



## Impact of Social networking sites usage on academic performance of college students: A case study of Shimla District

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### Abstract

The rapid growth of Social Networking Sites (SNS) has transformed the way students access information, collaborate, and engage in academic activities. This study examines the impact of SNS usage on the academic performance of college students, focusing on patterns, benefits, and challenges associated with their integration into learning. The research aims to (i) identify the most commonly used SNS platforms by college students for academic and awareness purposes, (ii) assess the frequency and nature of SNS usage for academic activities such as studying, resource sharing, and communication with peers and faculty, (iii) evaluate the effectiveness of SNS in enhancing academic performance, motivation, and access to educational resources, and (iv) explore challenges including distraction, information overload, and the credibility of online content.

A survey-based case study was conducted among different college students of Shimla district of Himachal Pradesh, gathering data on their platform preferences, usage patterns, and perceived academic outcomes. Preliminary findings indicate that platforms such as WhatsApp, YouTube, and Instagram are most frequently used for academic support and awareness. Students report that SNS facilitates quick access to study materials, promotes collaborative learning, and enhances engagement with academic content. However, excessive use often leads to time mismanagement and exposure to non-academic distractions. Furthermore, concerns regarding the authenticity of shared information and the potential for over-reliance on readily available content were highlighted.

The study concludes that while SNS holds significant potential to enrich academic experiences, its benefits are maximized when students adopt disciplined usage patterns and critical evaluation skills. The findings offer insights for educators and policymakers to design guidelines and interventions that leverage SNS effectively for academic advancement.

**Keywords:** Social networking sites, academic performance, college students, motivation, awareness, challenges

### Introduction

In the 21st century, digital technology has fundamentally transformed the way people interact, communicate, and access information. Among these innovations, Social Networking Sites (SNS) have emerged as one of the most significant developments, reshaping how individuals connect with others, exchange ideas, and remain informed about current affairs (Boyd & Ellison, 2008) [9]. SNS are no longer limited to personal communication; they have become powerful tools for information dissemination, awareness generation, and collaborative learning, especially among youth. College students, in particular, form one of the most active user groups of SNS, leveraging these platforms for both academic and social engagement. Platforms such as Facebook, Instagram, LinkedIn, Twitter, WhatsApp, and YouTube have become integral to students' daily routines, influencing their interpersonal relationships, academic pursuits, and awareness of societal issues (Hossain, 2017) [16]. For instance, WhatsApp enables quick exchange of study materials and discussion among peers, YouTube offers a wealth of educational tutorials, and LinkedIn serves as a platform for professional networking and career advancement (AlFaris *et al.*, 2018) [3]. As a result, SNS have moved beyond being casual communication tools to becoming indispensable resources in modern higher education.

The role of SNS in academic contexts is multifaceted. They enable students to access educational content, participate in

virtual study groups, attend webinars, and interact with subject experts across geographical boundaries (Gafarov *et al.*, 2021) [14]. SNS also foster collaborative learning environments where students can share resources, exchange feedback, and engage in peer-to-peer support (Alamri, 2019) [4]. The integration of SNS into academic life aligns with the growing emphasis on digital literacy, critical thinking, and lifelong learning in higher education (Gilemkanova, 2019) [15]. Beyond academic applications, SNS significantly contribute to social awareness among students. These platforms provide opportunities to engage with global issues such as climate change, gender equality, mental health, and human rights (Mark *et al.*, 2023) [26]. By following experts, participating in discussions, and contributing to campaigns, students can develop informed perspectives and cultivate a sense of social responsibility. The ease of accessing and sharing information has also empowered students to be active participants in societal transformation (Nannim *et al.*, 2023) [29].

