



The impact of social media on academic performance among secondary school students

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Abstract

Social media has become an integral part of daily life for secondary school students, with platforms such as WhatsApp, Instagram, YouTube, and Snapchat widely used for communication, entertainment, and, increasingly, education. While these platforms offer opportunities for collaborative learning, access to educational resources, and peer interaction, excessive use—especially for non-academic purposes—may negatively affect academic performance. This research paper explores the impact of social media usage on the academic performance of secondary school students. A quantitative research design was used; surveying 50 students aged 13 to 17 from three different schools. Data were collected on the duration, purpose, and patterns of social media use and correlated with students' academic performance. The findings revealed that while many students use social media for entertainment and chatting, a smaller percentage utilize it for academic purposes. A moderate negative correlation was found between total time spent on social media and academic achievement. The study concludes that the effects of social media on academic performance are both positive and negative, depending on how and why it is used. It recommends digital literacy programs and conscious efforts by parents and educators to promote balanced usage that supports students' academic success.

Keywords: Social media, digital literacy, communication, academic performance, entertainment

Introduction

In the digital era, social media has emerged as a transformative force, influencing nearly every aspect of daily life—especially among adolescents. Platforms such as WhatsApp, Instagram, YouTube, Snapchat, and Facebook have become deeply embedded in the routines of secondary school students. These platforms offer unprecedented opportunities for interaction, self-expression, entertainment, and increasingly, educational engagement. As students navigate school life alongside their digital identities, questions have arisen regarding the influence of these platforms on their academic performance (Boyd, 2014). Adolescents today are often referred to as “digital natives” (Prensky, 2001), having grown up in a world dominated by digital communication tools. While social media can support learning by providing access to academic resources, peer support, and collaborative learning environments, its excessive use also presents risks. Research suggests that overuse of social media may contribute to distraction, reduced concentration, procrastination, and even sleep disturbances, all of which can adversely affect academic outcomes (Paul, Baker, & Cochran, 2012).

On the other hand, social media platforms also offer educational value. For instance, YouTube provides instructional videos, while WhatsApp and Telegram support real-time communication for group projects and classroom updates. When used constructively, these platforms can foster student engagement, build digital literacy, and enhance collaborative learning experiences (Junco, 2012)^[1]. Despite these competing perspectives, there remains a lack of consensus regarding the overall impact of social media on academic performance—particularly among secondary school students. Most existing studies focus on college populations, overlooking the unique behavioural patterns and academic challenges faced by younger students (Kirschner & Karpinski, 2010)^[2]. Secondary school students are in a developmental phase characterized by increased sensitivity to peer influence, limited self-

regulation skills, and a growing academic workload, making them particularly vulnerable to the distractions posed by unregulated digital use.

This study aims to investigate the extent to which social media usage affects academic performance among secondary school students. It explores students' usage habits, the purpose of use (educational or recreational), the time spent on social media daily, and how these variables correlate with academic outcomes. The findings are intended to inform educators, parents, and policymakers about the benefits and challenges associated with social media use in adolescence and to propose strategies for balanced and productive digital behaviour.

Social Media

Social media refers to a collection of internet-based platforms and technologies that enable users to create, share, and interact with content and one another in real time. These platforms facilitate communication, collaboration, and community-building through text, images, audio, and video formats. Popular examples include Facebook, Instagram, WhatsApp, Snapchat, Twitter (X), YouTube, and TikTok, all of which allow users to publish content, engage in conversations, and form digital networks.



From a research perspective, social media is distinguished by its interactive nature, user-generated content, and algorithm-driven feed systems that personalize user experiences. Unlike traditional media, which is one-directional, social media promotes two-way communication and active participation, often blurring the lines between content creators and consumers (Kaplan & Haenlein, 2010).

In educational contexts, social media offers potential as a tool for learning, resource sharing, academic discussions, and collaborative work. However, its impact on students, especially adolescents, can vary significantly depending on the purpose, frequency, and duration of use. Understanding social media in both its technological and behavioural dimensions is essential for evaluating its role in academic performance, particularly among secondary school students.

Academic Performance

Academic performance refers to the level of achievement students attain in their educational pursuits, commonly measured through grades, test scores, class participation, and overall scholastic success. It reflects a student’s understanding of academic content, ability to apply knowledge, and consistency in completing academic tasks. Academic performance is influenced by factors such as motivation, learning environment, study habits, cognitive abilities, and external influences like family and social media use. In educational research, it serves as a key indicator of student learning outcomes and institutional effectiveness, especially when analysing the impact of behavioural or technological factors on student success.

