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## SOCIAL MEDIA EFFECTS ON ACADEMIC PERFORMANCE: PERCEPTIONS OF PROSPECTIVE TEACHERS

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### ABSTRACT

In today's modern society, technological advancement wrought the mosaic of social media. The evolved platform of social media has gained more currency and significance in everybody's life. Social media is a platform for global communication, information sharing, and interaction among individuals and groups. This study aimed to explore the perceptions of prospective teachers of social media's effects on the academic performance of undergrads, strategies that improve academic performance, and the coping strategies that offset the negative influence of social media. In methodology, applying constructivist and interpretivist philosophical stances, the qualitative case study design was adopted. The sample was selected through a purposive sampling technique. The data collection was sourced from focus group discussions and semi-structured interviews. The data analysis was achieved by adopting within and cross-data thematic analysis processes. The study findings showcased social media's dual influences on the academic performance of prospective teachers. The finding also suggested that social media serves as a platform to socialize and indirectly improve academic excellence. Time and mind management surfaced as key coping strategies to deter the negative influences of social media. The findings imply that students are now mentally more inclined to exploit social media offerings; however, in the absence of a proper support system, students and teachers will fail to tap into media technology and receive updates for teaching and learning. The recommendation necessitates that students maximize social media use to optimize academic activities that strengthen academic performance.

*Keywords:* Social media; Academic performance; Perceptions; Prospective teachers.

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### INTRODUCTION

Social media will touch above 3 billion users in 2022, which makes up 42.3% of the world's population (eMarketer, 2018). The research revealed that people spend approximately three hours daily on social media platforms (Hameed & Irfan, 2021). Now, the use of social networking websites is customary for people worldwide, regardless of their culture, caste, or nation (Owusu-Acheaw & Larson, 2015). Social networking sites and social media influence students' academics, and technology has become ingrained into individuals' lives (Raghavendra et al., 2018). In education, the amount of information students publishes on social networking platforms affects their academic performance. Sharing knowledge and information, exchanging, integrating, interpreting, and applying can assist in activities to perform better in studies (Almeida & Soares, 2014). When digitalization continues to evolve, understanding and learning to deal with it is still a need (Nouri et al., 2020); students are no exception. Youth shows more interest and involvement in technological items and social media (Fuchs, 2018). More recently, the corona pandemic increased social media use for non-academic and academic purposes (Ahmad & Murad, 2020). However, a

debate continues on whether social media impacts students' performance or not (Van Den Eijnden et al., 2018). The swift integration of social media networks in education and providing educational services through social media have compelled researchers and educators to examine how new technologies have shaped educational systems (Saini & Abraham, 2019).

The social component of digital technologies has gained popularity in education. The growth in digital technology use allows individuals to share information and stay connected with one another globally (Dwivedi et al., 2020). But, communication professionals, university administrators, and academics raised concerns over the good and detrimental effects of social media due to its rapid rise and regular use that affect students' academic performance (Yapıcı & Hevedanlı, 2014). This visualizes the significant impacts students receive on academic performance due to social media platforms. Currently, social media applications during corona pandemic gained value in higher education around the world (Dwivedi et al., 2020). Apart from the above, the perceptions of students about social media on their academic performance are crucial to explore for various reasons. Inquiring perception allows viewing a phenomenon that involves stimuli processing and involving experiences and memories in the process of understanding individuals (McDonald, 2012).

Information and communication technologies include social media applications for the use of all ages. In general, social media offers easy access from most locations via portable devices and wireless fidelity connections to everyone (Du et al., 2018). So, students over-rely on social media. Excessive exposure to social media causes isolation, melancholy, insecurity, jealousy, and low self-esteem, which affect academic performance (Ashford, 2017). This can distract students and lead to a low concentration span. In addition, more often, multitasking on technology may be an escape for students with attention deficit hyperactivity disorder who struggle to concentrate (Dewey, 2015). As students tend to consume more time on social media, they are likely to digress from the learning environment, which leaves a negative effect on academic achievement (Bekalu et al., 2019). Further, the control loosens over social media management due to social media addiction and its excessive use (Junco et al., 2011). However, the available literature on social media in the context of this study needs an investigation to discover the reality of its effects on undergraduates' academic performance. To address this gap, this study aimed to explore the effects of social media on the perceptions of prospective teachers and their impact on academic performance. Thus, the research questions designed to guide the inquiry included the following aspects: prospective teachers' perceptions of social media and the influence it has on academic performance; the strategic uses of social media that improved the academic performance of prospective teachers; and prospective teachers' mitigating strategies towards the negative effects of social media for improved academic achievement.

