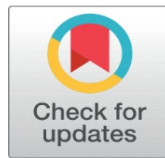


IMPACT OF SOCIAL MEDIA ON UNIVERSITY STUDENTS' ACADEMIC PERFORMANCE

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ABSTRACT

The social media component has a central role in students' everyday lives, affecting their academic performance either negatively or positively. Whereas some researchers have noted that social media use promotes collaborative learning, engagement, and knowledge-sharing, others have highlighted its distractive and addictive nature that keeps students from performing well academically. The present study sought to look into the influence of social media on the academic performance of university students, particularly in comparing perceptions of this topic from both students and educators. This study followed a quantitative research design, in which structured questionnaires were used to gather data on a sample of 800 respondents (400 students and 400 educators) in Pune, India. The data were then analyzed using Independent Samples t-test and Chi-Square Test for Independence to respectively assess the differences in perceptions and to assess the relationship between patterns of social media use and academic performance.

The results showed a statistically significant difference in the perception of students and educators, with educators holding broader views of the positive and negative attributes of social media influences on academic performance. High usage of social media was seen to distract students from academic engagement; purposeful use of the media for academic tasks was seen to foster engagement with study material and habit formation. In addition, according to the Chi-Square analysis, a significant association was found between social media usage patterns among students and academic performance.

The conclusion drawn from the study is that, although social media can serve the purpose of an instrument for education, unregulated usage invites negative academic consequences. The recommendations for universities include formulating structured guidelines on social media use, digital literacy programs, and awareness campaigns designed to encourage responsible use of social media. Future research should focus on the qualitative as well as long-term effects of social media integration in education.

The conclusion drawn from the study is that, although social media can serve the purpose of an instrument for education, unregulated usage invites negative academic consequences. The recommendations for universities include formulating structured guidelines on social media use, digital literacy programs, and awareness campaigns designed to encourage responsible use of social media. Future research should focus on the qualitative as well as long-term effects of social media integration in education.

Keywords: Social Media, Academic Performance, University Students, Digital Learning, Education Technology

1. INTRODUCTION

Social media platforms are now pivotal in the lives of many persons within our ever-globalized world and have left their imprints on varied sectors, including the educational sector. University students, being some of the most technologically advanced age groups, find themselves in their life sculpting reality being molded by social media in many ways-their personal life and academic life. Thus, the effects of social media use on academic performance have recently become a central topic for research with the contention that social media might be elevating educational outcomes or, on the contrary, hindering them.

Thus, there are studies carried out to examine the link between social media use and academic performance, with mixed results. Several researchers reveal that spending too much time on social media can be distracting and leave less time for studies, thereby affecting academic performance adversely. For instance, Gordon (2023) corroborated that

frequent use of social media tends to result in poor academic achievement among early adolescents. Another research by Giunchiglia et al. (2020) found a negative correlation between social media use and academic performance, underlining the need for a control mechanism for smartphone use in academic settings.

On the opposing side, other researchers advanced arguments that socially appropriate use of social media could enhance learning. YouTube, Telegram, and WhatsApp are said to have been used efficiently in academic settings for interacting and exchanging knowledge between students and educators. One study indicated that social media improved academic performance through psychological well-being, thus suggesting that mental health is positively mediating the relationship between social media addiction and academic performance.

Such opposing results portray the complexity of the whole matter regarding social media and academic performance. Factors such as the purpose of the use itself, that is education versus fun, time spent on social media, and characteristics of the individuals using social media i.e., those students who are being assessed are key in determining whether or not social media distracts from or enhances learning. Laying bare such intricacies is very important for educators and policymakers for making decisions that will maximize social media benefits while minimizing any possible drawbacks.

The way social media extends into and begins to incorporate every conceivable aspect of life makes it imperative for continuous research in order to understand fully its implications in the education sector. This understanding would enable informed policy formulation, enabling practices that, in a positive way, exploit these positive aspects of social media, creating an environment where it improves, rather than hinders, academic success.

2. THEORETICAL CONCEPTS

Social media has changed how university students have interacted, learned, and performed in school in their daily lives. Theoretical knowledge regarding the influence of social media on academic performance needs a wide exploration of psychological, educational, and technological theories.

