



RESEARCH ARTICLE

From Distraction to Dedication: The Paradoxical Effects of Social Media on Student Academic Performance

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Over many years, the use of social networks has proliferated and become fundamental to students' lives. These mechanisms provide the means for academic growth and distract attention at the same time; mostly, such effectiveness drove apprehension about their influence on students' academic performance. The use of social media can be a strong tool for improving academic work through interaction and availability of resources; however, it is also likely to expose the students to distractions and loss of control to effectively manage time. This study seeks to consolidate existing studies that address the advantages and disadvantages of the usage of social media about achievement in education. A systematic review following the PRISMA 2020 protocol was performed in major databases such as Web of Science, Scopus, and Google Scholar. 25 studies focused on the social media impact on academic performance and incorporated regulations such as demographics, usage, and education. The review indicates that social engagement promotes educational engagement through improved division of labour for academic tasks, enhanced access to learning materials, and increased social interaction via networks that are useful in academic learning. Excessive or irresponsible engagement in social networks, on the other hand, breeds distraction and procrastination that results in cognitive overload causing negative effects on academic performance. Besides, age, gender, and other related socioeconomic factors also play a moderation role; younger students seemed more prone to distractions. The research finds that social network sites are beneficial for educational purposes, especially for learning and enhancing engagement, however purposeful use of these sites is important to reap the benefits and avoid the negativity. Students, teachers, and education authorities need to work together for the full benefits of social networking for education. More studies should be directed at these new technologies and how to find a perfect balance in the use of social media to improve learning outcomes.

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INTRODUCTION**1.1. Background and rationale**

The use of social networks has changed dramatically and become more than a simple means of virtual communication, especially in the last decade. It has become part and parcel of billions of people's lives on the planet. This increase has been more notable among students, whose use of equipment with Internet connectivity includes networking sites such as Facebook, Instagram, YouTube, TikTok, and LinkedIn where they engage with their peers on education matters. The infiltration of social media is so immense that reports have indicated that many if not all students spend hours on these sites every single day (Babaran, 2022; Dimacangun & Guillena, 2023). Hence, it has emerged as a crucial subject of research on how social media affects students' academic accomplishments. There are more than 4.9 billion people worldwide who are internet users, with around 4.7 billion actively

using social media. It also highlights that social media use among students in Kaduna State, Nigeria, is relatively high, with most students rarely adhering to ethical usage guidelines. It finds that youths are the most common group to misuse social media, often engaging in sharing false news, spreading misinformation, and promoting indecency, which leads to negative impacts on academic performance. (Abubakar & Aliyu, 2024)

There are two sides to the use of social media in the educational system. One of the perspectives is that there is an emphasis on the use of social media in classrooms and its combination with education as an interactive means of communication among teachers and students and as a resource for learning outside the classroom (Boahene et al., 2019; Khan et al., 2016). For example, social sites have become a tool for students to facilitate collective learning, disseminate educational resources, and solve individual queries directed to other learners and teachers. However, the ready and easy availability of such tools coupled with their focus on entertainment has a negative side as well. This easiness can trigger procrastination, loss of concentration, and diminished academic self-efficacy (Lau, 2017; Hameed et al., 2022). The positive and negative aspects of social networks coexist in the life of a student and contribute to an ongoing discussion on the role of social media in education and its effects on academic performance.

Earlier works on this aspect have also given different outcomes. For example, Alkhateeb (2020) finds social media, particularly for educational purposes to enhance learning. In contrast to this, studies are reporting associated risks due to excessive use, multitasking, and using it for purposes that are not academic (Suganya et al., 2020). Moreover, other studies show that there are no effects regarding the use of social media on academic performance suggesting that the effects of social media on studies could be influenced by many factors including the context and individual's characteristics (Talaue et al., 2018). The connection is also made more complicated by changing online environments and the users' habitual incorporation of social media in their everyday lives.