### **Social Media and Academic Performance**

Social media is a mode of communication enabling instructors and students to connect via online learning tools while complying with social distance standards (Vordos et al., 2020). In other words, social media branches from the computer-mediated technology that disseminates ideas, make people socially aware, develops interests in careers, helps in sharing knowledge and social networking, and establishes virtual communities (Abbas et al., 2019). Furthermore, social media is a combination of various online applications and tools that contribute to the diverse methods of social interactions and communication among social media application users by facilitating, generating, and sharing knowledge (Hansen, 2017). Teachers can use social media for students to communicate information, interact, and offer different teaching approaches, encouraging them to become more active students in the process (Merle & Freberg, 2016). Moreover, social media provides a variety of channels that allow university students and the general public to communicate ideas, thoughts, conclusions, and information with one another in the world. On the other hand, academic performance is a multi-faceted concept that includes various academic abilities and actions

of a learner (Hijazi & Naqvi, 2006). Another view of students' academic performance is the assessment through various methods: grades, report cards, teacher evaluations, retention, and standardized test scores (Burns & Darling, 2002). According to Narad and Abdullah (2016), the student's academic performance is the accumulation of knowledge and the achievement of educational objectives set by the student and the teacher over a specific time period. Furthermore, academic performance is a metric used to assess students' progress in a variety of academic topics, where teachers and institutional authorities assess students' accomplishments through classroom performance, graduation rates, and test scores on standardized assessments (Ballotpedia, 2020). Additionally, it is the measurement of short and/or long-term goals which a teacher, institution, or student attains either by obtaining a cumulative grade point average or continuous assessment (Talib & Sansgiry, 2012). Apart from the above definitions, academic performance is frequently assessed through tests or formative assessments, but there exists no agreement as to how it is best tested or what components are more significant— declarative information such as facts or procedural knowledge such as skills (Santoveña-Casal, 2019).

Social media has a twofold effect on the academic performance of students (Talaue et al., 2018), a positive and negative effect on academics performance of students (Mehmood & Taswir, 2013). The study by Hameed and Irfan (2021) reported that students' overall academic performance and their use of social present a statistically insignificant relationship. The personal characteristics of individuals and the use of social media determine its advantages as well as disadvantages (Landry, 2014). Moreover, the use of social networking sites produced positive, no relation, and negative consequences on students' academic performance (Mady & Baadel, 2020). Social media does have both good and bad effects on academic achievement when it comes to students' use of the internet (Perrin, 2015). Hofmann et al. (2012) found a negative link between academic performance and social media use and that the students' excessive use of social media earns them not-so-good grades. So, the literature highlighted mixed results of social media's effects on academic performance.

### **Social Media and Academic performance: Positive Effects**

The positive effects of social media assist students in improving their academic performance. Students with strong social media and communication skills are more likely to communicate with their teachers and peers, which can improve academic success (Ahmed et al., 2020). Many academic institutions offer online courses through Google Classroom, WhatsApp and Zoom that help students to continue their education (Adnan, 2020). Social media tools contribute to spreading and disseminating information and foster collaboration among teachers and students (Esam & Hashim, 2016). Individuals can benefit from social media by developing a strong network of relationships with people from a variety of backgrounds (Roberts & David, 2020), gaining a sense of support (Domahidi, 2018), reducing isolation (Seo et al., 2016), and gaining access to professional opportunities. The updated features of social media make it possible for many people to discuss ideas and opinions with ease and openness on social media platforms and share experiences, prospects, information, and knowledge with others in an effective way (Al-Rahmi et al., 2018). Digital media and social networking transform how people communicate, collaborate, share information, and use it on a daily basis (Suseno et al., 2018). Furthermore, social networks allow starting friendships through insignificant interactions, messages, and involvement in social processes, which offer social support for one another (Abbas et al., 2019). Finally, Alahmar (2016) found that social networks serve as vital communication routes and a source of social support in learning environments. So, social media effects present positive outcomes in education.

