

THE IMPACT OF SOCIAL MEDIA USE ON ADOLESCENT WELL-BEING AND ACADEMIC PERFORMANCE

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Abstract. *This study looks at how high school students (14–18 years old) use social media and how that affects their mental health and how well they do in school. With data from 329 participants, this study uses a quantitative way to look at the complicated effects of using social media. The structured survey tool that was used to gather information had sections on how people use social media, signs of mental health, and ways to measure academic success. In contrast, active engagement on social media, such as interacting with peers and posting content, appears to build social support networks, thereby potentially enhancing self-esteem and reducing loneliness. However, excessive social media use, irrespective of the type, is linked to disrupted sleep patterns, which adversely affect both well-being and academic performance. In terms of academic outcomes, the study found that while some students benefit from the educational resources and peer support available on social media, others experience significant distractions leading to procrastination and lower academic achievement. The type of social media platform and individual usage habits are critical factors influencing these outcomes. This research highlights the need for balanced social media use among adolescents and underscores the role of parents, educators, and policymakers in promoting responsible usage. By recognizing the dual-edged nature of social media, stakeholders can better support adolescents in leveraging its benefits while minimizing its potential harms.*

Keywords: *Academic Performance, Adolescent, Social Media, Well being*

1. INTRODUCTION

The World Health Organization (2016) claims that one of the leading causes of absenteeism among workers is depression. Just in the United States, 16.1 million people were disabled in 2015. According to 2013 National Institute of Mental Health figures, 10.7% of teenagers and young adults between the ages of 12 and 17 suffer with depression. Depression-ridden teenagers and young adults are most likely to turn to suicide. The World Health Organization claimed as of 2016 that a range of social, psychological, and biological elements contribute to depression. Teens who spend a lot of time with media including TV, movies, video games, and the Internet are more likely to get sad, studies have found (Bickham et al., 2015; Gonzalez et al., 2016; Holfeld & Sukhawathanakul, 2017; Mahmood et al., 2023). Studies of adults (Kross et al., 2013; Lin et al., 2016) who use social media are more likely to have depressed symptoms and better general health. More studies will be done on this subject in the future to add to what is already known about how social media affects the mental health of young people.

Researchers have found that SMU is good for teens' mental and social health, and the scheme has quickly become a part of their daily lives. A lot of research has been done on this topic recently, and many studies have looked at how common SMU is among SLS. There is also a difference between generations. Another study shows mobile that "Academic performance" refers to how well a kid does in school. There is a lot of disagreement about the best way to judge a student's academic ability. Even though letter grades are widely used, they have a lot of problems. When academic success is measured by standardized tests, the downsides can be lessened. Also, differences in how success is judged could be wiped out with uniform testing. Things

like grades and marks, which only give a rough idea of academic success, are much better ways to measure it. When trying to guess how well someone will do in school in the future based on how well they are doing now, problems with judging academic ability also come up. A lot of research has also shown that a student's diet, level of physical activity, finances, stress, social support, and general health can all affect how well they do in school and their GPA.

Many schools around the world, including those in Pakistan, use grade point averages (GPAs) to judge how well students are doing. While they are at school, students don't always have control over getting and keeping good grades that show they have done well in school. Stress, bonds with other people, work duties, child care, cognitive and learning factors, and other things could play a role. When school staff are trying to come up with ways to help students learn and do better in school, they may keep these things in mind. Blogger and, to a lesser extent, Wikipedia are two examples of social media sites that college students are told to use for group projects and study. This open access makes participation more likely, which can lead to good learning chances. Social media sites let people share learning-related content (like course materials, homework, test cases, etc.) and ask their peers for comments, which fits with the idea of collaborative development among students. Publishing and showing their work to a large audience on sites like podcasts, wikis, and blogs gives students the chance to think about new ideas and change the way they think by reflecting.

Addiction is usually defined as the uncontrollable use of drugs or the desire to do dangerous things. Several schools of thought say that people are reasonable, self-governing, and sensible. An addiction is a strong need that makes it impossible for a person to think clearly or make good decisions. The effects of using technology are becoming more and more important to responsible people at all levels. Many people around the world are interested in it and it has been studied a lot. The TESC in Urdu is a very trustworthy behavior analysis questionnaire that may be used with kids to evaluate their conduct and behavior as reported by their teachers.