While noting the diversity of arguments within the existing body of knowledge, the rapid changes in technologies and their understanding in a contemporary context signal the need for a systematic review. This review seeks to evaluate the existing literature on social media and related academic engagements, assess the advantages and disadvantages, and recommend measures to increase the positive aspects while reducing the adverse effects.

1.2. Importance of the topic

The issue of how social media use correlates with academic performance is pertinent to teachers, students, and education decision-makers. Teachers need to be aware of the impact social media has on learning and engagement to adopt it in their teaching strategies and courses. Given the increasing focus on digital learning interactive spaces, especially among social media-age students, the application of such platforms as a means of enhancing learning through interaction, content sharing, and provision of educational resources to students can maximize student success and academic performance.

As students tend to wander more in the learning environment within the confinements of the grounds while using many social media, how such use of social media impacts the well-being of the students and their performance in the academic sphere becomes significant. By learning how to use social media in moderation, students will be able to accomplish their educational goals with the help of social media without incurring too many distractions or negative impacts on their academic performance. This review's results can also be applied to designing educational policies that promote the use of social networks for educational purposes in school. Such suggestions can promote social media use that engages their patterns on social and technological elements active today. Since the use of social media today has modified the patterns of communication and sharing of information, it is also essential to examine the pouring of social media in academics for appropriate actions to be taken in all the hierarchies.

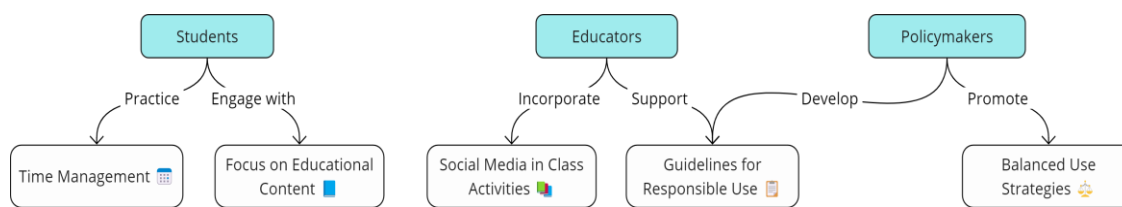


Figure 1: The figure outlining the balanced approach for different groups (students, educators, and policymakers) to optimize social media usage.

1.3. Research gap and objectives

Social Media Influence on Academic Performance: An Assessment of Valid Gaps in Research although there is a growing literature on the link between social media usage and academic output, several issues remain unexplored. This phenomenon needs large-scale, cross-disciplinary research available at many educational levels, layers of geography, and social situations which are currently lacking. In addition, there is no adequate attention directed to younger social media such as TikTok which is increasingly popular with students. Furthermore, little has been done in exploring how age, sex, social class, or discipline of study affect engagement with social media and academic performance. This review aims to cover four important aspects. First, it seeks to integrate the previous studies on the association between different social media sites and how they affect students’ academic performance. Second, it attempts to examine the extent to which social media is a stimulant or a deterrent to learning and mental engagement, thus explaining the positive and negative sides of social media as an educational tool. Third, the review explains the extent media gender, and location among other variables affect the social media effects of students factoring in how such effects have been moderated or mediated. Finally, this section critiques the research design adopted in published studies, revealing what has not been included in the existing body of research and suggesting new lines of inquiry to provide insight into the intricate relationship between the use of social media and students' academic achievement.

The systematic review aims to answer the following research questions:

RQ1: How does the frequency and type of social media use affect academic performance in students of different education levels?

RQ2: What are the positive academic impacts of social media use (e.g., collaboration, learning resource sharing), and what are the negative impacts (e.g., distraction, procrastination)?

RQ3: How do demographic factors such as age, gender, socioeconomic status, and field of study affect the relationship between social media and academic performance?

RQ4: What roles do psychological, behavioral, and social mechanisms play in mediating or moderating the effect of social media on learning outcomes?

Such concerns will overall ensure that the social media usage and performance nexus is better understood within the context learned and synthesized the observations will benefit a variety of stakeholders students, teachers, and policymakers by providing recommendations based on evidence collected.

