

Relationship Between Utilisation of Social Media and Academic Progress

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ABSTRACT The pervasive impact of social media on the academic lives of higher education students has stimulated interest in examining its effects on academic progress. The primary aim of this research was to explore the relationship between the utilisation of social media and academic progress. A survey method was utilised, whereby information was gathered from 102 higher education students via a Google Form. The collected data underwent analysis through various statistical methodologies including correlation, 't' test, and One-Way ANOVA with Post Hoc Test. The outcomes of the investigation demonstrated that the use of social media differed among distinct demographic categories, revealing specific trends linked to gender, academic standing, and field of study. Nevertheless, a statistically notable positive relationship was identified between social media utilisation and academic progress. This indicates that a conscientious and equitable interaction with social media platforms may positively influence the academic outcomes of students.

INTRODUCTION

Social media can have both positive and negative effects on student learning, and it is crucial to explore this relationship in depth (Nuraini et al. 2020). Social media's reach extends deeply into education, influencing how students learn both inside and outside the classroom, blurring the lines between formal and informal learning environments (Purnama and Asdlori 2023). The widespread utilisation of social media among students has ignited a significant discourse concerning its implications on academic achievement (Hosen et al. 2021). In a period characterised by extensive digital interconnectedness, students are progressively interacting with platforms like Facebook, Twitter, Instagram, and TikTok for various purposes such as communication, entertainment, and acquiring information (Fernandez-Rovira and Giraldo-Luque 2021). The prevalent adoption prompts crucial inquiries regarding the potential impact of social media usage on students' learning routines, ability to concentrate, and overall academic results (Manca 2020). Certain scholars posit that social media can function as a beneficial educational instrument, granting access to educational materials and cultivating collaborative learning settings. Conversely, some emphasise possible disadvantages, such as disturbances, decreased study time, and the risk of attenuated academic concentration (Tess 2013). The dynamic landscape

of social media usage among students has sparked debates on its effects on academic performance. With the pervasive presence of platforms like Facebook, Twitter, Instagram, and TikTok in students' daily lives, concerns arise about how these interactions impact their learning habits and educational outcomes (Chen and Bryer 2012). While social media is a valuable educational tool that enhances access to learning resources and fosters collaborative learning environments, others highlight potential drawbacks such as distractions, reduced study time, and compromised academic focus (Baytiyeh 2021; Scott and Goode 2020). Understanding the nuanced relationship between social media usage and academic achievement is essential for navigating the complexities of modern education in the digital age (Demekke 2024). The study found high engagement rates with Telegram, YouTube, and WhatsApp as the most commonly used platforms. Many students reported using these platforms for educational purposes, especially YouTube and Telegram (Sakhieva et al. 2024). The study revealed a strong positive correlation between academic performance and social media usage, indicating that a significant proportion of participants utilised social media platforms to enhance their scholastic achievements (Iqbal and Safdar 2023). The significant connection, with Robert emphasising the role of social media in influencing academic performance and Kazam

highlighting the potential for both positive and negative impacts (Robert 2020; Kazam et al. 2022). The dual impact of social media, with positive effects on academic performance in both urban and rural areas, as well as negative consequences (Shahid et al. 2023). The study found no significant correlation between social media usage and academic performance (Dimacangun and Guillena 2023). Students often use social media during lectures, which affects their concentration and may hinder their academic performance (Calunsag and Calunsag 2023). Research suggests a significant link between social media use and the academic performance of students (Rana et al. 2023). Students who engaged in academically-oriented social media use tended to experience positive effects on their academic performance (Mugambo and Kiwango 2024). Social media use has a significant impact on student academic performance (Sharma and Behl 2022). The examination of the impact of social media on academic achievement indicates that several social media elements exhibit a positive correlation with academic performance (Goet 2022). The analysis highlights areas where further investigation is necessary to gain a comprehensive understanding of the influence of social media in the realm of higher education. This research distinguishes itself from previous studies in terms of its focus, demographics, and sample size, thus setting it apart from existing literature. This study delves into the relationship between social media usage and academic performance among students in higher education.

Objectives

The objectives of this research were:

1. To find out the relationship between utilisation of social media and academic progress of higher education students.
2. To study the differences in utilisation of social media with respect to gender, locality, year of study, medium of learning, and graduation level on academic progress.

Hypotheses

The study aimed to assess the following hypotheses:

1. There is no significant relationship between utilisation of social media and academic progress of higher education students.

2. There is no significant difference between the mean scores of gender, locality, medium of learning and level of graduation in terms of utilisation of social media.
3. There is no significant difference in the mean scores of utilisation of social media among higher education students in different years of study.
4. There is no significant influence of utilisation of social media on academic progress of higher education students.

METHODOLOGY

To study the relationship of utilisation of social media and academic performance among higher education students, the researcher employed the Survey Method. A structured rating scale was meticulously crafted using Google Forms to facilitate ease of distribution and data collection. Participants were higher education students located in the Tehri Garhwal District, Uttarakhand State, India. The survey aimed to capture a range of responses that articulate the frequency, duration, and purpose of utilisation of social media, alongside its perceived effect on academic progress.

