Most of the participants (79%) agreed and some participants (8.1%) disagreed regarding the statement: I found it difficult to focus on what I was doing. The mean score (1.39) and Standard deviation (.77) showed that the participants are in favor of the statement. Most of the participants (70.9%) agreed and some participants (9%) disagreed regarding the statement: I was depressed. The mean score (3.48) and Standard deviation (.84) showed that the participants are in favor of the statement. Most of the participants (80%) disagreed and some participants (14.5%) agreed regarding the statement: I thought that all I did was attempt. The mean score (1.99) and Standard deviation (.53) showed that the participants were not in favor of the statement. Most of the participants (90%) agreed and some participants (7.2%) disagreed regarding the statement: I am hopeful for future. The mean score (1.37) and Standard deviation (.88) showed that the participants are in favor of the statement. Most of the participants (61.8%) disagreed and some participants (35.4%) agreed regarding the statement: I believed that my life had been in failure. The mean score (2.16) and Standard deviation (.92) showed that the participants were not in favor of the statement. Most of the participants (72.7%) agreed and some participants (18.1%) disagreed regarding the statement: I didn't talk as much as usual. The mean score (1.50) and Standard deviation (.84) showed that the participants are in favor of the statement.

Discussion

The study's findings highlight how intrusive social media is by showing that the majority of participants pause what they're doing to check it. The bulk of individuals showed signs of significant stress and depression, as seen by their heightened irritability, decreased appetite, and trouble concentrating. Despite these challenges, most said they had strong support networks and great resilience, refuting the notion that people couldn't get over their grief with

help. This result was in line with earlier research that found a strong correlation between social media use and sleep disturbance (Orzech et al., 2016) and depression (Primack et al., 2017). Adolescents with a social networking addiction spend more time on social media due to the nature of addiction. Furthermore, the emerging adults included in this study averaged three hours a day on social media usage. Similar results are shown by (Chern and Huang, 2018). The study findings showed that participants approach social comparison in a balanced manner. They do not continuously compare their activities or analyze their work against others, even if they routinely do so to evaluate their life successes and social performance. Similar study was supported by (Vogel et al., 2015) that explored undergraduate students' social comparison levels: Those with greater social comparison levels also used Facebook more frequently than those with lower levels of social comparison. Likewise, significant stress and depressive symptoms were reported, as evidenced by heightened irritability, decreased appetite, and trouble concentrating. Despite these challenges, most said they had strong support networks and great resilience, refuting the notion that people couldn't get over their grief with help. According to Umar and Idris (2018), excessive use of various social media platforms might have detrimental effects on students' mental health in addition to sleeplessness, hopelessness, and depression. These pupils also have higher levels of hostile tendencies and other personality disorders, such as egotistical tendencies and other antisocial behaviors. The positive attitude of most participants was apparent as they expressed hope for the future, disagreed with feelings of futility and failure in life, and believed that their quality of life was similar to others. Relevant findings from a similar study (Onyeizu et al., 2022) showed that the majority of participants suffered in their social lives as a result of their increased use of social media, suggesting that social media users are more likely to encounter social life problems. Adolescents who became addicted to social media and substituted social media for quality time spent with friends and family faced social consequences.

Conclusion

The study concludes that most participants display attitudes and behaviors that point to a high level of social media dependency. The majority of participants uses social media without a specific goal and considers it frequently when they are not, indicating habitual and possibly obsessive usage tendencies. Interpersonal disputes have resulted from this dependency, as the majority of participants reported disagreements stemming from their use of social media. Furthermore, a lot of people stop what they're doing to check social media, which emphasizes how invasive it is. It is clear from the data analysis that participants approach social comparison in a balanced manner. They do not continuously compare their activities or analyze their work against others, even if they routinely do so to evaluate their life successes and social performance. Participants appreciate social interactions and group learning as evidenced by their interest in discussing shared experiences and their desire to learn from others' viewpoints. But they also don't constantly compare their loved ones' lives to others' or show a persistent curiosity about what other people would do in similar circumstances. This implies that rather than continuously comparing themselves in all spheres of life, selectively employ social comparison, concentrating on personal accomplishments and social performance. Overall, participants show that they approach social comparison in a context-dependent and controlled manner, striking a balance between

the advantages of gaining knowledge from others and preserving their uniqueness. The majority of participants indicated substantial stress and depressed symptoms, as seen by their increased irritability, poor appetite, and difficulties focusing. Despite these difficulties, the majority expressed high resilience and support systems in opposition to the idea that they could not overcome grief with assistance. Overall, the participants' positive perspective was evident as they disagreed with emotions of futility and failure in life, thought that their quality of life was comparable to others', and voiced hope for the future. But a lot of participants also mentioned feeling depressed and having less social connection, which brings up some serious issues that need to be addressed. These results imply that although participants have significant mental health issues, they also have a lot of coping strategies and optimism.

Recommendations

It is recommended to encourage deliberate and thoughtful use of social media and to raise public awareness of the detrimental effects of excessive use. Reducing reliance can be facilitated by creating self-regulation techniques and offering resources for tracking and restricting consumption. Improving in-person social ties and providing mental health assistance for signs of depression and stress are essential. The intrusive nature of social media can be lessened by promoting frequent digital detoxification sessions. To further improve mental well-being, resilience-building programs should be strengthened and good coping techniques should be encouraged. It's crucial to teach parents and offer counsel on good social media practices for young users.

