

Investigating the Relationship between Personal Factors and Students' Perception Regarding Social Media's Usage Impact on Academic Performance

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ABSTRACT

In many developing countries, such as India, access to technology through computers, laptops, and mobile devices has rapidly increased. The exponential growth in smart phone usage has led to 5.24 billion active users of social media worldwide. Social media has become an essential part of everyone's life irrespective of age, gender, and occupation. For students, it allows them to stay engaged for extended periods and exposes them to innovative methods of learning that go beyond the limitations of traditional classrooms. Social media platforms have also opened avenues for continued communication between teachers and students beyond regular college hours. However, an important question arises: Can this unrestricted interaction between teachers and students or among students themselves, on social networks truly contribute to improved student academic performance for all or there is difference in such contribution based on personal factors of students? The objective of the present study is to find out the relationship between personal factors of students and their perception about social media's usage impact on their academic performance. A sample of 235 students was chosen for data collection from the various public and private colleges in Punjab. The present study concludes that among the various personal variables, gender and time spent on social media significantly influence overall satisfaction with social media as a preferred learning tool. Therefore, there is a need for a well-structured system within higher educational institutions to positively reshape students' attitudes, particularly among male students, toward the productive use of social media for improving academic performance.

Keywords: Academic Performance, Personal Factors, Satisfaction, Social Media, Technology.

Introduction

The digital revolution has significantly transformed our way of living, with technology now playing a vital role in almost every aspect of daily life (Anderson & Horrigan, 2016). In many developing countries, such as India, access to technology through computers, laptops, and mobile devices is rapidly expanding. This trend is expected to grow at an even faster pace soon. As a result of this increasingly tech-friendly environment, the demand for the latest gadgets continues to rise. Smartphone usage has grown exponentially, as they are now seen as convenient and preferred tools for accessing the Internet (Anderson & Horrigan, 2016).

As of February 2025, there are approximately 5.56 billion internet users across the world and 5.24 billion are actively using social media. These social media users are about 63.9% of the Earth's population. These statistics are an authentic proof of the supremacy of social media in human lives. Social media has become an essential part of everyone's life irrespective of age, gender and occupation. It has changed the way people communicate; as the doors of communication are wide open now.

For students, this widespread access to technology has sparked a new awareness of learning opportunities and even impact their learning approaches. It allows them to stay engaged for extended

periods and exposes them to innovative methods of learning that go beyond the limitations of traditional classrooms. Today's students are more curious and proactive, eager to explore new knowledge and uncover hidden information. They are now forming online communities to share content and build virtual interpersonal relationships. Social media platforms have also opened avenues for continued communication between teachers and students beyond regular college hours—something not typically possible in conventional classroom settings (Hamid, Waycott, Kurnia, & Chang, 2015). Even educators have been making continuous efforts to make lessons more engaging and interactive by incorporating audio visual aids, recorded lectures, and virtual classes as alternatives to traditional classroom teaching (Kaware & Sain, 2015; Westera, 2015).

However, an important question arises: Can this unrestricted interaction between teachers and students or among students themselves, on social networks maintain the authenticity and integrity of the teaching-learning process? And will it truly contribute to improved student academic performance for all or there is difference in such contribution based on personal factors of students? (Hershkovitz & Forkosh-Baruch, 2013).

Thus, the objective of this study is to find out the differences in students' perceived satisfaction about social media's usage impact on their academic performance based on their personal factors in selected higher education institutes of Punjab.

Literature Review

Gender is a commonly examined variable in social media research. The study of Mazman & Usluel (2011) concludes that females use social media for fulfilling academic objectives, and other intents whereas males use this medium primarily to establish new relationships. According to study of Al-Rahmi, Othman, & Yusuf (2015) female students tend to use social media more for academic collaboration and maintaining educational connections, while male students often engage more in entertainment-related use. This difference influences perception; female students are more likely to perceive social media as a productive academic tool compared to their male counterparts. Another research by Krasnova et al. (2017) revealed that in case of male students, social media is primarily for entertainment, while females use it for communication and information purposes. Alghamdi and Plunkett (2018) in their study among postgraduate students revealed that both genders feel the existence of a modest degree of relation between social media usage and academic purposes. The study concluded that the impact of social media is more positive than negative when correlated with academic performance.