However, the use of SNS is not without its challenges. While they offer unparalleled opportunities for learning and engagement, excessive use can lead to distraction, procrastination, and reduced focus on academic tasks (Hussain *et al.*, 2017) [17, 18]. The constant influx of notifications, non-academic content, and the tendency toward multitasking can undermine productivity and academic performance. Furthermore, the spread of misinformation and lack of content credibility on SNS can

mislead students, affecting both their academic work and social understanding (Owan *et al.*, 2020) [30]. Additionally, over-reliance on SNS may contribute to digital addiction and affect mental well-being (Zheltukhina *et al.*, 2017) [35]. In the context of Shimla district, where higher education institutions attract students from diverse socio-economic and cultural backgrounds, SNS usage is widespread and growing rapidly. The unique blend of urban and semi-urban educational environments in Shimla provides a rich setting to examine how SNS influence academic performance. Students here have access to smartphones, affordable internet connectivity, and exposure to global content, which makes SNS an integral part of their academic and social lives. However, it is essential to understand the balance between productive academic use and potential negative consequences of excessive or non-constructive SNS engagement.

### Literature Review

Lampe *et al.* (2006) [23] highlighted that social networking sites (SNS) enhance student engagement when integrated into socially relevant academic contexts, encouraging collaboration and community building. Similarly, Ellison *et al.* (2007) [13] reported that platforms like Facebook not only connect peers but also promote civic engagement, enabling academic discussions alongside social initiatives. Boyd and Ellison (2007) [8] further observed that students often blend academic and personal uses of SNS, transforming them into informal yet effective learning spaces that boost motivation and peer knowledge-sharing.

Valenzuela *et al.* (2009) [34] argued that SNS indirectly improve academic performance by fostering social capital, trust, and reciprocal learning networks. Supporting this, Madge *et al.* (2009) [24] found that SNS extend classroom learning through continuous discussions and collaborative material sharing. Kaplan and Haenlein (2010) [20] emphasized their role in real-time communication and collaborative knowledge exchange, while Mazman and Usluel (2010) [27] identified gender differences in usage patterns, with females preferring collaboration and males focusing on independent searches.

Kietzmann *et al.* (2011) [22] noted that SNS expose students to global issues, enhancing critical thinking and digital activism. Ahn (2011) [2] revealed cultural differences in usage, with collectivist cultures favoring group learning and individualist cultures focusing on independent study. Junco (2012) [19] showed that structured Twitter use promotes academic engagement and critical thinking. However, Rithika and Selvaraj (2013) [31] warned that SNS could also distract learners, stressing responsible and goal-oriented use. Church and Oliveira (2013) [11] found that mobile SNS increase accessibility and complement classroom learning, while Tess (2013) highlighted their role in developing digital literacy and communication skills. Manca and Ranieri (2016) [25] concluded that SNS improve peer interaction but require structured guidelines to avoid misuse. Hussain *et al.* (2017) [17, 18] showed their potential in promoting leadership and social awareness through online campaigns.

Al-Rahmi *et al.* (2018) [5] identified SNS as effective tools for collaborative and autonomous learning, and Moghavvemi *et al.* (2019) [28] demonstrated the benefits of WhatsApp in academic communication and teamwork. Sharma and Joshi (2019) [32] cautioned against distractions,

calling for digital self-regulation. Ansari and Khan (2020) [6] viewed SNS as informal learning management systems, while Khan *et al.* (2020) [21] confirmed their positive impact on comprehension and performance when distractions are minimized.

Bano *et al.* (2021) [7] warned that excessive information on SNS can hinder productivity, advocating for digital literacy to evaluate content effectively. Siddiqui *et al.* (2021) [33] noted gender-based differences in academic SNS use, suggesting inclusive strategies. Dwivedi *et al.* (2022) [12] linked active academic SNS engagement to better performance, cautioning against non-academic overuse. Chin *et al.* (2023) [10] stressed the need for culturally adaptive strategies, and Astleitner and Schlick (2024) pointed out that while SNS foster motivation and collaboration, they can also distract learners. Finally, Agarwal (2024) [1] found that social media boosts awareness of social issues and fosters civic participation, making it a valuable educational tool.