References

- 1. Apuke, O. D. (2016). The influence of social media on the academic performance of undergraduate students of Taraba State University, Jalingo, Nigeria. *Research in Humanities and Social Science, 6* (19) 63-72.
- 2. Asdaque, M. M., Khan, M. N. & Rizvi, S. A. A. (2010). Effect of internet on the academic performance and social life of university students in Pakistan. *Journal of Education and Sociology.3*(2), 21-27.
- 3. Aligwe, H. N., Ugochukwu, N. S., and Nwafor, K. A. (2017). Social media use pattern and the image implication among university undergraduate students in Southeast, Nigeria. *Journal of humanities and social sciences*, *2*(2), 231-249.
- 4. Azizi, S. A., Soroush, A. & Khatony, A. (2019) 'The relationship between social networking addiction and academic performance in Iranian students of medical sciences: A cross-sectional study', Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6500070/. [Accessed 4th Jul, 2024].
- 5. Bashir, H. and Bhat, S. (2017). Effects of Social Media on Mental Health: A Review. *The International Journal of Indian Psychology*, 4(3), 2348-5396.
- 6. Baker, D. A., & Algorta, G. P. (2016). The relationship between online social networking and depression: A systematic review of quantitative studies. *Cyberpsychology, Behavior and Social Networking*, 19(11), 638-648.
- 7. Chern, K.-C., & Huang, J.-H. (2018). Internet addiction: Associated with lower health-related quality of life among college students in Taiwan, and in what aspects? *Computers in Human Behavior*, 84, 460–466.
- 8. Ewing, E.S.K., Diamond, G., Levy, S., 2015. Attachment-based family therapy for depressed and suicidal adolescents: theory, clinical model and empirical support. *Am. J. Bioeth.* 17 (2), 136–156.

- 9. Fasae, J. K., & Adegbilero-Iwari, I. (2016). Use of social media by science students in public Universities in Southwest Nigeria. *The Electronic Library*, 34(2), 213-222.
- 10. Farah, H., & Yanda, A. (2015). The use of social networking among senior secondary school students in Abuja Municipal Area of Federal Capital Territory, Nigeria. *Journal of Education and Practice*, 6(15), 132-149.
- 11. Guedes, E., Sancassiani, F., Carta, M. G., Campos, C., Machado, S., King, A. L., & Nardi, A. E. (2016). Internet Addiction and Excessive Social Networks Use: What About Facebook? *Clinical Practice & Epidemiology in Mental Health*, 12(1), 43-48.
- 12. Hamm, M. P., Newton, A. S., Chisholm, A., Shulhan, J., Milne, A., & Sundar, P. (2015). Prevalence and effect of cyberbullying on children and young people: A scoping review of social media studies. *JAMA Pediatrics*, 169(8), 770-777.
- 13. Hou, Y., Xiong, D., Jiang, T., Song, L. & Wang, Q. (2019) Social media addiction: its impact and intervention. cyberpsychology: *Journal of Psychosocial Research on Cyberspace*, 13(1). 110-123
- 14. Kuss, D. J., & Griffiths, M. D. (2011). Online Social Networking and Addiction—A Review of the Psychological Literature. *International Journal of Environmental Research and Public Health,* 8(9), 3528-3552.
- 15. Lin, L. Y. (2016). Association between use of social networking media and depression in adolescents and young adults. *Depress Anxiety*, 2(4), 323-331.
- 16. Lin, L., Sidani, J. E., Shensa, A., Radovic, A., Miller, E., Colditz, J. B., & Primack, B. A. (2016). Association between social media use and depression among US young adults. *Depression and Anxiety*, 33(4), 323-331.
- 17. Moreno, M., Jelenchick, L., Egan, K., Cox, E., Young, H., Gannon, K., & Becker, T. (2011). Feeling bad on Facebook: depression disclosures by college students on a social networking site. *Depress. Anxiety*, 28 (6), 447–455.
- 18. Norton, A. (2020). Depression Risk Rises from Too Much Social Media. HealthDay News. https://www.webmd.com/depression/news/20240705/too-much-social media-time-could-raise-risk-of-depression.
- 19. Onyeizu, A. O., Nancy, N. O., Samuel, O., Binta, O. D., & Michelle, N. (2022). Social media addiction on mental health of undergraduates. *International Journal of Health Sciences*, 6(S6), 2524–2542.
- 20. Orzech, K. M., Grandner, M. A., Roane, B. M., & Carskadon, M. A. (2016). Digital media use in the 2 h before bedtime is associated with sleep variables in university students. *Computers in Human Behavior*, *5*(5), 43–50.
- 21. Oberiri, D. A. & Greg, H. E., (2017). The access and utilisation of social networking sites among social science students in northeastern nigeria public university. *International journal of social science and humanities. Reviews.* 7(2) 215-228.
- 22. Primack, B. A., Shensa, A., Escobar-Viera, C. G., Barrett, E. L., Sidani, J. E., Colditz, J. B., & James, A. E. (2017). Use of multiple social media platforms and symptoms of depression and anxiety: A nationally-representative study among U.S. young adults. *Computers in Human Behavior*, 69, 1–9.
- 23. Simsek, A., Elciyar, K & Kizilhan, T. (2019) 'A comparative study on social media addiction of high school and university students', *Contemporary Educational Technology*, *10*(2), 106-119.
- 24. Seabrook, E. M., Kern, M. L., & Rickard, N. S. (2016). Social networking sites, depression, and anxiety: A systematic review. *JMIR Mental Health*, *3*(4), 87-101
- 25. Umar, T. I. and Idris, M. (2018). Influence of Social Media on Psychosocial Behaviour and Academic Performance of Secondary School Students. *Journal of Education and Entrepreneurship.* 5(2) 36-46.
- 26. Vogel, E. A., Rose, J. P., Okdie, B. M., Eckles, K., & Franz, B. (2015). Who compares and despairs? The effect of social comparison orientation on social media use and its outcomes. *Personality and Individual Differences*, 86, 249-256.