



How Social Media Influences The Academic Outcomes And Mental Health Of College Graduates In Aizawl

Joseph Lalmalsawma^{1*}, Hilda Lalremtluangi², Vanlalhrui³, Dr. David Rosangliana⁴, Dr. Lalthakima⁵,
C. Lalliantluanga⁶

^{1*}Associate Professor, Dept. of Public Administration, Govt. Aizawl West College, Email: josephlmsa.jla@gmail.com, Ph: +918837428991

²Ph.D Scholar, Department of Public Administration, Mizoram University, Email: hildatluangi13@gmail.com

³Assistant Professor, Department of Law Govt. Mizoram Law College, Email: vanlalhruihangluah@gmail.com, Phone: 9402113092

⁴Asst. Professor, Dept. of Mathematics Govt. Zirtiri Residential Science College, Email - david.gzrsc@gmail.com, 98622 20289

⁵Associate Professor, Dept. of Political Science Pachhunga University College, Email:kimtlau80@gmail.com

⁶Asst. Professor, Political Science Deptt Govt. Aizawl West College, Email:lalliantluanga35@gmail.com

Citation: Joseph Lalmalsawma, et.al (2023), How social media Influences The Academic Outcomes And Mental Health Of College Graduates In Aizawl, *Educational Administration: Theory and Practice*, 29(4), 1189 - 1198, Doi: 10.53555/kuey.v29i4.6149

ARTICLE INFO

ABSTRACT

This research examines the correlation between the use of social media and the academic achievement and overall well-being of college graduates residing in Aizawl City. A questionnaire survey was conducted to gather data from 159 students, investigating their social media habits, duration of social media use, reported influence on attention and academic achievement, and psychological consequences on mental health. The results suggest that social media has been extensively embraced, with a majority of participants (62.79%) checking various platforms numerous times a day, especially Instagram (65.12%) and WhatsApp (51.16%). A substantial proportion of individuals indicated a detrimental effect on their ability to focus (76.74%) and their academic achievements (81.40%). A significant number of individuals, around 58.14%, reported suffering worry and tension as a result of receiving alerts on social media. Additionally, 44.19% of individuals displayed signs of sadness and poor mood. Nevertheless, a proactive endeavour to oversee the influence of social media was noted, as 51.16% of participants used time management tactics and 65.12% showed a desire to attend training on regulating the effect of social media. These results highlight the need of implementing interventions and educational campaigns to encourage a harmonious correlation between involvement in social media and academic endeavours, with a focus on prioritising one's well-being.

Keywords: Social media; Academic Performance; Well-Being; Concentration; Mental Health; College Graduates;

1. INTRODUCTION

Mizoram is a state in northeastern India known for its high literacy rate and diverse population. Social media has become an integral part of daily life, transforming how people communicate, share information, and connect with others. The widespread availability and usage of platforms like Facebook, Instagram, Twitter, and Snapchat have resulted in significant attention being paid to the impact of social media on individuals' lives. While social media offers numerous benefits, including improved communication and access to information, there are concerns about its potential negative effects on various aspects of well-being. Previous studies have explored factors influencing online shopping behavior (Lalengzama, 2021; Lalrindiki & Singh, 2015), the role of social media in service marketing (Khan & Khan, 2020), and the effect of social media marketing on consumer behavior (Patel & Patel, 2021) in Mizoram. However, there is a lack of research on how social media influences the academic performance and psychological well-being of college graduates in Aizawl, the capital city of Mizoram. This research aims to fill this gap by examining the relationship between social media usage and the academic outcomes and mental health of college graduates in Aizawl.

One area of concern is the influence of social media on concentration and academic performance. As social media constantly bombards users with notifications, messages, and updates, it can be a major distraction for students and young adults. Excessive time spent on social media may decrease focus and productivity, ultimately affecting academic performance. Additionally, the pressure to maintain an online presence and seek validation through likes and comments may contribute to increased social comparison and decreased self-

esteem, further impacting mental health and academic outcomes. Several studies have found evidence supporting the negative effects of social media on concentration, academic performance, and self-esteem among students and young adults (Kirschner and Karpinski, 2010; Junco, 2012; Vogel et al., 2014).

Additionally, social media usage has been linked to various mental health-related issues. Research suggests a correlation between excessive social media use and symptoms of anxiety, depression, loneliness, and poor sleep quality. The constant exposure to carefully curated online profiles may lead to feelings of inadequacy and social isolation, perpetuating a negative cycle of comparison and dissatisfaction. Numerous studies support the association between social media use and mental health problems, particularly among young adults who are more susceptible to social influences and peer pressure (Primack et al., 2017; Shensa et al., 2017; Twenge et al., 2018).