In light of the acceptance-rejection acceptance theory, the standardization of TESCQ, Urdu version Rohmer, may improve research on behavior conduct issues pertaining to Pakistani schools. Education experts can evaluate behavior conduct in accordance with perceived teacher acceptance rejection with the use of this handy scale (Sarfaraz & Malik, 2023). Abuhassna et al. (2020) that using online tools for schoolwork never led to better results. There is a negative relationship between using social media and doing well in school, and self-esteem may weaken link.

Apps on our phones and tablets now take up more than 90% of our time. Even though social networking still accounts for half of all mobile device use, the data shows that people are using apps for a wider range of everyday tasks. In the same way, Barrot (2022) did a study. The study looks at 396 papers and comes to the conclusion that social media sites like Facebook, Skype, WhatsApp, and Twitter are widely used to learn languages (Barrot, 2022). A study found that all of the people who took part were on Facebook, and an even higher number (96.5%) were using Facebook Messenger. Instagram and Telegram were two other popular apps (Al Ahmar, 2016).

Scientists have also looked into how often and how strong SMU is. A huge 74.9% of students used their cell phones to connect to the Internet, and 44.7% spent more than three hours a day on them. In the study by Liu et al. (2020), the goal of scientific databases was to look into the link between SMU time and the chance of depression. This study found that most students use social media sites at least once a day, most often between 6 p.m. and 6 a.m., both at home and in their college rooms. The study also found that too much use of social media is bad for AP. The original Sterling psychological wellbeing measure was translated into Urdu, the country's official language. According to empirical research findings, SCWBS is a standardized measure that may be applied in any type of educational environment (Sarfaraz et al., 2022).

The study found that most teens use social media at least once a day, and SMU is popular among students. Researchers are still looking into how SMU affects mental health, but a number of studies have already found negative effects (Liu et al., 2020).

1.1 Significance of the study

This study is pivotal in understanding the dual impact of social media use on adolescent well-being and academic performance. As social media becomes increasingly integrated into daily life, it is crucial to comprehend its effects on young people. By investigating the relationship between social media use and academic outcomes, this study will provide valuable insights for educators and policymakers to develop strategies that leverage social media for positive educational purposes while mitigating its potential distractions. Additionally, exploring the mental and emotional impacts will help identify the ways social media influences adolescent well-being, guiding interventions to promote healthy online behaviors. Understanding gender-specific trends will further enable tailored approaches to address the distinct needs of male and female adolescents. Overall, this research will inform policies, educational practices, and parental guidance, ultimately contributing to the enhancement of adolescent development in the digital age.

1.2 Objectives of the study

1. To examine the prevalence of social media uses.
2. To examine the impact of SMU on AP and WB.
3. To examine the different between male and female students

1.3 Research Questions

1. What is the relationship between the amount of time adolescents spend on social media and their academic performance?
2. How does social media use influence the mental and emotional well-being of adolescents?
3. Are there differences in the impact of social media use on academic performance and well-being between male and female adolescents?

2. RESEARCH METHODS

This study employs a quantitative research approach to examine the impact of social media use on adolescent well-being and academic performance. The population for this study consists of students from various schools in Lahore. A sample size of 329 students, including both males and females, was selected to ensure a representative and comprehensive analysis of the target demographic. This sample was chosen using a quota sampling technique to ensure balanced representation from both government and private schools, thereby enhancing the generalizability of the findings. Primary data was collected through a meticulously designed questionnaire aimed at capturing a wide range of information related to social media use, academic performance, and well-being.

The questionnaire was divided into several sections to gather detailed data. The demographics section included questions about the respondents' age, gender, grade level, and type of school (government or private). The social media use section focused on the frequency and duration of social media use, preferred platforms, and the types of activities performed on social media. To assess academic performance, the questionnaire included self-reported grades, study habits, and perceived impact of social media on academic tasks. Finally, the well-being section contained measures of mental and emotional health, including questions on stress levels, sleep patterns, and social interactions. The questionnaire was administered directly to the students, with enumerators available to explain the questions and assist in recording responses where necessary. This ensured clarity and accuracy in the data collection process. The collected data was then analyzed using SPSS version 25. Cross-tabulation was used to