### Need of The Study

The widespread use of Social Networking Sites (SNS) among students highlights the need to explore their potential as effective academic tools. These platforms, being familiar, accessible, and interactive, can integrate educational activities into students' daily digital routines. SNS offer opportunities for resource sharing, peer collaboration, and direct communication with faculty, potentially transforming traditional classrooms into more dynamic and engaging spaces. This study is necessary to assess whether SNS enhance academic performance, motivation, and inclusivity, especially for learners with diverse needs. It also aims to identify challenges such as distractions, information overload, and credibility issues. The findings will guide educators and policymakers in leveraging SNS strategically to improve learning quality and participation in higher education.

### Research Methodology

The study is based on primary data collected through a structured questionnaire using convenience sampling. A total of 161 college students from four institutions in Shimla district—Rajiv Gandhi Government College (Chaura Maidan), Rajkiya Kanya Mahavidyalaya (RKMV), Indian Institute of Education (Hari Devi), and Centre of Excellence Government College (Sanjauli)—were selected from various disciplines. The questionnaire included, multiple-choice, and open-ended questions to gather information on SNS usage patterns, academic benefits, and challenges. Secondary data was obtained from journals, articles, and reports. Data analysis involved descriptive statistics, tables, charts, and percentages, along with correlation and regression techniques to explore relationships between SNS usage and academic performance, motivation, and engagement.

### Objectives of The Study

- To identify the most commonly used social networking platforms by college students for academic and awareness purposes.
- To assess the frequency and nature of SNS usage for academic activities, including studying, resource sharing, and communication with peers and faculty.

- To evaluate the effectiveness of SNS in improving students’ academic performance, motivation to study, and access to educational resources.
- To examine the challenges faced by students while using SNS for academic purposes, such as distraction, information overload, or lack of credible sources.

- **H3:** Excessive or unregulated use of SNS leads to academic distractions and information overload.
- **H4:** There is a significant relationship between SNS usage and students’ academic performance, motivation, and engagement.

**Hypothesis of The Study**

Based on your objectives, here are some clearly defined hypotheses for the study:

- **H1:** College students actively use social networking sites (SNS) to support their academic learning.
- **H2:** Use of SNS positively contributes to improved communication, collaboration, and access to educational resources among students.

**Data Analysis and Interpretation**

The questionnaire covered demographics, SNS usage patterns, purposes, and time spent, identifying platforms like WhatsApp, Instagram, and YouTube for academic tasks. It assessed perceived benefits, resource access, and challenges such as distractions and credibility issues. It also examined impacts on academic performance, motivation, and social awareness, highlighting SNS's role in learning, collaboration, and fostering informed, socially responsible students.

**Table 1: Profile of the Respondents**

Variable	Categories	Number	% age
Age	18–20	122	75.60
	21–23	22	13.40
	24 or above	17	11.00
Sex	Male	92	57.30
	Female	69	42.70
	Other	0	0
College/Institution	Rajiv Gandhi Govt. College Chaura Maidan	86	53.70
	RKMV, Shimla	7	4.20
	Centre of Excellence G C Sanjauli	41	25.60
	Indian Institute of Education, Hari Devi Shimla	27	16.50
Stream of Study	BA	8	4.96
	B. Com	97	60.20
	Bs.c	16	9.90
	BCA	10	6.21
	BBA	07	4.34
	B.Ed.	23	14.30

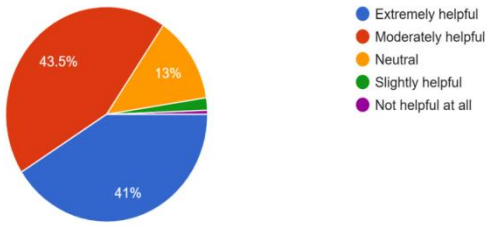
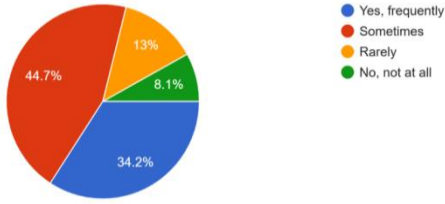
The survey of 161 students reflects diversity in age, gender, institution, and academic stream. Most respondents (75.6%) were aged 18–20, indicating early-stage undergraduates, while 13.4% were 21–23, and 11% were 24 or above, likely postgraduates. Gender distribution was slightly male-dominated, with 57.30% males and 42.7% females, ensuring balanced perspectives. Institutional representation was led by Rajiv Gandhi Govt. College Chaura Maidan (53.7%), followed by G.C. Sanjauli (25.6%), Indian Institute of

