EMPIRICAL REVIEW OF SOCIAL MEDIA AND ACADEMIC PERFORMANCE OF STUDENTS IN HIGHER EDUCATION

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Abstract

The growth and use of social media has significantly affected the worldviews for the last two decades. It has influenced all the sphere of life including education and higher education. This article reviews impact of social media on academic performance of students in higher education. We aimed to examine few thematic areas where social media has profound negative effect on the academic performance of students in higher education (universities). We employed a structured approach of systematic review to identify, evaluate, and synthesize the existing literature on the topic. We focused on the research published from 2015 onwards because it reflects the rise and prevalence of social media use in academia. The synthesis of data was conducted through a thematic analysis approach. The key themes/patterns related to social media usage and academic performance were extracted, grouped, and interpreted. We reached the conclusion that academic performance of students is negatively affected by social media use in each category of analysis, i.e. grading, CGPA, learning skills, class participation, language proficiency, study routine, expressions of ideas, knowledge development, research, and communication skills. Thus, we conclude that social media negatively affects the academic performance of the students in higher education. It is suggested to devise mechanism of normative rationality to fix this issue in academic performance of students in higher education.

INTRODUCTION

The growth and use of social media has significantly affected the worldviews for the last two decades. Social media has become an integral part of daily life, particularly among students in higher education (Chugh, & Ruhi, 2018; Sobaih et al., 2016). It offers a wide range of benefits including connectivity, information sharing, and academic networking. However, pervasive presence raised concerns about its negative influence on the academic performance of students. With easy access to social media platforms like Facebook, Instagram, Twitter, and TikTok, students are often drawn into distractions that divert their attention away from studies (Abdullah & Ullah, 2022; Vorderer, Krömer, & Schneider, 2016). The constant barrage of notifications, Greenhow and Lewin (2019) argued, is temptation to engage in time-consuming activities, and the pressure to maintain an online persona that contribute to procrastination, reduced focus, and poor time management. Eid and Al-Jabri (2016)

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stated that these disruptions, further when compounded over time, result into decline in academic performance, lower grades, and diminished overall learning outcomes. As higher education institutions continue to embrace digital technology, it is crucial to examine the impact of social media on academic performance of students and explore the strategies to mitigate its effects on student success. Research shows that rise of social media reshaped the ways of how students are engaged with social media (Dumpit & Fernandez, 2017; Manca, & Ranieri, 2016). These studies explain that how students engage with the world, offering new avenues for communication, information sharing, and social interaction. However, its widespread use has raised concerns about its negative impact on various aspects of academic performance. Lau (2017) analyzed that although social media provides convenience and connectivity but became a major source of distraction, undermining students' focus, time management, and overall academic discipline. Kaplan and Haenlein (2016) also maintained that constant engagement with social media platforms often lead to a decline in grades and CGPA, as well as learning skills. While majority of the students do not struggle to balance their online interactions with academic responsibilities (Abbas et al., 2019; Shahzad et al., 2020). Additionally, Siddiqui and Singh (2016) added that shallow and fragmented nature of online communication impair students' learning skills, making it difficult for them to engage in deep, reflective thinking or to develop critical research abilities. The time spent on social media also detracts from students' study routines, resulting in incomplete assignments and poor exam preparation (Bond et al., 2018; Shoaib & Abdullah, 2020). Furthermore, the reliance on quick, informal exchanges online hinders the development of effective communication skills and limit students' ability to articulate ideas in more formal academic settings (Akhtar, Abdullah, Matloob, & Malik, 2025; Kuss, & Griffiths, 2017). Ultimately, the pervasive influence of social media, while offering certain benefits, poses significant challenges to students' academic success, knowledge development, and intellectual growth in higher education (Aristovniket al., 2020; Ullah et al., 2017). Methodology