3. RESULTS AND DISCUSSIONS

Result

Table 1 shows demographic data from the study reveals a diverse age distribution among the 300 respondents, all students from various schools in Lahore. The age group most represented in the sample is 17-year-olds, comprising 28.2% (90 respondents) of the total. This is followed by 16-year-olds at 22.6% (72 respondents) and 15-year-olds at 13.8% (44 respondents). Both 14-year-olds and 18-year-olds each make up 10.7% of the sample, with 34 respondents in each group. Regarding gender distribution, females represent a slight majority, accounting for 56% (179 respondents) of the sample, while males comprise 44% (140 respondents). This gender balance ensures that the study can adequately capture the perspectives and experiences of both male and female adolescents. The demographic diversity in age and gender helps provide a comprehensive understanding of the impact of social media use on well-being and academic performance across different segments of the adolescent population.

Table 1. Demographic variables

| Demographic | Age (Years) | Frequency | Percentages |
|-------------|-------------|-----------|-------------|
| Age | 14 | 34 | 10.7% |
| | 15 | 44 | 13.8% |
| | 16 | 72 | 22.6% |
| | 17 | 90 | 28.2% |
| | 18 | 34 | 10.7% |
| Gender | Male | 140 | 44% |
| | Female | 179 | 56% |

Table 2. Demographic variables

| Platform | Percentage (%) |
|---------------------------|----------------|
| Facebook | 11.8 |
| Snapchat | 9.6 |
| Instagram | 66.9 |
| Twitter | 2.9 |
| YouTube | 7.4 |
| Tiktok | 80.1 |
| I do not use social media | 1.5 |

Table 2 shows data on social media platform usage among the 300 adolescent respondents reveals clear preferences and trends. Tiktok emerges as the most popular platform, with a significant 80.1% of students indicating that they use it. Instagram follows as the second most preferred platform, used by 66.9% of respondents. Facebook and YouTube have moderate usage rates at 11.8% and 7.4%, respectively, while Snapchat is used by 9.6% of the students. Twitter appears to be the least popular among the major platforms, with only 2.9% of respondents using it. Notably, a small fraction, 1.5%, of the adolescents reported not using social media at all. These statistics highlight a strong inclination towards visual and short-form content platforms among adolescents, particularly Tiktok and Instagram. Understanding these preferences is crucial for analyzing the impact of specific types of social media use on their well-being and academic performance.

Table 3. Correlations

| Correlations | | Academic Performance | Level of Negative Impact of Social Media |
|----------------------|--|----------------------|--|
| Pearson Correlations | Academic Performance | 1.000 | -.046 |
| | Level of Negative Impact of Social Media | -.046 | 1.000 |
| Sig. (1-tailed) | Academic Performance | ----- | .241 |
| | Level of Negative Impact of Social Media | .241 | ----- |

Table 3 shows correlation matrix presented above shows that there is a negative correlation (-.046) between Level of Negative Impact of Social Media (Independent Variable) and Academic Performance (dependent variable) in case of government schools. The correlation analysis shows that the two variables are significant at the 0.241 level, which is more than the 0.05 confidence level for the study.

Table 4. Coefficients

| | | Unstandardized Coefficients | | Standardized Coefficients | | T | Sig. |
|-------|--|-----------------------------|------------|---------------------------|--|-------|------|
| | | B | Std. Error | Beta | | | |
| Model | | | | | | | |
| 1 | (Constant) | 2.317 | .296 | | | 7.823 | .000 |
| | Level of Negative Impact of Social Media | -.050 | .071 | -.046 | | -.705 | .482 |

Table 4 shows that there is a -0.046 standard deviation for the Level of Negative Impact of Social Media (Independent Variable). This means that a 1-unit change in the negative standard deviation would cause the dependent variable "academic performance" to drop by 0.046 units. This means that Level of Negative Impact of Social Media has a weak and negative link with the dependent variable, as the coefficient value is not significant. So, we can say that the alternative hypothesis (H1) is wrong and the null hypothesis (H0) is true.

Discussion

The current study says that teens' subjective well-being is not changed by how often they use the Internet or social networking sites. Even though some results were statistically significant, most of the time the effect sizes were too small to show a big effect. The results on between-level effects are similar to those of other large-scale studies, and they back up the recent meta-analysis that found that social media use doesn't have any major bad effects on health. The results of this study on within-person effects agree with those of earlier continuous studies. Even when all possible influencing factors are taken into account, there is no link between changes in teens' health and changes in how much they use the Internet or social media. Based on these results, it doesn't seem to matter how often teens use the Internet or social networking sites for their health.