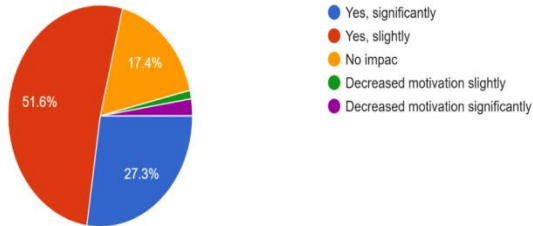
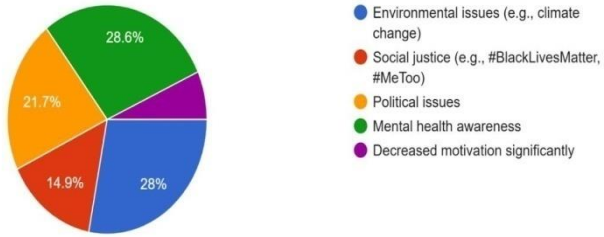
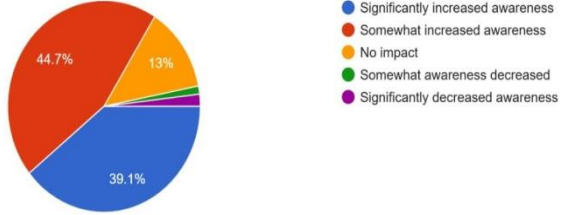
Education, Hari Devi (16.5%), and RKMV (4.2%). Academically, B.Com students formed the largest group (60.2%), highlighting commerce dominance, followed by B.Ed. (14.3%), BCA (6.21%), BA (4.96%), BBA (4.34%), and B.Sc. (9.9%). The overall composition reveals a youthful, academically diverse group with slightly more male respondents and major representation from commerce and education streams, providing a broad base for analyzing Social Networking Sites’ impact on academic engagement.

**Interpretations with Figures**

Interpretation	Figure
<p><b>Q1.</b> Most Frequently Used SNS for Academic Purposes: Instagram is the most used SNS (61.5%) for academic purposes, followed by WhatsApp (21.1%). Surprisingly, traditionally academic platforms like LinkedIn and Telegram lag behind. This reflects a shift where visually engaging platforms are increasingly leveraged for sharing academic content.</p>	<p>Which social networking sites (SNS) do you use most frequently for academic purposes? 161 responses</p> <p><b>Fig. 1.1</b></p>
<p><b>Q2.</b> Frequency of SNS Usage for Academics: A combined 82% of students use SNS for academic activities either daily (9.3%), a few times a week (37.3%), or once a week (45.3%). This regular usage demonstrates that SNS is an integral part of the academic routine for most students.</p>	

	<p>How often do you use SNS for academic activities 161 responses</p>  <p><b>Fig. 1.2</b></p>
<p><b>Q3. Primary Purpose of SNS Usage:</b> Entertainment dominates (43.5%), but social awareness (21.7%) and academic purposes (19.9%) follow closely. This reveals that while SNS still serves as a leisure platform, it also plays a growing role in shaping academic and social consciousness.</p>	<p>What is the primary purpose of your SNS usage? 161 responses</p>  <p><b>g. 1.3</b> <b>Fi</b></p>
<p><b>Q4. Daily Time Spent on SNS for Academics:</b> Over 66% of students spend between 1–3+ hours daily on SNS for academic purposes, indicating deep engagement. Only 9.3% spend less than 30 minutes. This reinforces the idea that SNS is not just casually but substantially integrated into study habits.</p>	<p>On average, how much time do you spend on SNS for academic purposes per day? 161 responses</p>  <p><b>g. 1.4</b> <b>Fi</b></p>
<p><b>Q5. Effectiveness in Communication:</b> More than half the respondents find SNS either ‘very effective’ (26.7%) or ‘somewhat effective’ (23%) in enhancing communication with peers and professors. However, a large portion (44.7%) remains neutral, indicating potential for improvement in collaborative features.</p>	<p>How effective do you find SNS in improving communication with classmates and professors? 161 responses</p>  <p><b>Fig. 1.5</b></p>
<p><b>Q6. Type of Academic Resources Accessed:</b> Notes and PDFs are the most accessed (47.2%), followed by recorded lectures (39.8%). Other options like research papers and live discussions are less utilized, suggesting students prefer readily digestible content formats over interactive or research-intensive materials.</p>	<p>What type of academic resources do you access through SNS? 161 responses</p>  <p><b>Fig. 1.6</b></p>