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This review article focused the impact of social media usage on academic performance involves a structured approach of systematic review to identify, evaluate, and synthesize the existing literature on the topic. The goal is to critically assess the evidence, identify patterns, and highlight key findings. This review follows a rigorous, transparent process to ensure comprehensive coverage of the subject and reliability of the conclusions drawn. This review adopts a systematic review design. A systematic review is chosen because it allows synthesis of a large body of evidence on a specific research question through a methodical process. The review is not limited to any geographical region or education level, ensuring a broad perspective on the topic. To ensure the relevance and quality of the studies included, specific inclusion criteria was framed. Empirical studies that focus on the relationship between social media use and academic performance (e.g., GPA, academic achievement, learning outcomes) were included. Similarly, studies published in peer-reviewed journals or reputable academic platforms are part of this article. While studies from a variety of disciplines, including education, psychology, sociology, communication, and information technology covering quantitative, qualitative, and mixedmethods research designs were included. Research published from 2015 onwards (10 years) were included because it reflects excessive use of social media in higher education. The synthesis of data was conducted through a thematic analysis approach. The key themes/patterns related to social media usage and academic performance were extracted, grouped, and interpreted for the readers in the light of empirical findings. The following table shows the themes discussed in key findings section.

Table 1

Themes of the Study.

Grades and CGPA Learning Skills Low-class Participation Language Proficiency Study Routine Expression of Ideas Knowledge Development Research and Communication Skills

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Key Findings

The themes tabulated in methodology are discussed and findings are summarized.

Grades and CGPA of students

Many recent studies suggest that impact of social media on students' grades is a growing concern, as excessive use of these platforms directly interferes with academic performance among the students (Balakrishnan, & Gan, 2016; Chawinga, 2017). Like other scholars, Kolhar, Kazi, and Alameen (2021) suggest that students spending significant amounts of time on social media tend to experience increased procrastination, decreased study time, and difficulty concentrating during lectures or study sessions. Akour and Alenezi (2022) stated that constant distractions from notifications and the lure of engaging with online content disrupts students' focus, leading to reduced productivity and a lack of preparation for exams or assignments. Additionally, Chugh et al. (2021) found that social comparison often facilitated by social media platforms contribute to stress or anxiety, which further hinders their academic performance. As a result, Pumptow and Brahm (2021) contended that students may find it challenging to maintain the level of academic rigor needed to achieve high grades, especially when the time spent on social media detracts from their ability. to complete assignments or engage deeply with course material.

Findings of the studies revealed that use of social media negatively impacts students' Cumulative Grade Point Averages (CGPAs), as the time and attention devoted to online platforms often come at the expense of academic commitments (Chugh et al., 2021; Abdullah et al., 2015; Pouwels et al., 2021). Like other scholars, Lacka, Wong, and Haddoud (2021) stated that students spent excessive hours on social media platforms may find it difficult to their time effectively, manage leading to procrastination and a lack of focus during study sessions. Lacka and Wong (2021) added that distraction results in incomplete assignments, poor exam preparation, and missed deadlines, contribute to lower grades and ultimately lower CGPA. Moreover, Islam, Sarker, and Islam (2022) revealed that constant engagement with social media leads to fragmented attention spans, making it harder for students to concentrate during lectures or while

studying. Barrot (2021) also pointed out that these disruptions accumulate and manifest in the form of reduced academic performance, with a noticeable decline in CGPA. Consequently, Solidjonov (2021) contended that while social media offers some benefits, its unchecked use adversely affect the students' ability to maintain a high academic standard.

Learning skills

The students' learning skills have become a significant concern due to social media usage in the present times. As Barrot (2022) argued that excessive use of social media often detracts students from the development of critical cognitive abilities needed for academic success. Nikou and Aavakare (2021) highlighted that frequent use of social media encourages shallow, fragmented interactions that require limited attention, which hinders students' ability to engage in deeper and sustained learning. Instead of reading academic materials or participating in focused study sessions, Camilleri (2021) identified that students may find themselves easily distracted by the endless flow of posts, videos, and notifications. Azionya and Nhedzi (2021) noted that constant multitasking and switching between tasks reduce the brain's ability to retain information and engage in critical thinking, which are essential skills for effective learning. Furthermore, Purwanti (2021) asserted excessive time spent on social media impair reading comprehension and analytical skills, as students may lose the patience and discipline required for in-depth research or thoughtful reflection. Ultimately, Hu and Yu (2021) found habitual use of social media lead to a decline in students' capacity for focused learning, diminishing their academic performance and intellectual growth.