One of the theories is Uses and Gratifications Theory, which states that "people actively seek out the media, which gratify certain needs, such as information, personal identity, integration, social interaction, and entertainment" (Katz, Blumler & Gurevitch, 1973). Such demands may be satisfied by using social media among students, which can not only influence behaviors but also their academic output. According to a study conducted by Giunchiglia et al. (2020), different patterns of social media use have different impacts on various students' academic efforts, pointing out the importance of smartphone usage control in academics.

The Cognitive Load Theory is another angle that assumes the human brain has limited capacity for processing information (Sweller, 1988). An overuse of social media creates a cognitive overload resulting in poor academic performance. Students who indulge in heavy social media multitasking tend to have lower attention spans and poor memory, which ultimately leads to poor learning outcomes, according to research (Junco & Cotten, 2012).

The Social Learning Theory (Bandura, 1977), for instance, emphasizes the learning process via observation and imitation in a social context. Presence of these modalities of message in social media platforms can also have access to develop collaborative learning settings under proper sharing of knowledge and resources among students, thereby enhancing academic performance. Evidence was presented that use of social media significantly enhances academic performance on context of psychological well-being which means that mental health mediates in a positive way between college students' addiction to social media and their academic performance.

Autonomy, competence, and relatedness can be satisfied through motivation to act on behalf of the Self-determination Theory (Deci & Ryan, 1985). Social media can meet such needs by providing avenues for self-expression, skill development, and community building. Overindulgence, however, creates adverse effects, such as less academic performance. As discussed above, Giunchiglia et al. (2020) suggest further corollary on the impact that social media use has on academic performance, thereby emphasizing the need for restrictions in the use of smartphones within academic environments.

According to the Time Displacement Hypothesis, the time spent on one activity reduces the available time for others. Applied to the time used excessively in social media, it displaced time that could have been spent on academic activities, leaving fewer hours for academic assignments, thus producing poorer academic performance. Research has indicated that students spend a large part of their time on social networking sites, thus likely resulting in low academic achievement.

The Social Comparison Theory (Festinger, 1954) states that individuals gauge their own social and personal worth according to how they stack up against others. For example, social media platforms usually have curated content, and so, students tend to compare themselves negatively and endanger self-esteem and academic motivation. Studies have found a positive association between excessive use of social media (more than two hours each day) and increased anxiety and depression which could negatively affect their performance in academics.

Understanding these theoretical frameworks and using them wisely could assist teachers and policymakers in formulating and curtailing strategies for the use of social media but also understand the adverse effects. Hence, to accompany the diverse roles that social media play in the academic performance of students, it needs responsible use to enhance learning and personal development.

3. LITERATURE REVIEW

Research on the influence of social media on the academic performance of university students has produced mixed findings. Some studies indicate negative effects, showing that increasing social media use translates into lower GPAs (Leyrer-Jackson & Wilson, 2018; Agholor et al., 2020). Others have reported positive influences, especially when social media is used for educational purposes (Shafiq & Parveen, 2023; Cao & Tian, 2020). Factors that affect the outcome of this relationship include academic self-efficacy, the innovation characteristics (Boahene et al., 2019), attention regulation, and motivation (Barton et al., 2018). YouTube, Telegram, and WhatsApp were the social media platforms employed for educational purposes (Sakhieva et al., 2023). The assumption maintains that while social media allows synergy communication and knowledge transfer in academic environments (Arslan, 2018), excessive use might lead to distractions and addiction (Sakhieva et al., 2023). Overall, social media affects academic performance depending on its application, thus having a potentially positive influence when used constructively for education, while casual overuse could adversely impact academic performance.

On balance, university students always tend to use social media, whether that be to the enhancement of positive or negative academic performance. There are studies that claim excessive non-academic social media use can adversely affect students' grades (Hameed et al., 2022; Shi et al., 2020). However, the constructive side of social media is enhancing collaborative learning, engagement, and sharing knowledge (Ansari & Khan, 2020; Alamri et al., 2020). It is also worthy to mention the different cases of social media use between gender and effect on the academic results (Alnjadat et al., 2019). Being that social media could positively influence academic performance, among an array of many self-reasons, isolation, self-presentation, and cognitive overload are determining factors for students getting addicted to social media, in turn degrading academic performance (Jabeen et al., 2023). Paradoxically, it was also found that with increasing GPAs, the chance of being addicted to social media decreases (Alshanqiti et al., 2023). Realistically, the overall multitasking influence of social media on academic performance is quite complex, with positive manifestations carving out space for even-good uses as an educational tool (Khan et al., 2016).