### **Social Media and Academic Performance: Negative Effects**

The literature highlights that academic performance receives negative effects from social media use. The study of Demirbilek and Talan (2018) found that using social media during lectures affected university

students' learning. Moreover, depression among students is associated with overuse of social media applications (Lin et al., 2016), anxiety, low self-esteem, and loneliness (Bhagat, 2015). Similarly, Kelly et al. (2018) informed that more engagement with social media applications, learning skills, and research capabilities deteriorate in certain situations as students lose concentration and dedicate less time to their studies. Moreover, the excessive use of social media constricts students' academic, social, and physical health (Jha et al., 2016). Same way, social media contributes to the general sense of ill-being, poor self-esteem, anxiety, and sadness as mental health symptoms (Hardy & Castonguay, 2018; Ashford, 2017). Students' use of social media might cause stress in students, which can have a negative impact on academic performance (Legaree, 2015). Further, spending more time on social media platforms diminishes students' interest in schoolwork (Bernard & Dzandza, 2018). Ajanaku (2016) found that social media restricts the socio-physical communication abilities of students as the conversation takes place "behind the screen". So, the negative effects of social media draw a parallel line with the positive effects on students' academic performance.

### **Studies on Social Media in Different Contexts**

In recent research, students used social media extensively for fun, identity building, social betterment (increasing one's offline social standing through online contacts), and maintaining interpersonal ties (Ifinedo, 2016). According to Owusu-Acheaw and Larson (2015), social media for messaging shows a strong negative effect on respondents' academic achievement. In a similar vein, in the Australian context, the study of Wakefield and Frawley (2020) informed that best-performing students' use of social networking sites showed no negative impact while jeopardizing the academic careers of those who do not perform well. Moreover, there is more of an urge to use social media than just a desire to engage in routine activities (Lee et al., 2017). Whelan et al. (2020) research in three countries reported that social media excess impairs self-regulation, which is a critical component for bagging excellent academic achievement. Finally, Van Der Schuur et al. (2015) found that the academic performance attributed to social media has a negative impact on actions and attitudes and the perceived academic learning of students.

### **Social Media Studies in Local Context**

A few studies were conducted in Pakistan to explore the effects social media has on academic performance. Ahmed et al. (2020) revealed that a significant correlation exists between social media use and university students' academic achievement. Moreover, the academic performance had a negative impact on students using social media for purposes other than academics (Hameed et al., 2022). In addition, Mustafa (2018) found a negative influence of social media on academic performance. These studies highlighted negative relationships between students' academic performance and social media. However, Hasnain et al. (2015) reported that students who use social media in a positive way learn more and do better in school, which improves academic performance. So, the literature review indicated contextual and research design gaps around the social media use of students at various levels, which affects academic performance.

### **The Conceptual Framework**

The conceptual framework was grounded in concepts from existing literature on relations between social media and academic achievement (Figure 1). The literature suggests social media is one of the factors affecting academic performance in positive and negative ways. Social media provides various key areas for students to develop their ideas by seeking academic assistance (Abdullahi, 2020); assisting students in maintaining connections with teachers and fellow students (Mowafy, 2018); and knowledge sharing (Bernard & Dzandza, 2018). The positive effects of social media enable students to enhance academic performance, while the negative effects of social media exacerbate academic performance. For instance, Sternberg et al. (2020) informed that social media use causes delays in submitting schoolwork and academic tasks, yielding lower grade point averages and a lower cumulative grade point average. Moreover, excessive

use of social media affects students' physical health (Khalid, 2017). A more interesting aspect of the current research study was to identify the strategies that prospective teachers use to improve academic performance; and the use of preventive strategies of social media that affect academic performance.