2. MATERIALS AND METHODS

This systematic review follows the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) 2020 guidelines to ensure transparency and replicability throughout the review process. This review explores social media's influence on students and their academic performance. The following four steps were strictly followed, ensuring a comprehensive and methodical review.

Step 1: Identification

The identification phase was fundamental in finding relevant studies for inclusion in the review. A systematic search was conducted across all the available databases using the right keywords and search techniques. The search strategy also included Boolean operators to narrow down the search rates. The studies were categorized for further analysis and screening depending on the keywords used to examine the impact of social media on the academic performance of students.

Step 2: Screening

After identification, selected studies were assessed for relevance and excluded if inappropriate. The titles and abstracts of the selected papers were reviewed by two authors independently for appropriateness. Studies which did not focus on social media and its relation to academic performance were omitted at this point. Any differences between the reviewers were solved through discussion or by the involvement of the third reviewer.

Step 3: Eligibility criteria

The eligibility criteria were established beforehand and were consistent with the review's purpose and objectives. Studies were evaluated using the following inclusion and exclusion criteria.

Table 1: The inclusion and exclusion criteria for the initial screening of articles

Criteria	Inclusion	Exclusion
Timeframe	Studies published between January 2016 and 2024	Studies published before 2016
Peer-Reviewed	Only peer-reviewed studies	Non-peer-reviewed articles, preprints, grey literature
Focus Area	Social media and its effect on students and academic performance in schools and GPA.	Studies do not discuss the effect on academic performance.
Language	English or translatable to English	Non-translatable languages

Step 4: Inclusion

The final review analyzed studies that met the inclusion criteria. In this phase, available information was collected from the selected studies to conduct the final review analysis. This included information such as the purpose of the study, type of study design, characteristics of the participants, and results. A flow diagram based on the PRISMA framework has been provided to depict this process graphically (see Figure 2).

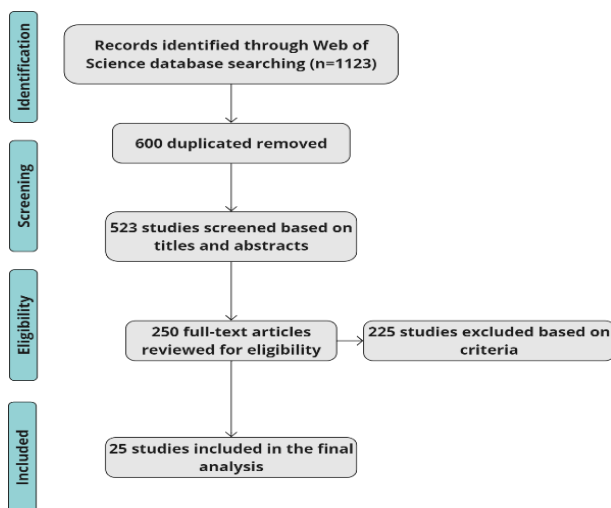


Figure 2: The search strategy for the inclusion of articles in our analysis.

Databases: A broad literature review has been conducted to find existing research studies that would contribute significantly to the topic of interest. These databases are Web of Science, Scopus, EBSCO Host, and Google Scholar, they are selected because they cover a wide range of education and technology-oriented research:

Search strategy

The search strategy encompassed keyword combinations alongside Boolean operators to narrow the findings. Below is a description of the search strategy and the list of keywords employed in different databases (see Table 2):

This strategy includes terms specifically related to social media platforms such as "social media," "social networking sites," "Facebook," "TikTok," and "online communities."

For academic performance, the search terms are broadened to include "academic performance," "student achievement," "educational outcomes," "school performance," "college achievement," "university grades," "GPA," and "academic success," among others.

Additional keywords that describe the student demographics and educational levels like "students," "learners," "pupils," "undergraduates," "postgraduates," "secondary education," and "higher education" are used to ensure the inclusion of a wide range of educational contexts.