Low-class participation

Persistent exposure to online content reduces students' ability to concentrate and participate actively in class discussions. Thus, social media serves as a major distraction that diverts attention away from educational pursuits (Hashim, Tlemsani, & Matthews, 2022). The constant availability of social media platforms creates an environment where students feel compelled to engage with unrelated content to their studies, such as browsing news feeds, watching videos, or participating in online discussions (Abdullah & Nisar, 2024; Bouton, Tal,

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& Asterhan, 2021). This reduces the time and energy available for setting academic goals, engaging in productive study habits, or seeking academic support. Furthermore, Akour and Alenezi (2022) told that instant gratification and social validation provided by social media diminish students' intrinsic motivation to focus on long-term academic objectives, such as improving grades or mastering complex subjects. The allure of immediate rewards from social interactions or entertainment may lead to procrastination, and over time, students may become less committed to their academic aspirations, resulting in lower participation in class, incomplete assignments, and a general disengagement from their educational goals (Abdullah & Kauser, 2022; Al-Rawashdeh et al., 2021). This trend undermines overall academic success and hinders the development of a strong work ethic necessary for future achievement.

Language proficiency

Language proficiency enables students to communicate effectively with teachers, peers, and others. Besides academic purposes, it is important for social interactions, collaboration, and networking. However, social media has impact on students' language proficiency, though often it contributes negatively by encouraging the use of informal language by reducing engagement with formal and academic writing (Abdullah, & Ullah, 2016; Khlaif & Salha, 2021). Social media platforms prioritize brevity and casual communication, leading students to adopt slang, abbreviations, and emoticons in both their online and offline interactions (Al-Rahmi et al., 2022). This informal style of communication, if overused, undermines students' abilities to express themselves clearly and effectively in more formal academic settings. Additionally, Khoza and Mpungose (2022) spotlighted that excessive use of social media reduces the time students spend engaging with more rigorous language development activities, such as reading academic texts or practicing writing skills. The exposure to nonstandard grammar and spelling further weaken language proficiency, making it difficult for students distinguish between informal to digital communication and the high-level language required for assignments, essays, and exams. As a result, students may struggle with more complex language tasks, hindering their academic performance and

language development (Abdullah, Matloob, & Malik, 2024; Rudolph, Tan, & Tan, 2023).

Study routine

Study habits promote consistency for long-term learning and retention. While social media significantly disrupts the study routines of students by providing constant distractions that interfere with time management and focus (Kwok, Leung, Poon, Fung, & Behavior, 2021; Muftah, 2024). The allure of checking notifications, browsing posts, or engaging in online conversations often leads students to procrastinate, pushing study sessions to the background. They spend more time on social media platforms making it difficult to establish or maintain consistent study habits, such as setting aside dedicated blocks of time for focused academic work. Anwar and Abdullah (2021) This disruption results into fragmented study sessions, reducing the depth of concentration needed for effective learning and retention of information. Additionally, Veluvali and Surisetti (2022) analyzed the immediate gratification offered by social media-whether through likes, comments, or new content-can condition students to prioritize short-term rewards over long-term academic goals, further weakening their study routines. In addition, Sasan and Baritua (2022) asserted that the lack of structure in the study habits may lead to poor preparation for exams, incomplete assignments, and ultimately, lower academic performance.

Expression of ideas

The expression of ideas is incredibly important for several reasons. Like other grey areas, social media has a profound effect on students' ability to express their ideas, often hindering their development of more nuanced and structured forms of communication (Alenezi, 2023; Hofer, Nistor, & Scheibenzuber, 2021). While social media platforms encourage frequent sharing of thoughts to promote brief, informal exchanges that prioritize brevity and emotional expression over depth and clarity. Khan (2021) reasoned that students may become accustomed to communicating in soundbites or hashtags, which affect their ability to organize and articulate complex ideas in academic contexts. This reliance on short, spontaneous posts limits students' vocabulary and their capacity to engage in thoughtful, evidence-based discussions, which are crucial for

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academic success. Furthermore, the immediate feedback culture on social media–where likes and comments are often prioritized over thoughtful critique– discourage students from developing critical thinking skills or refining their ideas through deeper reflection (Barton, Adams, Browne, & Arrastia-Chisholm, 2021). As a result, students may struggle to express themselves in a more sophisticated, analytical manner required for essays, presentations, or scholarly debates, ultimately impacting their academic communication skills.