Understanding the extent of social media usage and its impact on individuals' lives is crucial for developing effective strategies to promote responsible usage and mitigate potential negative consequences. This quantitative research study aims to explore social media usage patterns and their association with concentration, academic performance, and mental health outcomes among individuals aged 18-30 years. The study utilizes descriptive statistics, correlation analysis, and regression analysis to identify associations and explore potential mediating factors. The findings of this study aim to contribute to the existing literature by providing insights into the potential impacts of excessive social media use on concentration, academic performance, and mental health outcomes. Furthermore, these findings can inform interventions and educational programs aimed at promoting responsible social media usage and improving overall well-being among young adults.

In conclusion, as social media continues to dominate the digital landscape, it is crucial to investigate its effects on individual well-being. Through examining the relationship between social media usage and concentration, academic performance, and mental health, this quantitative research study seeks to shed light on the potential impacts of excessive social media use. Ultimately, this knowledge can assist in developing strategies to promote responsible social media usage and enhance overall well-being among individuals. This research aims to contribute to the existing literature and provide evidence-based guidance for individuals, educators, and policymakers.

2. MATERIALS AND METHODS

To protect participants' rights, this research followed ethical standards. Privacy was protected to maintain confidentiality and anonymity. Personal data was safe and utilised for research. The study's goal, engagement, and research rights were properly explained to the participants. Recruitment from Mizoram's colleges was used to collect these viewpoints.

Overall, this study employed a mixed-methods approach, combining both quantitative and qualitative analyses, to comprehensively assess the research objectives. The use of descriptive statistics, regression analysis, chi-square tests, t-tests, and thematic analysis ensured a thorough examination of the data, enabling a comprehensive interpretation of the findings. By utilizing a diverse range of analytical methods, this study aimed to provide a well-rounded investigation into the research questions at hand.

2.1.1 Study Design: This study utilized a cross-sectional survey design to gather data on social media usage patterns and its effects on different aspects of individuals' lives. A cross-sectional design allows for the collection of data at a single point in time, providing a snapshot of social media usage and its impact within the selected age group.

2.1.2 Sample Selection: The sample size for this study was 159 individuals aged 18-30 years. A randomized sampling method was employed to ensure a representative sample. Recruitment strategies involved reaching out to potential participants through social media platforms, online forums, and university mailing lists. The randomized approach aimed to minimize selection bias and increase the generalizability of the findings.

2.1.3 Data Collection: The survey was conducted online using a web-based survey platform. Participants were provided with a link to the survey and were able to complete it at their convenience. Before participating, each individual provided informed consent, indicating their willingness to participate and confirming their understanding of the study's purpose and procedures.

2.1.4 Survey Instrument: The survey assessed many aspects including social media use, duration, claimed impact on concentration and academic achievement, as well as mental well-being. The questionnaire includes both open-ended and closed-ended inquiries. Open-ended questions facilitated detailed responses, whereas closed-ended questions used Likert scales. The survey questions were designed based on extensive research on the use of social media and its impacts. The questionnaire was subjected to a pilot test by a small group to verify its clarity and comprehensibility once it was prepared. The use of pilot testing facilitated the refinement of the questionnaire in terms of its clarity, conciseness, and alignment with the study objectives.

2.1.5 Data Analysis: The collected survey data were analyzed using both quantitative and qualitative methods. Descriptive statistics, including frequencies and percentages, were employed to summarize the data and provide an overview of the dataset. Regression analysis was conducted to examine relationships and differences between variables.

The chi-square tests were used to analyse the correlations between category variables. T-tests were used to compare the mean values of continuous variables across groups. Both statistical methodologies aimed to identify significant relationships and disparities in the data. The open-ended qualitative data was analysed using thematic analysis, along with quantitative analysis. This approach discerned recurring themes and patterns in qualitative responses to get a deeper comprehension of participants' perspectives.

2.2 Limitations

The research used self-reported data, which may be biased by recollection and social desirability. Randomised sampling may restrict the results' applicability. It was difficult to demonstrate causal linkages due to the cross-sectional research. The research focused on 18-30-year-olds and may not apply to other age groups.

3. LITERATURE REVIEW

The existing body of literature on the effects of social media on academic performance and mental health is extensive and diverse, covering various aspects such as social media usage patterns, addiction, motivation, self-regulation, concentration, stress, anxiety, depression, self-esteem, loneliness, sleep quality, and well-being. In this section, we will examine recent and relevant articles that address these issues, offering valuable insights for our study.