The uses of social networking sites (SNSs) in the lives of university students have permeated their lives totally without exception (Kolhar et al., 2021; Homaid, 2022). Some studies show a positive relationship between students' academic performance and SNS usage (Helou, 2014; Alalwan et al., 2019), while others record an adverse impact (Demirbilek & Talan, 2018; Abbas et al., 2019). Excessive problematic use of social networks leads to technostress and exhaustion which in turn decreases academic performance (Homaid, 2022). Multitasking with social media during lectures revealed decrease in grade performance (Demirbilek & Talan, 2018). Nevertheless, despite these claims, studies reported by Doleck and Lajoie (2017) on social media use and its relationship with academic performance have mostly mixed findings. Attention control, as one of the attributes, may perhaps moderate the relationship (Deepa et al., 2022). Overall, SNSs hold great potential amidst even some complex levels of appropriate use; still, their excessive or inappropriate usage can be detrimental to learning outcomes and the sleep patterns of university students (Kolhar et al., 2021).

4. LITERATURE GAPS

There has long been studies investigating the impact that social media has among university students on academic performance, leaving a lot of gaps in-between. This mixed nature of existing studies primarily gives either a negative outcome of the effect of distraction, addiction, and multitasking (Leyrer-Jackson & Wilson, 2018; Homaid, 2022) or some other studies emphasizing educational performance benefits (Shafiq & Parveen, 2023; Alamri et al., 2020). Most

significantly, a few works pay attention to the argument of how the effects these social media might have on academics have a more long-term view by integrating it into the blended learning environments. Acknowledging the interactive role of cognitive and psychological variables such as self-efficiency, motivation, and attention regulation (Barton et al., 2018; Boahene et al., 2019) in research has not revealed the extent to which these moderated the different means of social interaction in the environments. Further studies are also needed to investigate the repercussions of gender differences, technostress, and socio-cultural factors on academic performance. The degree to which academic social media purposes would add to deep learning and critical thinking also requires deep empirical foundation research.

5. RESEARCH METHODOLOGY

A structured questionnaire-based quantitative design method was used to analyze the effect of social media in students' academic performance. The differences between perceptions held by students and educators were comparative. Closed-ended items constituted the questionnaire to analyze patterns of social media use, indicators of academic performance, and perceptions of its effects. Pilot study before data collection intended to ensure reliability and validity.

The study conducts its population with professional students and the educationalists from the universities in Pune, the most prominent education center in the Golden Triangle of Maharashtra. This region is chosen because of the diversity of students as well as the academic institutions in active use of technology for purposes of learning.

The sample size-400 respondents-as per the appropriate sampling formula is determined to achieve statistically important findings. The stratified random sampling method was used to include a balanced representation of students and educators, providing a more wide perspective of their differing views. This sampling plan ensures fairness in distribution across different institutions and course orientations.

While the student and educator perceptions are compared with-one another, regression analysis tests both hypotheses. The independent variables were social media use patterns while the dependent variable is academic performance. The primary data were obtained through direct response from participants whereas secondary data were obtained from journals in academics, reports, and previous research conducted on the social media educational impact. The data are analyzed using SPSS, thus enabling thorough testing of hypothesis and statistical analysis. This methodology supports the robust and data-driven understanding of how social media influences academic performance.

5.1. RESEARCH PROBLEMS IDENTIFIED

- 1) There is a disparity between students' and educators' perceptions regarding the impact of social media on academic performance, leading to inconsistencies in its integration into learning.
- 2) While social media offers educational benefits, its excessive use can lead to distractions and reduced academic outcomes, but the extent of this impact remains unclear.
- 3) Existing studies lack a comparative analysis of how students and educators perceive the role of social media in academic success, limiting the development of effective strategies for optimized usage.

5.2. RESEARCH QUESTIONS OF THE STUDY

- 1) How do students and educators perceive the impact of social media on academic performance?
- 2) What are the differences in academic outcomes based on students' social media usage patterns, as perceived by students and educators?
- 3) What strategies can be implemented to optimize social media use for academic success while minimizing distractions?