Knowledge development

In an ever-evolving world, staying informed and developing new knowledge helps students adapt to changing circumstances. Presently, social media can both enhance and hinder the knowledge development of students; however, its negative effects are often more pronounced when it comes to deep learning and critical thinking (Chugh et al., 2021; Abdullah et al., 2015; Hu et al., 2021). While social media platforms and academic forums provide access to a vast array of information while the content is often unfiltered, fragmented, and shallow, making it harder for students to engage in meaningful learning. Purwanti (2021) averred that constant influx of information, coupled with the temptation of non-educational content, lead to cognitive overload, where students struggle to distinguish between credible sources and misinformation. Moreover, Greenhow and Lewin (2019) owed avowed that quick-scrolling nature of social media encourages passive consumption rather than active, reflective engagement with knowledge, making it difficult for students to retain and apply what they learn. Instead of engaging in in-depth research, Solidjonov (2021) contended that students may prioritize instant gratification through viral trends or clickbait, which contributes to a superficial understanding of topics rather than the mastery required for academic achievement. Over time, this reliance on social media for knowledge stifle the development of critical thinking, analytical skills, and independent learning-skills that are essential for academic success and lifelong intellectual growth (Abbasi et al., 2016; Lacka et al., 2021).

Research skills

Research skills are important for students, serving as the foundation for both academic and personal

development. Currently, social media influences the research practices of students. Khlaif and Salha (2021) argued that negative effects often outweighing the positive. While, they argue, social media platforms or specialized online forums facilitate networking and provide quick access to research updates or scholarly discussions, however this leads to significant distractions that derail focused academic work among students. Lau (2017) revealed that students spend time scrolling through irrelevant content or engaging in trivial online interactions, reducing the time allocated for serious research activities. Furthermore, Khoza and Mpungose (2022) explained the casual nature of information shared on social media that encourage the use of unreliable or non-peer-reviewed sources, leading students to incorporate inaccurate or biased data into their research. Similarly, Alenezi (2023) viewed the temptation to rely on easily accessible social media posts, blogs, or videos discourage students from visiting more authoritative and academically rigorous sources, such as peer-reviewed journals or scholarly books. Consequently, the quality of research may suffer, leading to shallow analysis, weak arguments, and a lack of depth in academic thesis/project (Aristovnik et al., 2020; Abdullah et al., 2015). In the long run, excessive social media use hinder students' ability to conduct thorough, evidence-based research, and develop the critical thinking skills necessary for high-quality academic work (Dumpit & Fernandez, 2017).

Communication skills

Communication skills play a key role in every aspect of life, personally and professionally. However, social media has a serious repercussion on the communication skills of students, particularly in terms of their abilities to express themselves clearly and engage in meaningful, face-to-face interactions (Abdullah, Usmani, & Shoaib, 2023; Akour & Alenezi, 2022; Al-Rawashdeh et al., 2021). The informal, abbreviated nature of communication on social media platforms where brevity and speed are prioritized, affect the formal language skills and the ability to construct well-structured, coherent messages. Veluvali and Surisetti (2022) explained that students often resort to slang, emojis, and shorthand, which, while effective in casual online exchanges, may not translate well to academic or

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professional settings. Additionally, Rudolph et al. (2023) analyzed constant use of social media reduces quality of face-to-face frequency and the communication, limiting opportunities for students to practice verbal articulation, active listening, and empathy-key components of strong communication skills. Lacka and Wong (2021) owed that student struggle with engaging in more complex discussions, public speaking, or collaborative teamwork, which are essential for academic success and future career prospects. As a result, while social media offers a platform for interaction inadvertently stunts the development of crucial communication skills needed in real-world contexts.

Conclusion

The rapid growth and pervasive use of social media has a significant impact on students' academic performance in higher education, as evidenced by the literature reviewed in this study. The findings show negative connection between social media usage and various aspects of academic achievement, including grading, CGPA, learning skills, class participation, language proficiency, study routines, development, knowledge research, and communication skills. It is revealed that social media from distracts students their academic effective learning, and responsibilities, hinder contribute to a decline in overall performance. Given the widespread influence of social media in the academic context, it is essential for educators and institutions to adopt strategies that encourage balanced usage and foster an environment that minimizes its detrimental effects. The recommendation is to integrate normative rationality-strategies that promote self-regulation, time management, and mindful engagement-with students' academic activities. By doing so, higher education institutions may help students to mitigate the adverse effects of social media on their academic performance while promoting a more productive and focused learning experience to fix this issue.

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