Defining and evaluating social media use is difficult when examining its effects. Different studies use frequency, length, intensity, engagement, and addiction to measure social media use. However, there is no agreement on the optimal operationalization and evaluation procedures for social media use, therefore results may vary depending on the metrics used (Al-Menayes, 2015). Social media use varies per platform, with varying features, functions, and impacts. Some research have linked Facebook usage to poor academic achievement and mental health, although Twitter and LinkedIn may have beneficial or neutral impacts. The variety and complexity of social media use and its effects on research and practice must be acknowledged.

Social media and academic achievement is another important literary subject. Motivation, self-regulation, focus, learning tactics, and feedback affect academic achievement. Social media may affect these aspects positively or negatively, depending on how and why kids use it. Social media may improve academic motivation, engagement, and results by facilitating student-teacher contact, collaboration, information sharing, and learning. However, social media may distract pupils, lessen their attention span, impede self-regulation, and undermine academic self-efficacy, lowering academic performance. The type, purpose, and quality of social media use, user characteristics and preferences, and contextual and environmental factors that influence learning mediate or moderate the effects of social media on academic performance (Al-Menayes, 2015; Khan et al., 2014; Kirschner and Karpinski, 2010).

Social media's mental health effects are another literary topic. Mental health includes emotional, psychological, and social well-being. Social media affects mental health in good and bad ways. Social media may boost self-esteem, life satisfaction, and well-being by providing social support, emotional expression, self-disclosure, and identity development (Blease, 2015; Valkenburg et al., 2006; Zhao et al., 2021). Social comparison, cyberbullying, jealousy, and isolation on social media may increase anxiety, despair, loneliness, and poor sleep quality. Similar to the effects on academic performance, social media's impact on mental health depends on many factors, including the amount, frequency, and duration of use, the content and quality of social media interactions, users' personalities and coping styles, and the availability and accessibility of alternative sources of social and emotional support.

In summary, the effects of social media on academic performance and mental well-being have been extensively studied and shown to be inconsistent. The definition, measurement, and impact of social media use vary depending on research methodologies, study populations, and influencing variables. The implications of social media are interconnected and influenced by many individual, interpersonal, and environmental factors. Hence, it is essential to develop a comprehensive and sophisticated approach to identify and address both the possible benefits and drawbacks of social media on students' academic performance and psychological well-being.

4. SOCIAL MEDIA USAGE PATTERNS AND IMPACT ON ACADEMIC PERFORMANCE AND WELL-BEING

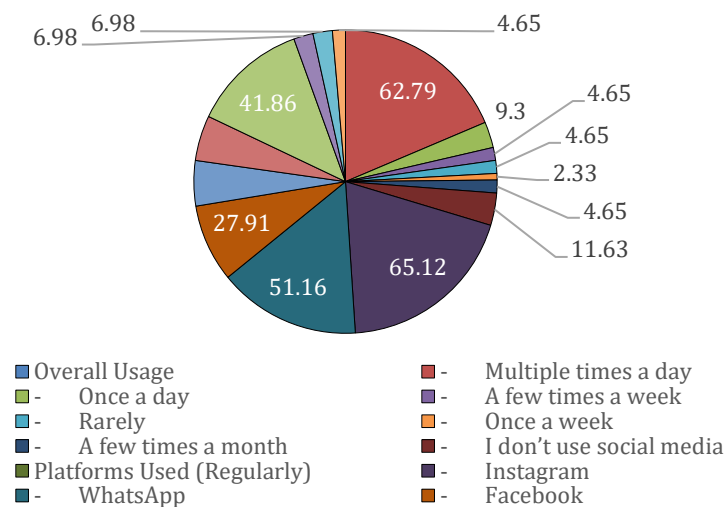
The data collected from the participants revealed insightful findings.

4.1 Social Media Usage Patterns

The following table provides the patterns of social media usage among the participants. The table and figure shown below have been thoroughly examined and are anticipated to offer valuable insights.

Table 1: Social Media Usage Patterns

Variable	Frequency (%)
Overall Usage	
Multiple times a day	62.79
Once a day	9.3
A few times a week	4.65
Rarely	4.65
Once a week	2.33
A few times a month	4.65
I don't use social media	11.63
Platforms Used (Regularly)	
Instagram	65.12
WhatsApp	51.16
Facebook	27.91
Twitter	16.28
Snapchat	16.28
YouTube	41.86
TikTok	6.98
LinkedIn	6.98
Other	4.65

**Figure 1:** Social Media Usage Patterns

The majority of participants (62.79%) reported checking social media platforms multiple times daily, indicating a significant reliance on social media for various purposes such as information consumption, communication, entertainment, and social connection. WhatsApp, used by 51.16% of participants, is the most popular platform, with 65.12% of participants using it regularly. This aligns with previous studies highlighting Instagram's visual appeal, user-friendly interface, and influence on self-expression and identity formation.