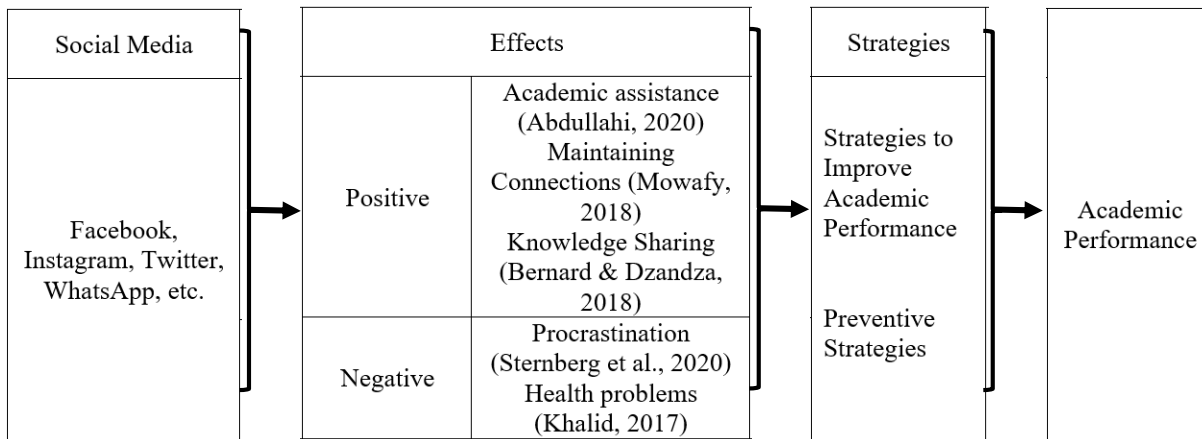


Figure 1. The conceptual framework.

## METHODOLOGY

The philosophical stance is grounded in subjectivism and interpretivism. The research approach was inductive. The research methodology was qualitative. The research strategy comprised a case study. The data collection tools comprised a combination of focus group discussions and semi-structured interviews. The data analysis technique of Labra et al. (2019) was adopted for the thematic analysis. The data analysis process is accomplished through seven steps: knowledge of data; generation of initial codes; searching for themes; reviewing themes; naming and defining themes; interpreting and presenting themes. Using the purposive sampling technique, prospective teachers studying in their last year were selected. A different set of samples selected for interviews and focus group discussion. There were four interviewees participated in the study who were labeled as i1, i2, i3 and i4; and four participants of focus group discussion (FGD) who were denoted by P1, P2, P3, and P4. The numbers at the end of quotes serve as a reference in the following data analysis. The interpretative validity was ensured through participant feedback.

## RESULTS AND DISCUSSION

The findings informed positive and negative perceptions of participants and interviewees toward social media effects that affect academic performance.

### Social Media with Polarized Effects on Academic Performance

Most participants believed that social media holds two-opposite effects on academic performance, and much depends on social media users. The positive effects of social media included: knowledge enhancement, English language development, catering to the needs of diverse learning styles, establishing connections with educators, peers, and friends, making for missed classes, and an enabling source for continued education during COVID-19 improved academic performance. As i3 said:

Due to social media, I have enriched my knowledge because social media really helps in the dissemination of knowledge. Social media application provides you accessibility of different websites from where you can get the knowledge of theories, books, geography, culture, current affairs, internationalization, global affairs and so on.

In the words of i1, “I have developed my writing skills because I read different articles blogs on different social media applications like Google Instagram blogposts and so on. In that way, social media benefits or help me to improve my academic performance positively”.

The negative effects of social media include: excessive use wasting useful time, physical and mental health issues, increased procrastination, developing addiction, and distraction through advertisements hamper academic performance. As i2 shared, “Due to social media, I personally have failed the sleep deprivation body ache as side effects”. Similarly, i3 said:

I am in my 7th semester, so whenever I reflect on those previous six semesters. I deduced that I have wasted my precious time. Once I found the reasons, I came across the social media as 1 of the reasons— due to social media, I developed a lot of procrastination or even I have developed a factor of procrastination just because of social media. As I have become highly addictive of social media, so whenever I am free, in my bed, in my class, in cafeteria, having conversation with my friend, I use mobile every time. So, in that way, I have become addicted of social media.

However, the use of social media determines the positive or negative effects on academic performance. P3 rightly pointed out, “So, we can never say that social media guarantees you to improve or disprove your academic performance. However, it all depends upon the usage” (FGD).

The response of participants suggested the positive and negative effects of social media. However, for most participants, the effects of social media are relative. In other words, it largely depends on the user of social media, which determines either positive or negative effects. So, social media users manage time and devise study plans to make preferred decisions themselves or be a victim.

### **Fostering Academic Development for Improved Academic Performance**

Many participants believed that social media serves as a source for the academic development of undergrads. The data analysis informed of components of academic development: writing skills, communication skills, working in groups, problem-solving skills, IT skills, searching on the internet, acquiring new words, and critical thinking skills. As P3 articulated, “I have enhanced my critical thinking skills because of social media. As I attended different online session on different topics, taken online courses, watched the educational documentaries and read blogs. That in result, enhanced my critical thinking skills (FGD).