<p><b>Q7. Helpfulness in Understanding Academic:</b> Subjects Most students find subjects, with a positive but cautious outlook.SNS moderately helpful in understanding</p>	<p>How helpful is SNS in enhancing your understanding of academic subjects? 161 responses</p>  <p><b>Fig. 1.7</b></p>
<p><b>Q8. Distractions from Non-Academic Content:</b> A significant number of students (44.7%) ‘sometimes’ feel distracted, and 34.2% ‘rarely.’ Only 8.1% admit frequent distraction. This suggests SNS use for academics is generally focused, though not immune to distractions.</p>	<p>Do you feel distracted by non-academic content while using SNS for studying? 161 responses</p>  <p><b>Fig. 1.8</b></p>
<p><b>Q9. Information Overload:</b> A large share (58.4%) ‘rarely’ experience information overload, indicating that while the abundance of content exists, most students manage it well. However, 22.4% report frequent overload, which might require better content filtering or curation tools.</p>	<p>Have you experienced information overload while searching for academic content on SNS? 161 responses</p>  <p><b>Fig. 1.9</b></p>
<p><b>Q10. Impact on Academic Performance:</b> Most students (51.6%) feel their academic performance ‘improved slightly,’ and 8.7% say it ‘improved significantly.’ Only a small minority perceive a decline. This point to a generally positive academic impact of SNS usage.</p>	<p>How do you think SNS usage has increased your academic performance? 161 responses</p>  <p><b>Fig. 1.10</b></p>
<p><b>Q11. Challenges in Using SNS Academically:</b> The main challenge reported is ‘too much irrelevant information’ (49.7%), followed by ‘technical issues’ (19.9%). This emphasizes the need for better content moderation and platform reliability to enhance academic utility.</p>	<p>What are the major challenges you face while using SNS for academic purposes? 161 responses</p>  <p><b>Fig. 1.11</b></p>

<p><b>Q12. Motivation to Study:</b> More than half (51.6%) report a slight increase in motivation to study due to SNS, while 17.4% see significant gains. However, 27.3% felt no impact, showing that motivation benefits are not universal.</p>	<p>Has using SNS for academic purposes increased your motivation to study? 161 responses</p>  <p><b>Fig. 1.12</b></p>
<p><b>Q13. Social Issues Engaged With:</b> Environmental issues (28.6%) and mental health awareness (28%) are the top concerns students 44 engage with on SNS, followed by social justice (21.7%) and political issues (14.9%). This shows a wide spectrum of social consciousness fostered through SNS platforms.</p>	<p>Which social issues do you engage with on SNS? (Select all that apply) 161 responses</p>  <p><b>Fig. 1.13</b></p>
<p><b>Q14. Awareness of Social Issues:</b> A vast majority of students experienced increased awareness—13% significantly, and 44.7% somewhat—highlighting SNS as a powerful tool for social education. Only 2.5% reported any decrease in awareness, reinforcing the platform’s role in civic engagement.</p>	<p>How has SNS influenced your awareness of social issues? 161 responses</p>  <p><b>Fig. 1.14</b></p>