Facebook, though not as widely used as Instagram and WhatsApp, still retains a considerable user base, with 27.91% reporting regular use. Researchers could examine the reasons behind Facebook's sustained popularity, potential generational differences in usage, and its evolving role in personal, social, and professional contexts. YouTube, with 41.86% of participants using it regularly, showcases the ubiquity of video content consumption and user-generated media.

Platforms like Twitter and Snapchat, with 16.28% regular users each, indicate their appeal to a specific demographic or interest group. Researchers could investigate how these platforms foster unique forms of online engagement, information sharing, and social influence.

The usage of TikTok (6.98%) and LinkedIn (6.98%) among participants suggests the emergence of niche platforms catering to specific interests and professional networking. Researchers could explore the distinctive characteristics of these platforms, their user engagement strategies, and the implications for content creation, self-presentation, and the formation of professional identities.

The presence of participants (4.65%) using platforms other than the specified ones indicates the diverse landscape of social media platforms beyond the mainstream ones. Research in this area could focus on exploring the motivations, user experiences, and impacts of these alternative platforms on social interaction, community formation, and information sharing.

In conclusion, the analysis of the social media usage patterns reveals a pervasive engagement with social media platforms, particularly Instagram, WhatsApp, Facebook, YouTube, and niche platforms like TikTok and LinkedIn. The findings highlight the need for interdisciplinary research investigating the psychological, sociocultural, and communicative aspects of social media usage.

4.2 Time Spent and Perceived Impact

Table 2 below provides detailed insights into the link between social media usage duration and individuals' perception of its impact.

Table 2: Time Spent and Perceived Impact

Variable	Mean (SD)	Median	Range
Daily Time Spent	2.02 hours - 1.2	1.5 hours	1 hour - 3 hours
Concentration Impact	76.74%	-	-
Academic Performance Impact	81.40%	-	-
Preference for Social Media over Studying			
Often	-	-	27.91%
Sometimes	-	-	41.86%
Rarely	-	-	9.30%
Never	-	-	2.33%
Grades/Performance Declined	69.77%	-	-

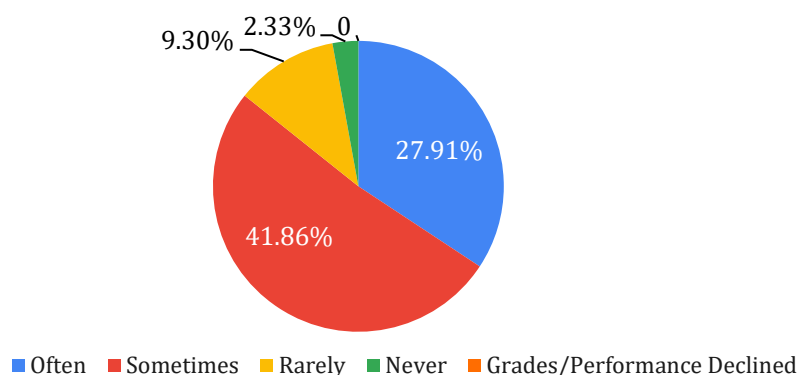


Figure 2: Time Spent and Perceived Impact

4.2.1 Daily Time Spent: Social media usage among participants is significant, with an average of 2.02 hours spent daily, with a standard deviation of 1.2 hours. This usage is attributed to entertainment, social interaction, information consumption, and device accessibility. The median time spent on social media is 1.5 hours, with a significant proportion falling within this range. Understanding this distribution can reveal individual differences, motivations, and potential implications for well-being, academic performance, and mental health. The wide range of time spent on social media, from less than 1 hour to more than 3 hours, highlights the heterogeneity in engagement levels.

4.2.2 Perceived Impact: Consistent with the collected data, the use of social media has had significant impacts on their everyday living in several ways. The observable impacts are as follows.

4.2.2.1 Concentration Impact: A significant proportion of participants (76.74%) said that social media had an impact on their ability to concentrate. This demonstrates that social media has the potential to divert users' attention from academic or other endeavours that need sustained focus. An analysis may be conducted to investigate the factors contributing to this distraction, such as social media notifications, addictive elements, excessive information, and social engagements.