Boolean operators (AND, OR, NOT) were used to ensure the search was comprehensive. For example:

- **AND** (e.g., "social media" AND "academic performance") to narrow the search to studies discussing both elements.
- **OR** (e.g., "Facebook" OR "Instagram" OR "TikTok") to expand the search to include various forms of social media.
- **NOT** to exclude irrelevant terms and narrow down the focus, such as studies not centered on academic settings.

Table 2: The summarized search strategy and keywords for Databases

NO.	Construct	Search Field/Limits
#1	"Social media" OR "networking sites" OR "online platforms" OR "Facebook" OR "Instagram" OR "Twitter" OR "TikTok"	TS=Topic
#2	"Academic performance" OR "student achievement" OR "educational outcomes" OR "school performance" OR "learning outcomes" OR "academic success"	TS=Topic
#3	"Students" OR "learners" OR "undergraduates" OR "high school students" OR "college students"	TS=Topic
#4	"Impact" OR "effects" OR "influence"	TS=Topic
#5	2016-2023	PY=Year Published
#6	#1 AND #2 AND #3 AND #4 AND NOT ("non-educational" OR "entertainment")	Language: English

Search methodology: This study was conducted in three main stages: (1) Identifying and finalizing relevant articles, (2) Applying a rigorous inclusion and exclusion criteria to filter the selected research articles, and (3) Analyzing the filtered articles using content analysis based on data obtained from the databases to synthesize the literature.

Data extraction and analysis

Pertinent information is gathered from the included articles, emphasizing some potential factors such as the category of social network sites studied, characteristics of the participants, ways of assessing academic performance and results reported. Synthesized data are consequently presented descriptively as well as statistically in order to highlight the patterns, relationships and discrepancies in the effects of social media on learning. This is done systematically to ensure that all aspects of the complicated relationship between learning and students’ engagement with social networks is dealt with as efficiently and as factually as possible. Different studies appearing within the review consider the benefits and demerits of social networking sites using the available empirical evidence.

3. Results

The studies examined so far are mostly from Asia (Philippines, Jordan, Indonesia, Hong Kong, Sri Lanka, and China) and one was from Africa Uganda in particular, and there is a clear absence of studies from the Western countries such as the U.S. and Europe. The majority of the studies target

college and university students and pay scant attention to high school or junior high students. The most common research design is cross-sectional and survey-based with a dominance of the quantitative approach, using constructs such as statistical correlation and self-reported data. Different aspects such as GPA, exams, and cognitive engagement were used to assess students' academic performance, which complicated the process of understanding the results due to the multiplicity of such metrics.

3.1 Here is the table summarizing key characteristics of the included studies:

Table 3: summarizes some of the past studies in point of 1. Country 2. Study Design 3. Social Media Platforms 4. Key Findings 5. Conclusion.

Author(s) and Year	Country	Study Design	Social Media Platforms	Key Findings	Conclusion
G. Talaue et al., 2018	Philippines	Survey-Based Cross-sectional Study	Facebook, Instagram	Dual impact on academic performance—positive for communication, negative for distraction.	Responsible social media use is key to leveraging its positive effects.
M. Alkhateeb, 2020	Jordan	Case Study	General social media	Positive impact on GPA with appropriate use.	Appropriate social media use can enhance academic performance.
S. Sutarno, 2017	Indonesia	Cross-sectional Study	Facebook, Instagram	No significant impact on academic performance.	Neutral impact suggests careful usage is necessary.
Ahmad Jahed Mushtaq, 2018	Afghanistan	Survey-Based Research	General social media	Positive impacts higher than negative impacts, but no significant statistical difference.	Social media usage can be beneficial if used positively for education.
Fainida Eppie Dimacangun, Junge B. Guillena, 2023	Philippines	Survey-Based Cross-sectional Study	General social media	Positive influence on learning, no significant correlation with academic performance.	Social media has potential educational benefits but needs regulation.
W. Lau, 2017	Hong Kong	Cross-sectional Study	General social media	No significant prediction for academic performance with academic use; negative impact with non-academic use.	Negative impact on academic performance due to multitasking.
D. Suganya et al., 2020	Sri Lanka	Quantitative Study	Facebook, WhatsApp	Significant negative effect on academic performance due to time spent and addictiveness.	Social media use should be balanced to avoid negative effects.
N. Ahmed et al., 2021	Saudi Arabia	Survey-Based Cross-	Facebook, Instagram	Mixed effects on academic	Awareness on