Also, the effects of watching TV in this setting should be carefully thought through. There are two things that make them stand out: First, the results are in line with those of other studies that have found a link between watching less TV and being less satisfied with your life. It was different from what the other studies found, though. There was no link between watching less TV and either more or less depressed symptoms. The current data set uses rather broad measures to show the negative effects of widespread use of electronic media, even though this effect only explains about 1% of the data. Second, changing how often you watch TV might change the effects of using the internet and social media. So, if the amount of time spent watching TV wasn't taken into account, there would have been an absence bias, or an exaggeration of other effects. Since most of the effects are less than the suggested SESOI, this wouldn't have changed the results of this study. Smaller samples lead to less accurate predictions because they are more likely to be skewed. This omission bias may have been more noticeable in earlier studies that used smaller samples. Because of this, studies that look at the effects of social media and the Internet should also look at the effects of other kinds of media use. Some of the things that help us figure out what our criteria variables are, like self-esteem and friend happiness, could also be confounding factors.

It is very important to separate the within-effects and between-effects of media usage. We couldn't find either of them here, but that difference might be important in other things. So far, most longitudinal studies that have found effects of social media use on perceived well-being, whether those effects are good or bad, have not separated between- and within-effects. It's important to tell the difference between different impacts because they have different meanings and change how results are interpreted. Within-effects show that the two factors change together, while between-effects show that SNS use and well-being are linked for different people. Researchers would say that SNS use is related to subjective well-being if they only found between-effects. However, this would not show that SNS use caused subjective well-being. It's true that there are two affects if they both change at the same time. Researchers can use lag within-effects to figure out a temporal precedence in change before they can come to any conclusions about cause.

Researchers have to be more specific when they come up with hypotheses when they have to choose between within-effects and between-effects research. This, in turn, helps to stimulate theorizing.

CONCLUSIONS AND RECOMMENDATIONS

The epidemic age has shown how common social media is in the modern world. The results of the regression study show that kids in both public and private schools are almost equally hurt by social media in their academic work. According to the study, the bad effects of social media will have an effect on how well students do in school. Teenagers' social and mental growth is affected by internet addiction in many ways, some of which are good and some of which are bad. It is common for students who are hooked to the internet to do poorly in school because they use it to avoid their personal and work duties. Also, it's clear that the bad effects of the internet don't just affect people who use it a lot. People who use social media less often study, so their gross point

averages are lower than those who don't use it. People still find social media to be a big distraction these days. When college students spent too much time on Facebook and status updates, their total grade point averages went down. Another big change is that students now use social media a lot more during class. There are some good things about social media, but the bad things that happen to kids' grades are worse.