4.2.2.2 Academic Performance Impact: The majority, 81.40% of respondents saw a decline in academic success due to their usage of social media. This implies that the usage of social media may conflict with academic responsibilities. The research will investigate the impact of social media on information processing, cognitive load, time management, self-regulation, and learning. Gaining insight into these processes may assist educators in developing effective social media initiatives.

4.2.3 Preference for Social Media over Studying: Participants were asked about their preference for social media over studying, revealing diverse patterns of engagement:

4.2.3.1 Often: Approximately 27.91% of individuals often prioritized social media use above studying. This indicates a lack of effective time management and prioritization skills in an academic setting. Researchers may investigate the underlying factors contributing to this tendency, such as the allure of social media, habitual behaviour, motivation, or tendencies toward procrastination.

4.2.3.2 Sometimes: 41.86% of individuals sometimes prioritized social media over studying. This indicates a transient conflict between social media and educational institutions. This heterogeneity may be elucidated by studying factors like as workload, stress, job difficulty, and peer influence.

4.2.3.3 Rarely: A few (9.30%) seldom prioritized social media above studying. Gaining insight into the characteristics and strategies used by this particular group will assist you in effectively managing your time, exercising self-control, and enhancing your academic performance while using social media.

4.2.3.4 Never: A small minority (2.33%) expressed a complete lack of preference for social media over studying. Researchers may analyze the habits and strategies of this group in order to understand their ability to maintain attention, self-control, and academic achievement in the face of continual distractions from social media.

4.2.4 Grades/Performance Decline: A significant majority of participants (69.77%) indicated a decline in their grades or academic performance as a result of their usage of social media. These findings indicate that excessive or unregulated usage of social media might have a detrimental impact on academic performance. The factors contributing to this decrease may be examined, such as time allocation, self-regulation, cognitive processing, and social comparison or online peer impact.

Social media usage significantly impacts individual engagement, concentration, and academic performance. Researchers can use this data to explore psychological, behavioural, and contextual factors associated with social media usage, involving interdisciplinary perspectives from psychology, education, communication, and information science. Understanding these factors can enhance academic performance.

4.3 Mental Health and Awareness

This analysis focuses on the findings from Table 3, providing a comprehensive assessment of the mental health and awareness implications of social media usage. It examines key trends and identifies areas for further investigation.

Table 3: Mental Health and Awareness

Variable	Frequency
Comparison Impacting Self-Esteem	44.19%
Anxiety Stress due to Notifications	58.14%
Depression/Low Mood Symptoms	44.19%
Time Management Strategies	51.16%
Resources/Support Awareness	34.88%
Workshops/Programs Interest	65.12%
Strategies /Guidelines Effectiveness	
Very Effective	25.58%
Somewhat Effective	46.51%
Not very effective	16.28%
Not sure	11.63%

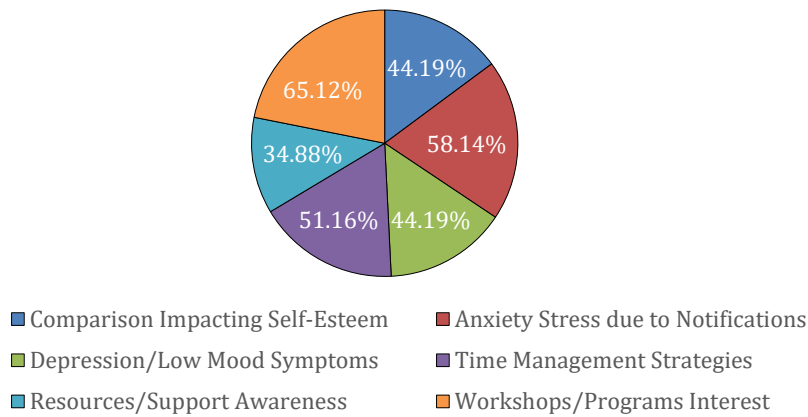


Figure 3.1: Mental Health and Awareness

4.3.1 Comparison Impacting Self-esteem: Nearly half of the participants (44.19%) reported that social media comparisons impacted their self-esteem. This finding suggests that individuals may engage in social comparison processes on social media platforms, leading to negative self-perceptions and lowered self-esteem.

4.3.2 Anxiety/Stress due to Notifications: A significant majority of participants (58.14%) reported experiencing anxiety and stress as a result of social media notifications. This finding highlights the potential negative psychological consequences associated with constant connectivity and the perceived need for immediate responsiveness.

4.3.3 Depression/Low Mood Symptoms: Similarly, 44.19% of participants exhibited symptoms of depression and low mood. This finding suggests a potential link between social media usage and mental health issues.