Mazman & Usluel (2010) found that students from different academic levels and disciplines use and perceive social media differently. For example, students in the humanities and social sciences often find social media useful for discussion and content sharing, while students in technical and science disciplines may not perceive it as academically beneficial. Jones et al., 2010 highlighted that social media technology is used in undergraduate learning but there is reluctance to make it a part of formal curriculum. Dahlstrom et al. (2015) in their study on undergraduate and post graduate students revealed that undergraduate students use social media for diverse functions. They use technology for academics and even other contexts. Alwagait, E., Shahzad, B. & Alim, S. (2014) found a positive correlation between social media usage and the academic performance of postgraduate students. Research results of Maqableh M., Rajab L. et.al. (2015) showed that there was a significant impact of Social Network Sites (SNS) on the student's academic performance. Also, there was a significant impact of SNS use per week on the student's academic performance.

According to Asemah & Okpanachi (2013) students' engagement with social media influences their academic performance. Acheaw & Larson's (2015) reported that there was a positive association between social media usage and academic success. Amin et al. (2016) in his study found that the students who use social media to interact, create ideas and develop insights related to their study by allocating much of their time are exhibiting good academic results.

Based on literature review, following hypotheses have been formulated for the present study:

- H₁:** The gender of the student has significant effect on students' perception of social media's usage impact on academic performance.
- H₂:** The type of college has significant effect on students' perception of social media's usage impact on academic performance.

H₃: The time spent on social media by student has significant effect on students' perception of social media's usage impact on academic performance.

H₄: The academic level of student has significant effect on students' perception of social media's usage impact on academic performance.

Research Methodology

- **Scope of the Study and Sample Size**

Descriptive research design is used in this study and the scope of the present study is limited to state of Punjab. The universe of the study is the students of different colleges in Punjab state. Among the various public and private colleges in Punjab, a sample of 235 students was chosen for data collection.

- **Design of Questionnaire**

A self-structured questionnaire is prepared and used to collect the data. The questionnaire has been divided into two parts - the first part relates to the demographic profile of the respondents and the second part of questionnaire includes statements relating to overall satisfaction of students relating to social media usage on their academic performance with responses ranging from strongly disagree to strongly agree on seven-point scale (where 1 represent strongly disagree to 7 represent strongly agree).

- **Data Collection**

The online questionnaires were distributed among college going students who use social media sites for their studies. A sample of 235 students studying in different colleges of Punjab was selected for the study.

- **Tools and Techniques**

Descriptive analysis was done by calculating frequency and percentages (Table 1). The Independent Sample T-test and one way ANOVA was used to determine the differences in overall satisfaction of students based on personal variables (Table 2 (a) & (b)).

Data Analysis and Interpretation

- **Demographic Profile**

The demographic profile of the respondents in Table1 shows that 35.3% respondents were male and 64.7% were female. According to academic level, 61.8% respondents were of under graduate students followed by 26.8% was found to be of post graduate students; merely 11.4% were doing diploma or other courses. Moreover 41.5% of students belong to public or govt. and 58.5% belong to private colleges. Majority of students i.e. 45% of respondents use social media sites less than 5 hours in a week for their studies.

Table 1: Demographic Profile of Respondents

Particulars	Classification	Frequency	Percentage
Gender of Student	Male	83	35.3
	Female	152	64.7
Type of College	Public	97	41.5
	Private	138	58.5
Academic Level	Under Graduate	145	61.8
	Post Graduate	63	26.8
	Others	27	11.4
Weekly Usage of social media for Studies	Less than 5 hours	106	45.0
	5 to 10 hours	87	37.0
	More than 10 hours	42	18.0
Sample Size		235	100

Source: Primary Data, 2024

- **Relation between Personal Factors and Students' Perception of Social Media Usage Impact on Academic Performance**

T-test results in table 2(a) show that gender does have significant effect on students' perception of social media's usage impact on academic performance, $t_{233} = -2.785$, $p < .05$. Hence, alternate hypothesis H₁ is not rejected.