As i1 expressed:

I have developed my writing skills because I read different articles blogs on different social media applications like Facebook, Google, Instagram, blogposts and so on. In that way, social media benefits or helps me to improve my academic performance positively.

In the words of i2, “social media expands our knowledge within seconds because of social media application we have access to get the knowledge of theories, current affairs, international affairs and so on”.

The responses indicated that social media enhanced participants’ vocabulary because of reading experience from social media applications—Instagram, Facebook, Google and so on. The interaction with people and uses of social media extend the vocabulary used for smooth communication. Moreover, social media boosts learning because the information is collected from social media, which develops a positive influence on academic performance. Hence, improvement in academic performance pairs with social media use. Now, social media has become the need of students as it enriches their knowledge, which is beneficial for academics. Further, the response also indicated that social media assists in the collection of information regarding current affairs, general knowledge, and specific knowledge. Also, the implementation of

knowledge in classroom discussions and even in exams impacts academic performance positively. Therefore, social media serves as a vehicle to spread knowledge in no time and offer learning opportunities.

### **Social Media Content Breeds Bane and Blessing**

Media pressure appeared as an important factor in affecting academic performance. The motivational material on social media and inspirational stories of successful people to never give up invokes the feeling of nothingness or demands beyond the average capacity and talent of individuals, hence, causing discomfort. As P4 expressed:

Sometimes, social media contributes to our pressure. Undoubtedly, we are living in an era where people post their success stories within a second on their social accounts. So, whenever we just see their stories. It really makes us feel low esteemed, guilty, and even ashamed. In such scenarios, it affects our set of thinking patterns which really contribute on our academic performance adversely.

On the contrary, i3 maintained:

I read the bibliographies stories of never giving up, and the people who have become successful despite all the failures. In that way I read those stories. I sometimes watch motivational videos just to make myself motivated enough to do something productive for my own self for my parents and for my academic purpose activities. In that way, I get the dose of motivation whenever I watch those motivational videos or read the stories of people who have become successful. Which in result help me to stay motivated. So, whenever I am motivated, it really affects my academic performance positively.

Moreover, i1 shared:

After—availing the wonderful opportunity, I have gotten the sense of appreciation from parents, teachers, colleagues and I have got some sort of motivation from that. In that way I have got a dose of motivation that really helped me to improve my performance more.

The respondents reported a dichotomy of results. First, a gap between successful people and average people. A process of struggle leads to achievement, while a struggler has yet to take the first step. This success and the way to success are two approaches students adopt. Some go into the doldrums, while others dare to face discomfort zones. Second, social media is a source of motivation to put the academic performance on the track to success. The success stimulus triggers internal mechanisms and prepares for similar success as others have achieved. In addition, social media platform helps in earning appreciation and motivation for future endeavors. So, the success stories on social media stimulate individuals to channel energies for achievement, which serve as a positive catalyst or develops a feeling of stress that affects academic performance.

### **Diverse Strategies for Improving Academic Performance**

For the second question, the participants were informed of a variety of strategies they used for the improvement of academic performance. Such strategies include notes taking, following and subscribing to online channels, organizing material virtually, bookmarking videos, watching videos; acquiring and using vocabulary; searching for authentic information; consulting online sources for clarification of difficult concepts and misconceptions; installing relevant applications; and seeking virtual assistance. As i2 shared:

I use note making strategy. Whenever, I read any article or watch any video or documentary or read any report, I note the main points those points can be in any form of the topic which includes its effects, reasons, solution and so on.

In same vein, i4 responded:

Even when I watch videos and don't find the relevancy in them. So, I install relevant applications and learn the concepts accordingly. For example, I am learning the Mathematics concept, then I will use the "Photo math" application. Thereafter, I learn the steps of solutions. In that way, I follow this strategy of installing applications.

The responses reported the use of different strategies related to social media and online platforms for improving academic performance. The most recurring strategies were notes taking and subscribing to video channels. The notes taking strategy was in common for jotting down any pertinent information from social media or online platforms. Moreover, the source of the video provided facilitation in the clarification of difficult concepts and eradication of misconceptions. However, due to human diversity, the expected variety of strategies indicates participants' insightfulness and alertness in seeking authentic information for learning to improve academic performance.