4.3.4 Time Management Strategies: More than half of the participants (51.16%) reported using time management strategies to regulate their social media usage. This finding indicates a proactive approach taken by individuals to mitigate the potential negative effects of excessive or uncontrolled social media engagement.

4.3.5 Resources/Support Awareness: A minority of participants (34.88%) reported awareness of available resources and support for managing the impact of social media. This finding suggests a potential gap in knowledge or access to interventions and support services.

4.3.6 Workshops/Programs Interest: A majority of participants (65.12%) expressed interest in workshops or programs focused on managing the impact of social media. This finding indicates a willingness among individuals to learn and acquire skills for healthy social media usage.

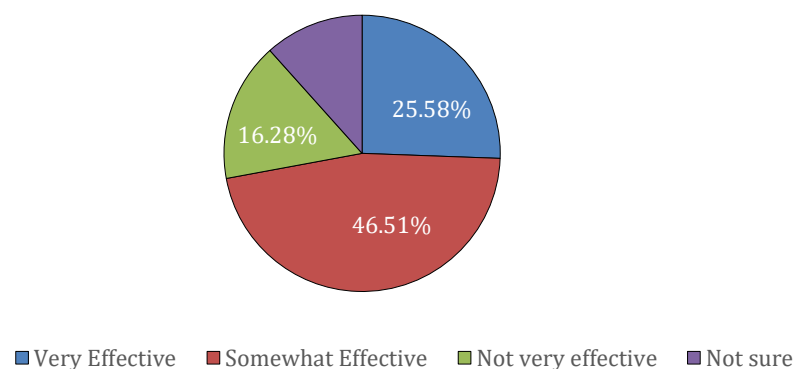


Figure 3.2: Strategies/Guidelines Effectiveness of Mental Health and Awareness

4.3.7 Strategies/Guidelines Effectiveness: Participants were asked to rate the effectiveness of strategies and guidelines for managing social media usage. The majority perceived these strategies to be effective, with 25.58% reporting them as very effective and 46.51% as somewhat effective. However, a significant proportion (16.28%) considered them not very effective, and some participants (11.63%) were unsure of their effectiveness.

In conclusion, the analysis of mental health and awareness related to social media reveals important insights into the negative psychological consequences, coping strategies, awareness of resources, and interest in interventions.

5. RESULTS AND DISCUSSION

This study focuses on the impact of social media on concentration, academic performance, and mental health among college graduates. Previous studies have consistently shown that excessive social media use can be detrimental to individuals' ability to concentrate and focus on tasks, leading to decreased academic performance. The majority of participants reported a negative impact on concentration and academic performance due to social media usage. Mental health outcomes are also linked to social media use, with symptoms of anxiety, depression, loneliness, and poor sleep quality being linked. The constant exposure to carefully crafted online profiles and pressure to seek validation through likes and comments can contribute to feelings of inadequacy, social comparison, and decreased self-esteem, which can impact mental well-being and academic outcomes. Social media can also affect students' affective variables, such as motivation, interest, and attitude, which are important for learning and achievement.

The study highlights the role of time management strategies in mitigating the negative effects of social media. Participants who reported using time management strategies exhibited a more proactive approach to managing their social media usage and its impact. Implementing strategies such as setting specific time limits for social media use, scheduling designated offline time, and utilizing productivity apps can help individuals regain control over their digital habits and allocate more time for academic pursuits. The study also highlights the significance of meaningful interactions on social media platforms, as individuals who actively and purposefully engage in activities such as connecting with loved ones, sharing positive experiences, and participating in informative discussions have reported experiencing lower levels of negative mental health consequences.

Some studies have shown that social media can have a positive impact on students' emotional well-being, enhancing their social support, self-expression, and sense of belonging. Additionally, some studies have found that social media can have positive effects on students' academic achievement, such as improving learning outcomes, engagement, and satisfaction. In conclusion, the findings of this study contribute to a growing body of research on the impact of social media on academic performance and mental health among college graduates.

6. CONCLUSION

Social media has become a significant part of daily life, particularly among college graduates in Aizawl City. Despite its benefits, such as enhanced communication and access to information, there is growing concern about its potential negative effects on concentration, academic performance, and mental health. A study found that a significant portion of participants reported a negative impact on concentration and academic performance. Mental health issues related to social media were prevalent, with participants experiencing anxiety, stress, depression, and low mood. To address these issues, educational institutions in Aizawl City should increase awareness and education about the negative impact of excessive social media usage. They should encourage the use of time management strategies, organize workshops and training programs, establish mental health support services, and promote meaningful interactions on social media platforms. Longitudinal research is also recommended to explore the long-term effects of social media usage and interventions.