T-test results in table 2(a) show that type of institution does not have significant effect on students' perception about social media's usage impact on academic performance, $t_{233} = -1.709$, $p > .05$. Hence, alternate hypothesis H2 is rejected.

Table 2(a): Personal Factors and Students' Perception of Social Media Usage Impact on Academic Performance (T-test)

Factors	Categories	N	Mean	Std Dev	T Value	P-Value
Gender	Male	83	5.00	1.775	-2.785	.006*
	Female	152	5.63	1.544		
Type of College	Public	97	5.22	1.821	-1.709	.089
	Private	138	5.59	1.493		

Source: Primary Data, 2024; *Significant at 5 percent level of Significance

Table 2 (b): Personal Factors and Students' Perception of Social Media Usage on Academic Performance (ANOVA)

Factors	Source of Variation	SS	DF	MS	F value	P-Value
Weekly Usage of Social Media for Studies	Between Groups	17.609	2	8.805	3.326	.038*
	Within Groups	614.118	232	2.647		
	Total	631.728	234			
Academic Level	Between Groups	3.209	2	1.604	.592	.554
	Within Groups	628.519	232	2.709		
	Total	631.728	234			

Source: Primary Data, 2024; * Significant at 5 percent level of significance

The results of ANOVA in table 2(b) depicts that there is a significant relation between time spent on social media sites for studies on students' perception regarding social media's usage impact on academic performance in selected colleges of Punjab, $F(2, 232) = 3.326$, $p < .05$. Hence, alternate hypothesis H3 is not rejected.

Table 3: Post Hoc Multiple Comparison for the difference in Students' Perception of Social Media Usage Impact on Academic Performance on the basis of Time Spent on Social Media by Students (Tukey HSD)

Dependent Variable	Social Media Usage (I)	Social Media Usage (J)	Mean Difference (I-J)	Std. Error	Sig.
Overall Satisfaction	Less than 5 hours	5-10 hours	.447	.234	.138
		More than 10 hours	-.296	.304	.594
	5 to 10 hours	Less than 5 hours	-.447	.234	.138
		More than 10 hours	-.743*	.314	.049*
	More than 10 hours	Less than 5 hours	.296	.304	.594
		5-10 hours	.743*	.314	.049*

Further the mean perception of academic performance of students across the two categories of time spent on social media by students varies significantly in selected colleges of Punjab. Post hoc comparisons in Table 3 indicates that mean score of students who use social media for 5 to 10 hours (5.10) is significantly different from those who use social media for more than 10 hours ($M = 5.85$) for studies. The results of ANOVA in table 2(b) depicts that there is no significant relation between academic level of students on students' perception regarding social media's usage impact on academic performance in selected colleges of Punjab, $F(2, 232) = .592$, $p > .05$. Hence, alternate hypothesis H4 is rejected.

Discussion and Implications

The results of t-test and ANOVA indicate that out of four personal variables, gender and weekly time spent on social media for studies have significant impact on students' perception of social media's usage impact on their academic performance. Female students were found to have higher satisfaction than male students. The results are like the results of previous studies of Al-Rahmi, Othman, & Yusuf (2015). The time spent on social media has significant effect on students' perception of social media usage on academic performance. The students who spent more time on social media for studies are more satisfied regarding their academic performance. The results agree with previous studies undertaken by researchers (Asemah & Okpanachi, 2013; Acheaw & Larson's, 2015).

The present study concludes that among the various personal variables, gender and time spent on social media significantly influence overall satisfaction with social media as a preferred learning tool. Therefore, there is a need for a well-structured system within higher educational institutions to positively reshape students' attitudes, particularly among male students, toward the productive use of social media for improving academic performance.

Limitations and Future Direction for Research

This study has certain limitations that could become an insight for future research. Due to time constraints, the research was limited to a few cities in Punjab. Future studies could expand the scope to include regions from other states across India for broader insights.

Secondly, the data was collected through self-reported questionnaires, which may have introduced response bias. Future research could incorporate open-ended feedback to gain a deeper understanding of participants' perspectives.

Lastly, future studies could also explore how personal factors influence not only students' satisfaction but also teachers' achievement and satisfaction related to social media use in the academic context.

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