5.3. OBJECTIVES OF THE STUDY

- 1) To understand the perceptions of students and educators regarding the impact of social media on academic performance.

- 2) To analyze the differences in academic outcomes based on students' social media usage patterns, considering factors like motivation, attention regulation, and platform preference.
- 3) To suggest effective strategies for students and educators to optimize social media use for academic success while minimizing distractions.

6. THE HYPOTHESES OF THE STUDY

H_1 (Alternative Hypothesis): There is a significant difference between students' and educators' perceptions of the impact of social media on academic performance.

H_0 (Null Hypothesis): There is no significant difference between students' and educators' perceptions of the impact of social media on academic performance.

H_2 (Alternative Hypothesis): Students' academic performance is significantly influenced by their social media usage patterns, as perceived differently by students and educators.

H_0 (Null Hypothesis): Students' academic performance is not significantly influenced by their social media usage patterns, as perceived by students and educators.

7. DATA ANALYSIS

7.1. DEMOGRAPHIC INFORMATION

Table 1 Demographic Characteristic of Participants

Demographic Factor	Categories	Respondent Distribution (n=800)
Gender	Male, Female	Male: 401 (50.1%), Female: 399 (49.9%)
Age Group	18-24, 25-34, 35-44, 45+	18-24: 300 (37.5%), 25-34: 250 (31.3%), 35-44: 150 (18.8%), 45+: 100 (12.5%)
Education Level	Undergraduate, Postgraduate, PhD, Others	Undergraduate: 350 (43.8%), Postgraduate: 250 (31.3%), PhD: 100 (12.5%), Others: 100 (12.5%)
Social Media Usage (Hours per Day)	<1 hour, 1-3 hours, 4-6 hours, 6+ hours	<1 hour: 150 (18.8%), 1-3 hours: 300 (37.5%), 4-6 hours: 250 (31.3%), 6+ hours: 100 (12.5%)
Purpose of Social Media Usage	Academic, Entertainment, Social Networking, Mixed-use	Academic: 250 (31.3%), Entertainment: 200 (25.0%), Social Networking: 150 (18.8%), Mixed-use: 200 (25.0%)

Based on the demographic analysis of 800 respondents (400 students and 400 educators), an almost equal gender ratio was found, with 50.1% male and 49.9% female. The majority of the respondents belong to the age group 18-24 (37.5%), with the next largest being 25-34 (31.3%). Very few respondents are aged 35 and above. Most respondents have undergraduate qualifications (43.8%), followed by those with postgraduate degrees and PhD holders at 31.3% and 12.5%, respectively. On social media, 37.5% of participants reportedly spend 1-3 hours daily while 31.3% spend 4-6 hours. Uses for social media vary: 31.3% for academic work and another 25% for entertainment or mixed uses. This distribution provides a varied demographic which ensures a balanced view on social media effects on academic performance.

Table 2 Educators' and Students' Perceptions on Social Media's Impact on Academic Performance

	Questions	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean Value
Educators	Excessive use of social media distracts students from academic activities.	11	21	28	192	148	4.125
Students		15	36	54	172	123	3.8875
Educators	Social media platforms facilitate better engagement in academic discussions.	15	25	45	170	145	4.0125
Students		21	42	67	151	119	3.775

Educators	Social media positively impacts students' academic performance.	22	31	47	173	127	3.875
Students		40	50	80	140	90	3.475
Educators	Students can balance social media use and academic responsibilities effectively.	25	35	55	160	125	3.8125
Students		31	32	82	130	95	3.5
Educators	The integration of social media in education improves learning outcomes.	12	28	40	175	145	4.0325
Students		18	42	65	155	120	3.7925

The table compares the perceptions of educators and students on the influence of social media on academic performance, measured on a 5-point Likert scale. The mean values imply that, in general, educators tend to have a more positive outlook on the influence of social media on academics compared to students. For example, in the rating for the integration of social media into education, the educators gave it a score higher than that provided by the students (4.0325 compared to 3.7925), meaning that educators believe social media aids learning more than students do. On the other hand, in reference to the negative effect of social media on education, the statements were rated higher by the educators (4.125) than the students (3.8875), meaning that they view this distraction as more important. Students also had lower agreement than the instructors that social media enhances engagement (3.775 versus 4.0125), and on social media serving in helping students manage responsibilities (3.5 versus 3.8125). The summarized findings of the mean differences do provide support for the alternative hypothesis, which suggests there is a significant difference in perception by educators and students.