### **Strategies to Mitigate Down Side of Social Media**

The participants shared their coping strategies to diffuse the negativity attached to social media for its influence on academic performance. The deterring strategies of participants included: activating airplane mode, subscribing to and following relevant pages on social media, uninstalling social media apps, reading books, studying when the mobile phone battery nears the end, engaging in class activities, connecting with peers and teachers, and study at night. Besides, the most common preventive strategy was to keep the cellular phone away to offset the negative effects of social media. As i2 stated, "I keep my mobile phone away from my reachability our proximity or even set it as on airplane mode. In that way, I remain somewhat undistracted". Same time, P4 shared, "I use social media just for fun, relaxing and even entertainment purposes. So, in that period of time, I don't study".

A participant (P2) shared another mitigating strategy:

I reduce the influence of social media. For that I mostly try to deactivate my social media application accounts or even I reduce the use of such applications when exams are nearby or whenever I any tougher assignment is due (FGD).

An interviewee (i3) informed:

When the academic workload is high on my shoulder and time is tough, I simply deactivate all the unnecessary applications like Facebook, Instagram and Twitter. I mostly use this strategy to reduce the negative effect that social media has on my academic performance.

These strategies informed ways undergrads devised to offset the downside of social media. The context in which social media is used presses the need for devising measures to undermine its effects on accelerated academic performance. Moreover, the strategies suggested innovative solutions to the existence of social reality introduced through technology and electronic gadgets. An understanding of these strategies indicates that despite all negativity in social media, if individuals will, they can still retain focus on studies and enhance learning opportunities.

### **Discussion**

The findings revealed that social media has more positive effects than negatives. This corroborates with the literature. To begin with, the positive effects of social media have an influence on academic performance, according to El-Badawy & Hashem. (2015) social media helps in the academic development of students as it provides vast opportunities for interaction and learning for academic related-engagements. Secondly, social media disseminates authentic and relevant knowledge in various forms. Al-Rahmi et al. (2018) confirmed that social media provides quick access to instrumental knowledge. Thirdly,



social media instils a sense of inspiration and motivation, which catalyzes the learning process, hence, brings improvement in academic performance. The study of Rieger and Klimmt (2019) acknowledged that social media develops a source of inspiration among individuals because social media portrays various inspirational stories. However, the negative effects of social media are reported to obstruct academic performance. One of the negative effects of social media indicated that social media develops procrastination among students. Sternberg et al. (2020) confirmed that social media contributes to procrastination among students, which deteriorates their academic performance. Moreover, social media instils an inferiority complex in students. Appel et al. (2017) also confirmed that due to social media, students compare themselves with others, which further leads them to an inferiority complex. The finding of the second question reported strategies that students adopted to improve academic performance through social media. The existing literature lacks support for this finding because the previous studies focused on exploring the relationship and effects between social media and academic performance while ignoring strategies that undergrads follow to foster learning from social media sources. However, the strategies to accelerate academic performance using social media have received the least attention from researchers; but being important, it surfaces valuable insights about situation-handling and finding social media as an opportunity for collecting information. Similarly, in order to offset the negative influences of social media, the third question informed coping strategies that reduce the risks of social media on the academic performance of prospective teachers. There might be few or no studies that exist to support this finding. The coping strategies suggest instructions when using social media to maximize learning outcomes.

## **CONCLUSION AND RECOMMENDATIONS**

Social media use among university students has intensified in the modern era. The exploration of social media effects among undergrads established that social media has more positivity than negativity according to self-reported perceptions of participants on academic performance. Further, by mitigating the negative effects of social media, the participants continue learning from social media to improve academic performance. Moreover, participants informed that by applying coping strategies, students could focus on their studies and limit the negative influence of social media that affects academic performance. The findings suggest that social media use depends on its users. The process of social media use introduces its users to find ways that are useful for learning and analyze to alleviate its effects for better academic development. The findings stemmed from a small sample, hence, limiting generalizability. The objective of the study was to the effects of social media and ignore other contingent variables that would limit the scope. Thoughtful channelization of social media phenomenon in academia can uplift the quality of education in higher education. Teachers and institutional management must focus on conducting training sessions to enlighten students of tertiary education for enhanced academic productivity, which will result in long-term effects on society. Students need to learn to develop self-discipline and management skills to focus on studies than social media, which will help in academics. Future research to focus on identifying the frequency and intensity of social media and its relationship with academic performance. Furthermore, while this study explored social media use in terms of academic performance, quantitative studies are required to gain more insights into the times of the day and days when social media is used.

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