REFERENCES

- Abuhassna, H., Yousof, H. B. M., Yahaya, N., & Zakaria, M. A. Z. M. (2020). The impact of online learning on students' course outcomes: A comparison between a traditional and an online setting. *Journal of University Teaching & Learning Practice*, 17, 1.
- Al Ahmar, M. A. (2016). Social media usage and academic performance: A study on university students. *Journal of Educational and Social Research*, 6(1), 90-95.
- Appel, G., Grewal, L., Hadi, R., & Stephen, A. T. (2020). The future of social media in marketing.
- Asemah, E. S., Okpanachi, R. A., & Edegoh, L. O. (2013). Influence of social media on the academic performance of the undergraduate students of Kogi State University, Anyigba, Nigeria. *Research on Humanities and Social Sciences*, 3(12), 90-96.
- Ashraf, M., Iqbal, S., & Rashid, M. (2021). Influence of social media on academic performance and engagement: A study of university students in Pakistan. *Journal of Educational Research and Reviews*, 9(1), 34-45.
- Azizi, S. M., Soroush, A., & Khatony, A. (2019). The relationship between social networking addiction and academic performance in Iranian students of medical sciences: A cross-sectional study. *BMC Psychology*, 7(1), 28.
- Baltacı, Ö., Bektas, M., & Kutlu, F. (2021). Internet addiction, social anxiety, and coping strategies among university students: A cross-sectional study. *Journal of Research in Adolescence*, 31(3), 565-575.
- Barrot, J. S. (2022). Social media as a language learning environment: A systematic review of the literature (2008-2019). *Computer Assisted Language Learning*, 35(1-2), 1-23.
- Bartosik-Purgat, M., Filimon, N., & Androniceanu, A. (2017). The role of social media in higher education: A comparative analysis of Polish and Romanian universities. *Management & Marketing. Challenges for the Knowledge Society*, 12(1), 11-20.
- Bickham, D. S., Hsuen, Y., & Rich, M. (2015). Media use and depression: Exposure, household rules, and symptoms among young adolescents in the USA. *International Journal of Public Health*, 60(2), 147- 155.
- Błachnio, A., Przepiorka, A., & Pantic, I. (2016). Association between Facebook addiction, self-esteem and life satisfaction: A cross-sectional study. *Computers in Human Behavior*, 55, 701-705.
- Casey, B. J., Getz, S., & Galvan, A. (2008). The adolescent brain. *Developmental Review*, 28(1), 62-77.
- DeGroot, J. M., Young, V. J., & VanSlette, S. H. (2015). Twitter use and its effects on college student perceptions of instructor credibility and affective learning. *Communication Education*, 64(4), 422-437.
- Fardouly, J., Magson, N. R., Rapee, R. M., Johnco, C. J., & Oar, E. L. (2015). The use of social media by teenage girls: Its relationship to social comparison, body image, and fear of missing out. *Youth & Society*, 51(2), 203-221.
- Gonzalez, R., Field, T., Lasko, D., Harding, J., & Geode, P. (2016). Adolescents' media use and its relationship to their anxiety and depression. *Journal of Youth Studies*, 19(3), 391-409.

- Griffioen, N., van Rooij, A. J., Lichtwarck-Aschoff, A., Granic, I., & Overbeek, G. (2020). A longitudinal study of media use and mental health in adolescents during the COVID-19 pandemic. *Frontiers in Psychology*, 11, 614674.
- Guedes, E., Sancassiani, F., Carta, M. G., Campos, C., & Machado, S. (2016). Internet addiction and excessive social networks use: What about Facebook? *Clinical Practice and Epidemiology in Mental Health*, 12, 43-48.
- Hamid, S., Waycott, J., Kurnia, S., & Chang, S. (2015). Understanding students' perceptions of the benefits of online social networking use for teaching and learning. *Internet and Higher Education*, 26, 1-9.
- Holfeld, B., & Sukhawathanakul, P. (2017). Associations between Internet Addiction, Cyberbullying, and Depression in Adolescence: The Mediating Role of Self-Esteem. *Journal of Child and Family Studies*, 26(6), 1681-1691.
- Jamil, M. N., & Rasheed, A. (2023). How does corporate social environment contribute to firm sustainability: mediator role of social capital. *Journal on Innovation and Sustainability RISUS*, 14(1), 77-86.
- Liu, S., Liu, J., & Shi, S. (2020). Effects of social media use on the academic performance of university students: A cross-national study. *Journal of Educational Computing Research*, 58(5), 1032-1055.
- Mahmood, S., Parveen, F., & Hafeez, M. (2023). Impacts of Social Networking Sites on University Students. *Pakistan Journal of Society, Education and Language (PJSEL)*, 9(2), 370-385.
- Orben, A., & Przybylski, A. K. (2019). Screens, teens, and psychological well-being: Evidence from three time-use-diary studies. *Psychological Science*, 30(5), 682-696.
- Sarfaraz, B., & Malik, A. A. (2023). The Standardization of the teacher's evaluation of student's conduct questionnaire in Hyderabad Pakistan. *Pakistan Journal of Educational Research*, 6, 3.
- Sarfaraz, B., Iqbal, S., & Iqbal, Z. (2022a). Urdu translation of Stirling children emotional and psychological well-being scale in Pakistan. *Pakistan Social Sciences Review*, 6(2), 815-822.
- Sarfaraz, B., Iqbal, Z., & Iqbal, S. (2022b). Perceived teacher rejection and psychological well-being of school age children in Pakistan. *Pakistan Journal of Educational Research*, 5, 2.
- Shinwari, M. N., Iqbal, H., Yasir, W., Akbar, S., Andleeb, I., & Jamil, M. N. (2023). Exploring the nexus between emotional intelligent and academic engagement of university students. *Journal of Positive School Psychology*, 1762-1772.