Sample

The sample for the present study was chosen utilising a stratified random sampling technique. This approach was adopted to ensure that every higher education student in Tehri Garhwal District had an equal opportunity to be included in the study, thereby maintaining a representative sample. As shown in Table 1, the sample comprises 102 higher education students selected for the study.

Tool

Social media and its effect on academic achievement is therefore a systematic method, which aims at defining the links and interconnection between the use of the social media platforms and academic achievement by students. This tool consists of 30 statements, which are divided into two areas wherein the first part concerns the use of social media and the second part addresses the performance in school. One of the segments aimed at social media usage focuses on different aspects of students' experience of using social media in an academic context that includes collaboration, knowledge search, and

Table 1: Distribution of sample

Demographic variable	Category	Number Institution	Percentage	Name of the
Gender	Male	N=48	47.1	P.G Degree College, Tehri Garhwal; H.N.B Garhwal Central University, S.R.T Campus
	Female	N= 54	52.9	
Medium of learning	English	N= 77	75.5	
	Hindi	N= 25	24.5	
Locality	Rural	N= 55	53.9	
	Urban	N= 47	46.1	
Level of graduation	UG	N= 41	40.2	
	PG	N= 61	59.8	
Year of study(B.A/B.Ed/ B.Com/M.Sc/M.A)	First Year	N=40	39.2	
	Second Year	N=45	44.1	
	Third Year	N=17	16.7	

Source: Data collected in the month of March and April, 2024 at Tehri Garhwal, Uttarakhand

communication with teachers. On the other hand, the academic performance division measures how social media is likely to be perceived on students' study schedule, teamwork ability, concentration, and performance. Every statement under the scenario is rated using the Likert scale, which ranges from Strongly Disagree, Disagree, Neutral, Agree to Strongly Agree. This method of scoring enables one to dissect how students' interactions on social media affect their grades. The validity of the tool was given to experts in the field of educational technology and social media education to obtain their comments and opinions. The scale demonstrated good reliability with a coefficient of $r = 0.79$, determined through the test-retest method.

Data Collection

A Google Form was circulated among the higher education students. The survey link was distributed through academic networks, including online class forums, institutional email, and direct communication to potential respondents, ensuring a comprehensive reach across the student population. Participants were given the opportunity to complete the survey at their convenience, allowing for flexible participation.

Data Analysis

H01: There is no significant relationship between utilisation of social media and academic progress of higher education students.

Table 2 reveals a statistically significant positive correlation coefficient of 0.43, which shows

that there is a moderate positive relationship between utilisation of social media and academic progress among the sample population. This implies that as social media use increases, academic performance tends to improve. However, it is important to recognise that correlation does not imply causation. Other factors not considered in this analysis may influence both utilisation of social media and academic progress.

Table 2: Relationship between utilisation of social media and academic progress

	Utilisation of social media	Academic progress
Utilisation of Social Media	1	.43** .00
Academic Progress	102 43** .00 N=102	102 1

H02: There is no significant difference between the mean scores of gender, locality, medium of learning and level of graduation in terms of utilisation of social media.

Table 3 reveals that there is no significant difference found with respect to gender and locality. The calculated t-value for medium of learning is 2.89, which is significant at 0.01 level, indicating that researchers reject the null hypothesis. Hence, there is a noteworthy difference between the mean scores of students who use social media in Hindi medium compared to those who use it in English medium. Specifically, students who

Table 3: Utilisation of social media with respect to gender, locality, medium of learning and graduation level

Variable	N	Mean	SD	df	t-value	p-value
Male	48	55.10	5.06	100	1.84	.07
Female	54	53.31	4.73			
Urban	47	53.57	5.41	100	1.09	.27
Rural	55	54.65	4.51			
English	77	53.38	5.09	100	2.89	.01*
Hindi	25	56.56	3.59			
UG	41	55.80	4.78	100	2.85	.01*
PG	61	53.05	4.79			

*Significant difference

use social media in Hindi medium tend to have higher mean scores. The calculated t-value for graduation level is 2.85, which is significant at 0.01 level, indicating that researchers reject the null hypothesis. Hence, there is a noteworthy difference between the mean scores of UG and PG students' social media use. Specifically, UG students tend to have higher mean scores when it comes to utilisation of social media.

H03: There is no significant difference in the mean scores of utilizations of social media among higher education students in different years of study.

Table 4 reveals that F value is 2.42 and the significance value of 0.09 indicates that the difference in utilisation of social media between the three groups (First Year, Second Year, and Third Year) is not statistically significant at the typical alpha level of 0.05. In other words, researchers accept the null hypothesis, suggesting that the mean score of utilisation of social media is not significantly different among students in different years of study.

H04: There is no significant influence of utilisation of social media on academic progress of higher education students.