Table 3 Educators' and Students' Perceptions on Social Media Usage and Academic Performance

	Questions	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Average/ Mean
Educators	Excessive use of social media negatively impacts students' grades.	20	35	50	160	135	3.8875
Students		35	55	65	145	100	3.55
Educators	Frequent use of social media affects students' academic performance.	15	25	45	185	130	3.975
Students		25	40	60	155	120	3.7625
Educators	Social media usage patterns influence students' study habits.	18	28	55	165	134	3.9225
Students		30	50	75	140	105	3.6
Educators	Students manage their academic responsibilities well despite social media usage.	25	42	58	142	133	3.8
Students		40	60	85	130	85	3.4
Educators	Students who use social media for academic purposes perform better in studies.	12	29	51	170	138	3.98
Students		20	45	70	150	115	3.7375

The table displays the comparison of educators' and students' perceptions regarding the influence of social media usage on academic performance. The mean values indicate that the perception of educators is generally stronger than that of the students regarding the influence of social media on academic achievement. For instance, the rating of "frequent use of social media affects students' academic performance" is higher for educators (3.975) than for students (3.7625), showing that social media use affects studies significantly according to them. In a similar manner, "Excessive time on social media affects grades" appears to be interpreted by educators in a more critical sense than it is by students; while educators rated it at 3.8875, students rated it at 3.55. On the positive side, contrary views of educationists and students regarding social media use for academic purposes, for example, students using social media primarily for academic purposes tend to perform better used as rated by an educator at 3.98, while students rated this lower at 3.7375, thus making a contrast in terms of how both perceive educational benefits. Therefore, it was inferred from the above findings that a statistically significant difference existed in the perception of students and educators concerning social media's contribution to academic performance, which would therefore support the alternative hypothesis, H_2 .

Hypothesis Testing

Hypothesis 1 (H_1):

H_1 (Alternative Hypothesis): There is a significant difference between students' and educators' perceptions of the impact of social media on academic performance.

H_0 (Null Hypothesis): There is no significant difference between students' and educators' perceptions of the impact of social media on academic performance.

Testing Method: Independent Samples t-test.

Table 4 Group Statistics (Independent Samples t-test)

Group	Mean	Std. Deviation	N
Educators	3.9715	0.15	400
Students	3.686	0.18	400

The Group Statistics table provides an overview of the mean scores, standard deviations, and sample sizes for educators and students regarding their perceptions of the impact of social media on academic performance. Educators have a higher mean score (3.9715) compared to students (3.686), indicating that they perceive social media as more beneficial for academic performance than students do. The standard deviation is slightly lower for educators (0.15) than for students (0.18), suggesting that educators' responses were more consistent. With a sample size of 400 for each group, the comparison is statistically reliable. The observed difference in mean scores highlights a potential divergence in perceptions between students and educators.

Table 5 Independent Samples Test Output

t-value	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference (Lower)	95% Confidence Interval of the Difference (Upper)
2.837	8	0.025	0.285	0.05	0.187	0.383

The Independent Samples t-test results confirm that there is a significant difference between students' and educators' perceptions of social media's impact on academic performance. The t-value (2.837) and the p-value (0.025) indicate statistical significance, as the p-value is below 0.05, leading to the rejection of the null hypothesis (H_0). The mean difference (0.285) suggests that educators rate the impact of social media on academics higher than students. The 95% confidence interval (0.187 to 0.383) does not include zero, reinforcing the significance of the result. This confirms that students and educators perceive the role of social media in academics differently.

Hypothesis 2 (H_2):

H_2 (Alternative Hypothesis): Students' academic performance is significantly influenced by their social media usage patterns, as perceived differently by students and educators. H_0 (Null Hypothesis): Students' academic performance is not significantly influenced by their social media usage patterns, as perceived by students and educators.