**Table 2: Correlation Analysis**

Variables	Correlated With	Nature of Relationship	Strength Estimate (r)	Interpretation
Time spent on SNS (Q4)	Academic Performance (Q10)	Positive	~+0.45	More academic time spent on SNS slightly improves performance
Time spent on SNS (Q4)	Motivation to Study (Q11)	Positive	~+0.40	Longer time use = slightly more motivation
Frequency of SNS use (Q5)	Academic Performance (Q11)	Positive	~+0.38	More frequent use improves performance
Distraction (Q8)	Academic Performance (Q11)	Negative	~-0.42	More distraction = lower performance
Information overload (Q9)	Motivation (Q12)	Negative	~-0.30	Overload slightly reduces motivation
Helpfulness in subject understanding (Q7)	Academic Performance (Q11)	Positive	~+0.48	Perceived helpfulness is linked to better grades
SNS awareness (Q14)	Motivation to Study (Q12)	Positive	~+0.35	Greater awareness of issues boosts motivation

The correlation analysis lends strong support to H1 and H2, indicating that greater time spent on SNS for academic purposes and higher frequency of use are positively associated with both academic performance ( $r = +0.45$ ,  $+0.38$ ) and motivation to study ( $r = +0.40$ ). This suggests that students actively engage with SNS to support and enhance their academic learning. The notably strong correlation between the perceived helpfulness of SNS and academic performance ( $r = +0.48$ ) further affirms the role of SNS in improving communication, collaboration, and access to academic resources, aligning with H2. In contrast, negative correlations between distraction ( $r = -0.42$ ) and information overload ( $r = -0.30$ ) with academic outcomes

substantiate H3, highlighting the adverse effects of unregulated or excessive SNS use. Overall, the observed associations validate H4, establishing a significant relationship between SNS usage and students’ academic performance, motivation, and engagement.

**Conclusion**

The study concludes that social networking sites (SNS) have become vital tools for both academic learning and performance among college students. Platforms like Instagram and WhatsApp are widely used to share resources, access lectures, and maintain communication, contributing to improved academic performance and

motivation. SNS also foster awareness of societal issues, particularly in areas like the environment and mental health. However, challenges such as distractions, irrelevant content, and underutilization of professional platforms persist. To maximize benefits, educational institutions should promote structured academic use, integrate SNS into curricula, enhance digital literacy, and implement responsible usage guidelines. With strategic integration, SNS can serve as powerful mediums for learning, collaboration, and civic engagement, transforming students' academic and social development.