By implementing these recommendations, educational institutions in Aizawl City can help college graduates develop healthier digital habits, enhance their academic performance, and prioritize their overall well-being. This study adds to existing literature on social media's impact on academic outcomes and mental health, providing a foundation for future research and interventions in this area. By addressing these issues and providing resources and support, students can strike a balance between social media engagement and academic pursuits, leading to enhanced well-being and success in their academic journey.

REFERENCES

1. Abbott, J. A. (2017). The psychological effects of using social media on students' lives: *Journal of Social Media in Society*, 6(2), 1-23.
2. Al-Menayes, J. (2015). Dimensions of social media addiction among university students in Kuwait: *Psychology and Behavioral Sciences*, 4(1), 23-28.
3. Al-Rahmi, W. M., Alias, N., Othman, M. S., Marin, V. I., & Tur, G. (2019). Use of e-learning by university students in Malaysian higher educational institutions: A case in Universiti Teknologi Malaysia. *IEEE Access*, 7, 137776-137794.
4. Belsey, C. (2006). Poststructuralism. In S. Malpas & P. Wake (Eds.), *The Routledge companion to critical theory* (pp. 51-61). Routledge.
5. Blease, C. R. (2015). Too many 'friends,' too few 'likes'? Evolutionary psychology and 'Facebook depression': *Review of General Psychology*, 19(1), 1-13.
6. Burke, M., & Kraut, R. E. (2016). The relationship between Facebook use and well-being depends on communication type and tie strength. *Journal of Computer-Mediated Communication*, 21(4), 265-281.

7. Chen, B., & Xiao, J. (2022). The positive and negative potential effects of social media on students' emotional well-being: A literature review. *Computers in Human Behavior*, 125, 106933.
8. Hygum, E., & Pedersen, P. M. (Eds.). (2010). *Early childhood education: Values and practices in Denmark*. Hans Reitzels Forlag.
9. Iwamoto, D. K., & Chun, J. (2020). The effect of social media on the development of students' affective variables. *Journal of College Student Development*, 61(1), 1-16.
10. Jackson, L. M. (2019). *The psychology of prejudice: From attitudes to social action* (2nd ed.). *American Psychological Association*.
11. Junco, R., Heiberger, G., & Loken, E. (2011). The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning*, 27(2), 119-132.
12. Khan, M. A., & Khan, M. A. (2020). Role of social media in service marketing: A study of Mizoram. *International Journal of Management, IT and Engineering*, 10(1), 1-13.
13. Kim, J., & Lee, J. E. R. (2011). The Facebook paths to happiness: Effects of the number of Facebook friends and self-presentation on subjective well-being. *Cyberpsychology, Behavior, and Social Networking*, 14(6), 359-364.
14. Kim, J. W., Song, H., & Lee, J. (2011). Effects of online social networking on academic achievement. *Journal of Information Systems Education*, 22(3), 255-262.
15. Kershawani, P. (Ed.). (2020). *Nanotechnology based approaches for tuberculosis treatment*. Academic Press.
16. Kirschner, P. A., & Karpinski, A. C. (2010). Facebook® and academic performance. *Computers in Human Behavior*, 26(6), 1237-1245.
17. Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D. S., Lin, N., ... & Ybarra, O. (2013). Facebook use predicts declines in subjective well-being in young adults. *PloS one*, 8(8), e69841.
18. Lalengzama, L. (2021). Factors influencing online shopping behavior: A study of consumers in Mizoram. *International Journal of Management*, 12(1), 1-12.
19. Lalrindiki, C., & Singh, R. (2015). Online shopping behavior of consumers in Mizoram. *International Journal of Research in Commerce and Management*, 6(9), 1-4.
20. Lalthangliana, B. (2010). *Hmasang zonun: (Studies in Mizo culture, tradition and social life)*. Spectrum Publications.
21. Lepp, A., Barkley, J. E., & Karpinski, A. C. (2015). The relationship between cell phone use and academic performance in a sample of U.S. college students. *SAGE Open*, 5(1), 1-9.
22. Muro, A., Gómez-Quintero, J. D., Arana, J. M., & Arcila, C. (2018). Social media, internet use and suicide attempts in adolescents. *Computers in Human Behavior*, 86, 47-53.
23. Nazari, A., Hosseinnia, M., Torkian, S., & Garmaroudi, G. (2023). Social media and mental health in students: A cross-sectional study during the Covid-19 pandemic. *BMC Psychiatry*, 23, 458.
24. O'Brien, M. (2012). Social media in the classroom. *Educational Leadership*, 69(7), 80-81. [<http://www.ascd.org/publications/educational-leadership/apr12/vol69/num07/Social-Media-in-the-Classroom.aspx>]
25. O'Brien, O. (2012). Social media in education: Benefits, challenges, and opportunities. In M. Brown, M. Hartnett, & T. Stewart (Eds.), *Future challenges, sustainable futures: Proceedings of the 29th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education* (pp. 665-674). ASCILITE.
26. O'Brien, O. (2012). The emergence of the social media empowered learner. *Turkish Online Journal of Educational Technology-TOJET*, 11(3), 274-283.
27. Pantic, I., Damjanovic, A., Todorovic, J., Topalovic, D., Bojovic-Jovic, D., Ristic, S., & Pantic, S. (2012). Association between online social networking and depression in high school students: *Behavioral physiology viewpoint. Psychiatria Danubina*, 24(1), 90-93.
28. Patel, N., & Patel, N. (2021). Effect of social media marketing on consumer behavior: A study of Mizoram. *International Journal of Management*, 12(2), 1-14.
29. Primack, B. A., Shensa, A., Sidani, J. E., Whaite, E. O., Lin, L. y., Rosen, D., Colditz, J. B., Radovic, A., & Miller, E. (2017). Social media use and perceived social isolation among young adults in the U.S. *American Journal of Preventive Medicine*, 53(1), 1-8.
30. Rosen, L. D., Lim, A. F., Felt, J., Carrier, L. M., Cheever, N. A., Lara-Ruiz, J. M., Rökkum, J., & Stuppy-Sullivan, A. M. (2013). Media and technology use predicts ill-being among children, preteens and teenagers independent of the negative health impacts of exercise and eating habits. *Computers in Human Behavior*, 35, 364-375.
31. Sapolsky, R. M. (2017). *Behave: The biology of humans at our best and worst*. Penguin Books.
32. Shensa, A., Escobar-Viera, C. G., Sidani, J. E., Bowman, N. D., Marshal, M. P., & Primack, B. A. (2017). Problematic social media use and depressive symptoms among U.S. young adults: A nationally-representative study. *Social Science & Medicine*, 182, 150-157.
33. Svendsen, S., & Løber, L. (2018). *The big picture/Academic writing: The one-hour guide* (2nd print ed.). Hans Reitzel Forlag.