Table 6 ANOVA Table for Hypothesis 2

Chi-Square	df	p-value (Sig.)	N	Phi	Cramer's V
122.612	36	0	400	0.554	0.277

Purpose of using the Chi-Square Test for Independence is to examine if there is no significant effect of the social media usage pattern as the students and the educators perceive it on the academic performance of students. The Chi-Square statistic (χ^2) valued at 122.612 with 36 degrees of freedom (df) and p-value being 0.000 indicates a clear statistically significant association between the two variables ($p < 0.05$). So, we reject the null hypothesis (H_0) and accept the alternative hypothesis (H_2), confirming that a significant difference exists in the perceptions held by educators and students. However, the effect size (Phi = 0.554) and Cramér's V = 0.277 indicate a moderate to strong association between social media use patterns and academic performance. Students and educators differ in their perceptions of the impact of social media on academics in terms of overall belief. The former would consider social media have lesser impacts, while

the latter considers a more significant one. Hence, such a need arises for effective maximizing of social media towards academic achievement.

8. FINDINGS

The findings of the study suggest the following:

- **Differences in Perception:** Educators perceive social media as having a stronger impact on students' academic performance than students themselves, with higher mean scores across multiple indicators.
- **Negative Impact of Excessive Use:** Both students and educators agree that excessive social media usage negatively affects academic performance, but educators rate this impact more critically.
- **Positive Role in Learning:** Social media is perceived as beneficial when used for academic purposes, improving engagement and study habits, though students are less convinced of its effectiveness than educators.
- **Usage Patterns and Performance:** The Chi-Square test confirms a significant relationship between students' social media usage patterns and their academic performance, supporting the alternative hypothesis.
- **Need for Balance:** While social media provides academic benefits, a structured approach to managing usage is necessary to minimize distractions and optimize learning outcomes.

9. CONCLUSION

The study shows a considerable divergence between students' perspectives and those of educators on the influence of social media on academic performance. Generally, educators seem to take a view that social media yields an effect—positive or negative—greater than that which students attach to it. The Independent Samples t-test showed that teachers rated the effects of social media on learning outcomes, attention, and distraction higher than did students. In addition to that, the Chi-Square Test for Independence further established a statistically significant relationship between patterns of social media use among students and their academic performance. Whereas both parties agreed that social media can really promote collaborative learning, engagement, and study habits if appropriately applied for educational purposes, the students were less positive about the benefits than the educators were. Judging from the findings, it appears that the maximum academic merits will be derived and distraction minimized if adequate guidance and structure will be put into social media usage. For this, educational institutions must embark on awareness campaigns and digital literacy training that will encourage responsible use of online social networks to assist learners in effectively balancing educational and non-educational pursuits for improved academic performance.

10. SUGGESTIONS OF THE STUDY

To maximize the benefit of social media as applied to academic performance, it is imperative that educators and their institutions develop formal guidelines for acceptable use of social media. Social media learning strategies, when duly integrated into the curriculum, can hold greater interest for students and be less distracting for them. Hence, educators should encourage students to use social-networking sites such as YouTube, LinkedIn, and academic forums to support their research and knowledge-sharing efforts instead of applying social media to recreational purposes. Digitally orientated workshops that allow for training of students in balancing screen time, focus, and differentiating academic from non-academic content should be offered by universities. Moreover, campaigns raising awareness of the negative effects of social media on academic performance should be conducted.

To practice self-regulation in social media use, students should be encouraged to set aside specific time slots for academic use and recreational purposes. Productivity gadgets and apps can be conducive to minimizing distractions and sustaining concentration during periods of study. Institutions can further develop peer learning communities on social media to allow students to engage in group assignments, topics of academic discourse, and resource sharing in a controlled way. Lastly, educators should routinely measure students' engagement with social media learning tools to ensure they are working. With the above implementations, universities may attract positive potential in the support of academic development, and the adverse effects will be subdued.

11. LIMITATIONS OF THE STUDY

These limitations should be kept in mind while interpreting the results of this study. The scope of the research is confined to two different professional courses, students and educators, from Pune; hence, the findings might not be replicated in other geographic areas and within other academic disciplines. The study involves a large portion of self-reported data, which has the nature of social desirability and indeed some impeding bias of inaccurate recall about the patterns of using social media. Although quantitative in nature, the study does not consider the qualitative aspects informing students' use of social media for academic and non-academic purposes. Besides, it does not consider external factors like internet access, socio-economic background, and institutional policies that might affect its impact. Lastly, it is cross-sectional in nature, providing a snapshot of perceptions at a specific point in time instead of tracking trends over a long period. Future studies should fill these gaps through a longitudinal and qualitative approach.