Review of Related Literature

Numerous studies have examined the relationship between social media usage and academic performance, especially among adolescents. Junco (2012) ^[1] found that when used constructively, platforms like Facebook can promote student engagement and facilitate academic interaction. Similarly, Tess (2013) suggested that social media tools, including blogs, wikis, and networking sites, can enhance collaborative learning and resource sharing when integrated into educational settings. However, excessive and recreational use of social media has been linked to negative academic outcomes. Kirschner and Karpinski (2010) ^[2] reported that students who frequently use Facebook tend to have lower GPAs compared to non-users. Paul, Baker, and Cochran (2012) further highlighted that high usage of online social networking leads to academic procrastination, reduced study time, and diminished academic focus. In the context of secondary school students, the impact is particularly significant due to their developing cognitive and self-regulation abilities. Boyd (2014) emphasized that adolescents are more susceptible to online peer influence, which may distract from academic priorities.

Objectives of The Study

1. To compare the academic performance among male secondary school students having high and low level of social media.
2. To compare the academic performance among female secondary school students having high and low level of social media.
3. To study the relationship between social media and academic performance among secondary school students.

Hypotheses of The Study

1. There is no significant difference academic performance among male secondary school students having high and low level of social media.
2. There is no significant difference academic performance among female secondary school students having high and low level of social media.
3. There is no significant the relationship between social media and academic performance among secondary school students.

Methodology

Descriptive research does not fit neatly into the definition of either quantitative or qualitative research methodologies, but instead it can utilize elements of both, often within the same study.

Sample

The investigator decided to pick up eight senior secondary schools from Sonipat District by using multi-stage random sampling technique. Thus, the sample of the study consists of 100 students randomly selected from class 11th.

Variables of The Study

- **Dependent Variable:** Academic Performance
- **Independent Variable:** Social Media

Tools Used

1. Social Media Addiction Scale by Dr. K. Arunkumar, and Dr. T. Premalatha (2024)
2. Academic Performance Test score has been taken from the performance of students in previous examination.

Analysis and Interpretation of Data

Objective: 1

To compare the academic performance among male secondary school students having high and low level of social media.

Hypothesis: 1

There is no significant difference academic performance among male secondary school students having high and low level of social media.

Table: 1 Mean Standard Deviation and t-value for mean scores of academic performances of male

Sr. No.	Group	N	Mean Scores	S. D’s	t-value
Academic Performance	High social media	50	67.43	13.12	3.164**
	Low social media	50	74.94	12.9	

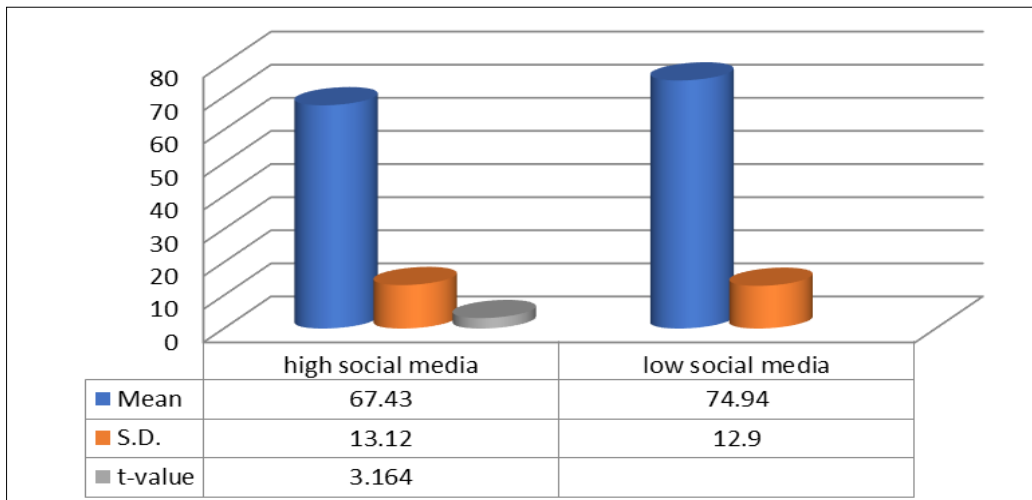


Fig 2: Mean, S.D. and t-value

Interpretation: From the table:1 it can be observed that the t-value of 3.164 was found significant at 0.05 level, which indicates that academic performance among male secondary school students with high and low level of social media uses differ significantly. So, the null hypothesis i.e. There is no significant difference academic performance among male secondary school students having high and low level of social media, is rejected. In terms of mean, it can be seen that mean academic performance score of male secondary school students with low level of social media uses i.e.74.34 has been found higher than that of male secondary school students with high level of social media i.e.67.43. It is

emerged clear that male secondary school students with high level of social media uses have less academic performance as compared to their counterparts.