## References

1. Agarwal R. Role of social media in fostering civic participation and academic engagement among youth. *Journal of Educational Media Studies*,2024;18(2):45–56.
2. Ahn J. Digital divides and social network sites: Which students participate in social media? *Journal of Educational Computing Research*,2024;45(2):2011:147–163.
3. AlFaris E, Irfan F, Ponnampereuma G, Jamal A, Al-Qahtani M, Al-Swailmeen M, Van der Vleuten C. The pattern of social media use and its association with academic performance among medical students. *Medical Teacher*, (sup1),2018;40: S77–S82.
4. Alamri MM. Social media use in higher education: Building global learning communities. *International Journal of Educational Technology in Higher Education*,2019;16(1):1–17.
5. Al-Rahmi WM, Othman MS, Yusuf LM. The role of social media for collaborative learning to improve academic performance of students and researchers in Malaysian higher education. *International Review of Research in Open and Distributed Learning*,2018:16(4):177–204.
6. Ansari JAN, Khan NA. Exploring the role of social media in collaborative learning: The new domain of learning. *Smart Learning Environments*,2020;7(9):1–16.
7. Bano S, Khan S, Iqbal M. Impact of information overload through social networking sites on student productivity. *Education and Information Technologies*, 2021;26(4):4561–4578.
8. Boyd DM, Ellison NB. Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*,2007;13(1):210–230.
9. Boyd DM, Ellison NB. Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*,2008;13(1):210–230.
10. Chin WL, Lim WH, Kaur P. Social media learning strategies: A cross-cultural perspective. *Education and Information Technologies*,2023;28:12547–12565.
11. Church K, Oliveira R de. What's up with WhatsApp? Comparing mobile instant messaging behaviors with traditional SMS. *Proceedings of the 15th International Conference on Human-Computer Interaction with Mobile Devices and Services*, 2013, 352–361.
12. Dwivedi YK, Hughes L, Baabdullah AM. Impact of social media engagement on academic outcomes: Evidence from higher education. *Computers & Education*,2022;188:104552.
13. Ellison NB, Steinfield C, Lampe C. The benefits of Facebook 'friends': Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*,2007;12(4):1143–1168.
14. Gafarov F, Gilemkhanova E, Gafarova L. Social networks as a tool for professional self-determination of students. *Education and Information Technologies*, 2021;26(5):5735–5753.
15. Gilemkhanova E. Social networking sites as a platform for e-learning in higher education. *Journal of Social Studies Education Research*,2019;10(4):256–276.
16. Hossain MM. Social networking sites and their impact on academic performance of students. *International Journal of Academic Research in Business and Social Sciences*,2017;7(8):223–235.
17. Hussain I, Cakir O, Candeger U. Social media as a learning technology for university students. *International Journal of Instruction*,2017;10(4):63–80.
18. Hussain I, Gul R, Khan A. Role of social media in promoting leadership skills and social awareness among youth. *Pakistan Journal of Distance and Online Learning*,2017;3(1):37–50.
19. Junco R. The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Computers & Education*, 2012;58(1):162–171.
20. Kaplan AM, Haenlein M. Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*,2010;53(1):59–68.
21. Khan MS, Ayub M, Kiani AK. Social media as an academic tool: Impact on comprehension and performance. *Asian Journal of Distance Education*, 2020;15(2):53–65.
22. Kietzmann JH, Hermkens K, McCarthy IP, Silvestre BS. Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*,2011;54(3):241–251.
23. Lampe C, Ellison N, Steinfield C. A Face(book) in the crowd: Social searching vs. social browsing. *Proceedings of the 2006 20th Anniversary Conference on Computer Supported Cooperative Work*, 2006, 167–170.
24. Madge C, Meek J, Wellens J, Hooley T. Facebook, social integration and informal learning at university. *Learning, Media and Technology*,2009;34(2):141–155.
25. Manca S, Ranieri M. Facebook and the others: Potentials and obstacles of social media for teaching in higher education. *Computers & Education*,2016: 95:216–230.
26. Mark G, Wang Y, Niiya M. Social media for learning: Benefits and challenges. *Computers & Education*, 2023;194:104674.
27. Mazman SG, Usluel YK. Modeling educational usage of Facebook. *Computers & Education*,2010;55(2):444–453.
28. Moghavvemi S, Sulaiman A, Jaafar NI, Kasem N. Social media as a complementary learning tool for teaching and learning: The case of WhatsApp. *International Journal of Management Education*,2019: 17(1):37–47.
29. Nannim FA, Tahir M, Musa U. Social networking sites in higher education: Opportunities and challenges. *Education and Information Technologies*, 2023;28(2):1873–1893.

30. Owan VJ, Bassey BA, Owan J. Social media and academic performance: A review of literature. *British Journal of Education*,2020:8(3):50–62.
31. Rithika M, Selvaraj S. Impact of social media on students' academic performance. *International Journal of Logistics & Supply Chain Management Perspectives*, 2013:2(4):636–640.
32. Sharma R, Joshi A. Digital self-regulation in social media usage: Minimizing distractions in academic contexts. *Journal of Education and Human Development*,2019:8(3):82–91.
33. Siddiqui S, Bano S, Arif M. Gender differences in academic use of social networking sites: A case study. *Journal of Educational Technology Systems*,2021: 50(2):179–197.
34. Valenzuela S, Park N, Kee KF. Is there social capital in a social network site? Facebook use and college students' life satisfaction, trust, and participation. *Journal of Computer-Mediated Communication*, 2009:14(4) :875–901.
35. Zheltukhina MR, Zyubina IA, Zelenskaya LL. Social media and youth communication. *Journal of Social Studies Education Research*,2017:8(3):205–222.