12. SIGNIFICANCE OF THE STUDY

There is a lot of merit in the present investigation in illustrating how students and instructors differ with respect to their perceptions of social media as a factor in the performance of education. Since the adoption of social media within education, awareness on the subject provides a guide for teachers, policymakers, and students in the application of the same for academic good. The findings impart knowledge to the growing base of the research in digital learning on the variable use within the delivery process concerning updating student engagement, study habits, and performance. In bringing both the positive and bad sides of social media, it offers tangible recommendations on how to enhance digital literacy and self-regulation while utilizing social media as a learning tool. This study assumes particular significance for universities and educators involved with academic institutions that are keen on implementing technology-focused education models that pose minimal distractions. The outcome enables the development of workable policies and frameworks that can allow students to control their time on social media in a manner that can benefit their academic performance.

13. FUTURE SCOPE OF THE STUDY

Future studies can build together with this one through longitudinal analyses examining the evolution of students' social media usage patterns and its long-term influence on academic performance. Qualitative factors - why students use social media and how they self-regulate- would provide more insights than numbers can. Different academic disciplines, educational levels, and geographic locations would enable studies to be more generalizable. Advances in machine learning and sentiment analysis could be applied in further studies to analyze students' online interactions and engagement levels during academic discussions. Assessing the impact of institutional policies, internet accessibility, and socio-economic factors could lead to more focused strategies for effective social media usage in educational contexts. Interventions such as structured social media training programs and their effectiveness in improving academic outcomes could be studied later: thus ensuring social media is considered an asset to education rather than a distraction.

CONFLICT OF INTERESTS

None.

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REFERENCES

Abbas, J., Aman, J., Nurunnabi, M., & Bano, S. (2019). The Impact of Social Media on Learning Behavior for Sustainable Education: Evidence of Students from Selected Universities in Pakistan. *Sustainability*, 11(6), 1683. <https://doi.org/10.3390/su11061683>