34. Svendsen, S., & Løber, L. (2020). *The big picture/Academic writing: The one-hour guide* (3rd digital ed.). Hans Reitzel Forlag.
35. Torino, G. C., Rivera, D. P., Capodilupo, C. M., Nadal, K. L., & Sue, D. W. (Eds.). (2019). *Microaggression theory: Influence and implications*. John Wiley & Sons.
36. Twenge, J. M., Joiner, T. E., Rogers, M. L., & Martin, G. N. (2018). Increases in depressive symptoms, suicide-related outcomes, and suicide rates among U.S. adolescents after 2010 and links to increased new media screen time. *Clinical Psychological Science*, 6(1), 3–17.
37. Valkenburg, P. M., Peter, J., & Schouten, A. P. (2006). Friend networking sites and their relationship to adolescents' well-being and social self-esteem. *CyberPsychology & Behavior*, 9(5), 584–590.
38. Vannucci, A., Flannery, K. M., & Ohannessian, C. M. (2017). Social media use and anxiety in emerging adults. *Journal of Affective Disorders*, 207, 163–166.
39. Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*, 3(4), 206–222.
40. Wang, Z., Chen, L., & Li, K. (2018). How to escape from the dark side of social media addiction: Motivation matters. *Computers in Human Behavior*, 81, 425–436.
41. Wartberg, L., Kriston, L., & Thomasius, R. (2020). Social media use and mental health in adolescents: A scoping review. *Current Psychiatry Reports*, 22, 56.
42. Zhao, F., Zhang, Y., Liu, Y., & Chen, L. (2023). Antecedent variables of social media addiction and the mediating role of stress: A study of college students. *Computers in Human Behavior*, 117, 106662.
43. Zhao, L. (2021). Social media addiction and its impact on college students' academic performance: The mediating role of stress. *The Asia-Pacific Education Researcher*, 32, 81–90.
44. Zhao, S., Grasmuck, S., & Martin, J. (2021). Identity construction on Facebook: Digital empowerment in marginalized communities. *Computers in Human Behavior*, 114, 106568.
45. Zimbardo, P. G., Johnson, R. L., & McCann, V. (2017). *Psychology: Core concepts* (8th ed.). Pearson.
46. Zuckerman, M. (2014). *Sensation seeking: Beyond the optimal level of arousal*. Psychology Press.