Objective: 2

To compare the academic performance among female secondary school students having high and low level of social media.

Hypothesis: 2

There is no significant difference academic performance among female secondary school students having high and low level of social media.

Table: 2 Mean Standard Deviation and t-value for mean scores of academic performances of female

Sr. No.	Group	N	Mean Scores	S. D's	t-value
Academic Performance	High social media	50	88.04	18.99	2.99**
	Low social media	50	93.01	26.71	

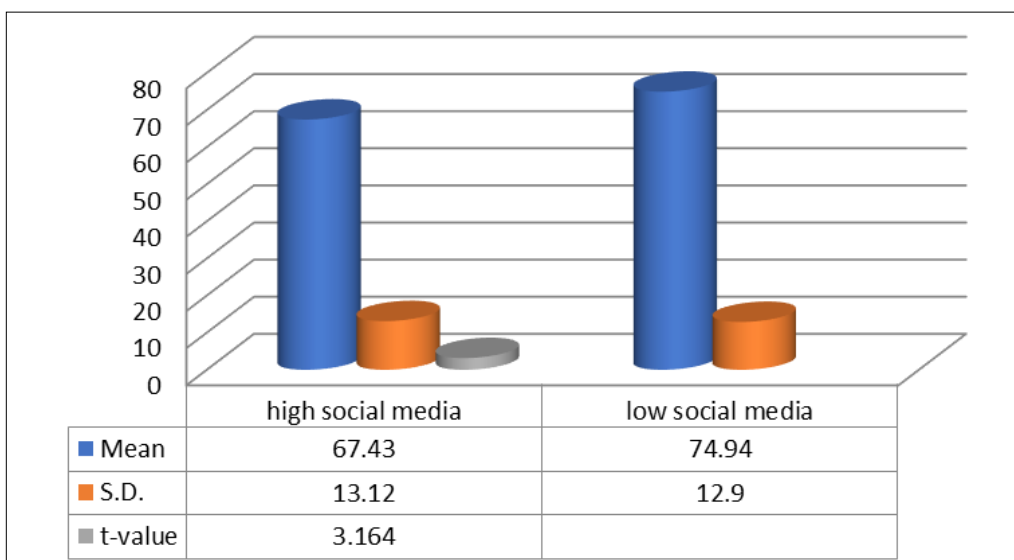


Fig 2: Mean, S.D. and t-value

Interpretation: From the table:1 it can be observed that the t-value of 2.99 was found significant at 0.05 level, which indicates that academic performance among female secondary school students with high and low level of social media uses differ significantly. So, the null hypothesis i.e. There is no significant difference academic performance

among female secondary school students having high and low level of social media, is rejected. In terms of mean, it can be seen that mean academic performance score of female secondary school students with low level of social media uses i.e.93.01 has been found higher than that of female secondary school students with high level of social

media i.e.88.04. It is emerged clear that female secondary school students with high level of social media uses have less academic performance as compared to their counterparts.

Objective: 3

To study the relationship between social media and academic performance among secondary school students

Hypothesis: 3

There is no significant the relationship between social media and academic performance among secondary school students.

Table 3: Coefficients of Correlations between social media and Academic Performance of school students

Sr. No.	Variables	N	Coefficients of correlation
1.	Academic Performance	100	-0.76**
2.	Social Media	100	

** Significant at.01 level

Interpretation: The Table 4.3 reveals that coefficient of correlation (r) between Academic Performance and Social Media among secondary school students is -0.76 which is negative and significant at 0.01 level of significance. So, the null hypothesis i.e. There is no significant the relationship between social media and academic performance among secondary school students. is accepted. So, it can be concluded that the higher social media use among students less the level of academic performance.

Conclusion

The present study aimed to examine the impact of social media usage on the academic performance of secondary school students, with specific comparisons across gender. The results revealed a statistically significant difference in academic performance between male students with high and low social media usage. Male students with lower levels of social media engagement scored higher (M = 74.94) than those with higher usage (M = 67.43), indicating that excessive use may negatively affect academic achievement. Similarly, a significant difference was found among female students. Those with low social media usage scored better (M = 93.01) than their high-usage counterparts (M = 88.04), though the gap was smaller than that observed among males. These results led to the rejection of both null hypotheses for male and female students, confirming that social media use significantly affects academic outcomes. Additionally, a strong negative correlation (r = -0.76) was observed between social media usage and academic performance across the full student sample, indicating that as time spent on social media increases, academic performance tends to decline. This finding reinforces the concern that excessive social media engagement hampers students' academic success. The study thus suggests the need for responsible and balanced use of social media among secondary school students.

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