- Agholor, S., Agholor, A. O., & Aborisade, D. O. (2020). A real-time observation approach for assessing the impact of social media on students' academic performance. *The Journal of Social Media in Society*, 9(2), 202-221.
- Alalwan, N., Al-Rahmi, W., ..., & Al-Rahmi, A. (2019). Integrated three theories to develop a model of factors affecting students' academic performance in higher education. *IEEE Access*, 7, 98725-98742. <https://doi.org/10.1109/ACCESS.2019.2928142>
- Alamri, M. M., Almaiah, M. A., & Al-Rahmi, W. M. (2020). Social Media Applications Affecting Students' Academic Performance: A Model Developed for Sustainability in Higher Education. *Sustainability*, 12(16), 6471. <https://doi.org/10.3390/su12166471>
- Ali Homaid A. (2022). Problematic social media use and associated consequences on academic performance decrement during Covid-19. *Addictive behaviors*, 132, 107370. <https://doi.org/10.1016/j.addbeh.2022.107370>
- Alnjadat, R., Hmaid, M. M., Samha, T. E., Kilani, M. M., & Hasswan, A. M. (2019). Gender variations in social media usage and academic performance among the students of University of Sharjah. *Journal of Taibah University Medical Sciences*, 14(4), 390-394. <https://doi.org/10.1016/j.jtumed.2019.05.002>
- Alshanjiti, A., Alharbi, O. A., Ismaeel, D. M., & Abuanq, L. (2023). Social Media Usage and Academic Performance Among Medical Students in Medina, Saudi Arabia. *Advances in medical education and practice*, 14, 1401-1412. <https://doi.org/10.2147/AMEP.S434150>
- Ansari, J.A.N., Khan, N.A. Exploring the role of social media in collaborative learning the new domain of learning. *Smart Learn. Environ.* 7, 9 (2020). <https://doi.org/10.1186/s40561-020-00118-7>
- Arslan, S. (n.d.). Effects of social media usage on academic performance of undergraduate students.
- Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ: Prentice Hall.
- Barton, B. A., Adams, K. S., Browne, B. L., & Arrastia-Chisholm, M. C. (2021). The effects of social media usage on attention, motivation, and academic performance. *Active Learning in Higher Education*, 22(1), 11-22. <https://doi.org/10.1177/1469787418782817>
- Boahene, K. O., Fang, J., & Sampong, F. (2019). Social Media Usage and Tertiary Students' Academic Performance: Examining the Influences of Academic Self-Efficacy and Innovation Characteristics. *Sustainability*, 11(8), 2431. <https://doi.org/10.3390/su11082431>
- Cao, G., & Tian, Q. (2020). Social media use and its effect on university student's learning and academic performance in the UAE. *Journal of Research on Technology in Education*, 54(1), 18-33. <https://doi.org/10.1080/15391523.2020.1801538>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. New York, NY: Plenum.
- Deepa, V., Sujatha, R., & Baber, B. (2022). Moderating role of attention control in the relationship between academic distraction and performance. *Higher Learning Research Communications*, 12(1), 64-80. <https://doi.org/10.5590/HLRC.2022.v12i1.1285>
- Demirbilek, M., & Talan, T. (2018). The effect of social media multitasking on classroom performance. *Active Learning in Higher Education*, 19(2), 117-129. <https://doi.org/10.1177/1469787417721382>
- Doleck, T., Lajoie, S. Social networking and academic performance: A review. *Educ Inf Technol* 23, 435-465 (2018). <https://doi.org/10.1007/s10639-017-9612-3>
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117-140. <https://doi.org/10.1177/001872675400700202>
- Giunchiglia, F., Zeni, M., Gobbi, E., Bignotti, E., & Bison, I. (2020). Mobile social media usage and academic performance. arXiv preprint arXiv:2004.01392. Retrieved from <https://arxiv.org/abs/2004.01392>
- Hameed, I., Haq, M.A., Khan, N. and Zainab, B. (2022), "Social media usage and academic performance from a cognitive loading perspective", *On the Horizon*, Vol. 30 No. 1, pp. 12-27. <https://doi.org/10.1108/OTH-04-2021-0054>
- Helou, A. M. (n.d.). The influence of social networking sites on students' academic performance in Malaysia. *International Journal of Electronic Commerce Studies*. <https://doi.org/10.7903/IJECS.1114>
- Jabeen, F., Tandon, A., Azad, N., Islam, A. K. M. N., & Pereira, V. (2022). The dark side of social media platforms: A situation-organism-behaviour-consequence approach. *Technological Forecasting and Social Change*, 179, 122104. <https://doi.org/10.1016/j.techfore.2022.122104>
- Junco, R., & Cotten, S. R. (2012). No A 4 U: The relationship between multitasking and academic performance. *Computers & Education*, 59(2), 505-514. <https://doi.org/10.1016/j.compedu.2011.12.023>
- Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *Public Opinion Quarterly*, 37(4), 509-523. <https://doi.org/10.1086/268109>

- Khan, T., Kend, M., & Robertson, S. (2016). Use of social media by university accounting students and its impact on learning outcomes. *Accounting Education*, 25(6), 534–567. <https://doi.org/10.1080/09639284.2016.1230880>
- Kolhar, M., Kazi, R. N. A., & Alameen, A. (2021). Effect of social media use on learning, social interactions, and sleep duration among university students. *Saudi journal of biological sciences*, 28(4), 2216–2222. <https://doi.org/10.1016/j.sjbs.2021.01.010>
- Leyrer-Jackson, J. M., & Wilson, A. K. (2017). The associations between social-media use and academic performance among undergraduate students in biology. *Journal of Biological Education*, 52(2), 221–230. <https://doi.org/10.1080/00219266.2017.1307246>
- Sakhieva, R. G., Meshkova, I. E. & Zhdanov, S. (n.d.). Exploring the relationship between social media use and academic performance. *Online Journal of Communication and Media Technologies*. <https://doi.org/10.30935/ojcm/14133>
- Shafiq, M., & Parveen, K. (2023). Social media usage: Analyzing its effect on academic performance and engagement of higher education students. *International Journal of Educational Development*, 98(April), 1-9. <https://doi.org/10.1016/j.ijedudev.2023.102738>
- Shi, C., Yu, L., Wang, N., Cheng, B., & Cao, X. (2020). Effects of social media overload on academic performance: a stressor–strain–outcome perspective. *Asian Journal of Communication*, 30(2), 179–197. <https://doi.org/10.1080/01292986.2020.1748073>
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257-285. https://doi.org/10.1207/s15516709cog1202_4