Table 5a: Post Hoc Tukey Test

Academic progress	N subset for alpha = 0.05		
	N	1	2
Low	26	43.5	
Average	25	50.41	
High	51		57.5

Table 5 reveals that F-value is 9.38 and the p value of .00 indicates that the difference in academic progress between the three groups (Low scores below 46.26, Average scores between 46.26 and 55.86, and High scores above 55.86 social media use) is statistically significant at 0.01 level. Researchers reject the null hypothesis that there is a significant difference in the mean score of academic progress among higher education students with different levels of utilisation of social media. The Tukey post-hoc test results are also

Table 4: Utilisation of social media with respect to year of study

	Sum of squares	df	Mean square	F	Sig.
Between groups	115.675	2	57.837	2.42	.09
Within groups	2361.816	99	23.857		
Total	2477.490	101			

Table 5: Utilisation of social media and academic progress of higher education students

	Sum of squares	df	Mean square	F	Sig.
Between groups	374.16	2	187.08	9.38	.00
Within groups	1973.48	99	19.93		
Total	2347.64	101			

provided in Table 5a. The means for the three groups are low = 43.5, average = 50.41 and higher = 57.88. The overall ANOVA result indicates that there are significant differences in the mean values of academic progress among these groups.

DISCUSSION

Similar to the studies by Sakhieva et al. (2024), Iqbal and Safdar (2023), and Kyaw et al. (2024), Zavala et al. (2023), Javeed (2023), Goet (2022), and Uddin et al. (2022), found significant positive correlation between utilisation of social media and academic performance. This suggests that responsible and balanced engagement with social media can have educational benefits for students. However, the study adds nuance to this relationship by considering various demographic factors and their interactions with social media usage patterns. In contrast to the studies by Ahmad et al. (2023), Asanga et al. (2023), Castillas (2023), Calunsag and Calunsag (2023), Peter et al. (2023), Iqbal and Safdar (2023), Shiraly et al. (2024), Zhao (2023), Bhosale and Biswas (2022), and Suganya et al. (2020), did not find a significant correlation between utilisation of social media and academic progress when controlling for other variables. This discrepancy could be attributed to differences in sample characteristics, cultural contexts, or the specific measures used to assess the utilisation of social media and academic progress. Further research is needed to replicate and extend these findings.

The study found that the positive impacts of social media in higher education settings appeared to be higher than the negative impacts, and student achievement was high (Bankawat 2024; Gumabay et al. 2024). However, a considerable number of students engage with social media predominantly for recreational purposes, which may result in diversions and ineffective time management, thereby adversely influencing academic outcomes (Swathi and Kumar 2024; Adhikari 2024). Elevated levels of involvement with social media can precipitate dependency, thereby undermining students' capacity to concentrate during academic study periods (Khan 2024). Additionally, social media broader impact both academic progress and psychological well-being of the learners was highlighted in the study by Mosharrafa et al. (2024). This is similar to the

study by Thapa et al. (2023) and Shahzad et al. (2022), who found no significant influence of social media practice on academic progress when considering well-being as a mediating factor. However, the study did identify a significant difference in utilisation of social media with respect to gender, which was not explored in Thapa et al.'s (2023) research. This highlights the need to further investigate gender-specific patterns of usage and their potential impacts on well-being and academic outcomes. Moreover, the investigation conducted by Aswad and Hassan (2024) highlights the adverse consequences associated with excessive engagement in social media, particularly when intensified by insufficient parental oversight. Their results correspond with existing literature indicating that although social media may provide educational advantages, unregulated engagement frequently results in poor time management and can detrimentally impact academic achievement, thereby further complicating the intricate relationship between social media utilization and academic performance.

CONCLUSION

This study unveiled a favourable connection between the utilisation of social media and academic performance, indicating that students who interact with social media responsibly have the potential to enhance their academic performance. Variations in the usage patterns of social media were identified in the study, depending on gender, medium of instruction, and graduation level. These discoveries underscore the intricacy of the association between social media and academic performance.

RECOMMENDATIONS

Educational institutions should incorporate social media literacy and digital citizenship programs into their curricula. These programs should aim to teach students about responsible and productive social media use, including time management, privacy settings, and critical thinking skills to evaluate online content. Educators can utilise social media platforms to create online learning communities and extend classroom discussions beyond traditional hours. This can enhance student engagement, foster collaborative learning,

and provide additional avenues for academic support. Institutions should develop guidelines and policies that encourage responsible social media use among students. These guidelines should emphasise the appropriate use of social media during class or study time, promote positive online interactions, and discourage cyberbullying or inappropriate behaviour. Educators and parents should work together to monitor students' social media usage and provide guidance on healthy habits. This encompasses aiding students in comprehending the potential ramifications of excessive utilisation of social media and urging them to uphold a harmonious lifestyle that integrates face-to-face social engagements, physical exercise, and sufficient rest. Educational institutions ought to offer assistance and instruction to enable students to utilise social media efficiently for academic objectives, including networking, accessing digital materials, and engaging in virtual conversations pertinent to their academic discipline.

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