		sectional Study		performance; positive for some, negative for others.	responsible use is crucial.
Kingsley O. Boahene et al., 2019	Ghana	Quantitative Analysis	General social media	Social media use positively related to academic performance when used educationally.	Social media can enhance academic performance when used for educational purposes.
Xin Su, Jiatao Huang, 2021	China	Survey-Based Cross-sectional Study	General social media	Student engagement mediates social media use and academic performance relationship.	Social media use's impact on academics is mediated by student engagement.

3.2 Social media usage patterns and academic performance

Frequency and Intensity of use

The research suggests that students differ in the ways they use social media, from daily to weekly, and a certain extent, the time spent on it also differs. Research generally agrees that a reasonable amount of time spent on social networks, particularly for educational purposes, has a direct influence on positive academic outcomes. For example, engaging in academic social media such as forums or researching educational materials is expected to increase one’s achievements and GPA (Alkhateeb, 2020; Boahene et al., 2019). Several researchers indicate a U-shaped relationship, where the intent-driven use is of an optimal level and favors academic performance but use below or above the optimal level is detrimental to the academic performance.

One of the studies highlights critical statistics on social media's impact on student mental health and academic performance. A significant finding is that 39.4% of surveyed students reported spending between 3 to 5 hours daily on social media, with the majority using between 1 to 3 platforms regularly. The research demonstrates a clear positive relationship between social media use and social media fatigue (SMF), with a correlation of 0.626, indicating a moderate impact. Additionally, the study found a strong correlation ($\rho = 0.702$) between social media use and the "Fear of Missing Out" (FoMO), suggesting that the constant connectivity and pressure to stay updated contribute heavily to students’ anxiety. (Ayub & Ying, 2024)

Active vs. passive use

The frequency at which social media is used enhances or decreases the academic performance depending on the extent of the use. Such use of social media which entails engaging others in discussions and working jointly on academic assignments tends to boost the academic performance of students. Active involvement helps in less superficial learning as the learner has to put some efforts into it and also encourages participation in the academic activities (Boahene et al., 2019). In stark contrast, where content is passively engaged in through just viewing screens, scrolling feeds and watching clip contents, this has contributed to academic performance drops and levels of academic engagement. It is known that passive engagement causes divert attention to active academic work which results to limited time for productive academic work (Lau, 2017).

3.3 Positive and negative effects of social media on academic performance

Positive academic effects

There are some benefits that social media can have on students’ academic performance. One benefit is that it enables students to assist each other by way of online interactions, for example, the formation of alliances or virtual study groups to exchanging study materials and assisting each; this restores a sense of belongingness and increases the willingness to take part in academic pursuits

(Talaue et al., 2018). Another use of social media is made for obtaining information for the classes about the well-known resources such as e-lectures, research papers and educational materials on YouTube, which was found helpful by some students in the learning process and surfaced better academic performance (Dimacangun & Guillena, 2023). In addition to this, making use of social media, for example, by creating an account with LinkedIn for career purposes tends to motivate students who are exposed to such platforms, with regards to the academics, since they appreciate the possibility of different jobs and professional horizons.

Negative academic effects

Social networking sites, on the other hand, provide a range of hindrances to educational success. One such problem is inhibition towards academic work, entertainment in this case being the main focus especially when it is accompanied by unrestrained social media access, which most students, unfortunately, indulge in. As a result, academic achievement diminishes along with the study time as they mostly indulge in non-academic activities (Suganya et al., 2020). In addition, excessive engagement in social media has been found to lead to shorter attention spans, more time spent on several tasks concurrently, and trouble completing academic activities. In addition, excessive engagement in social media and especially at night may cause poor quality of sleep and consequent daytime sleepiness, which is detrimental to academic performance.

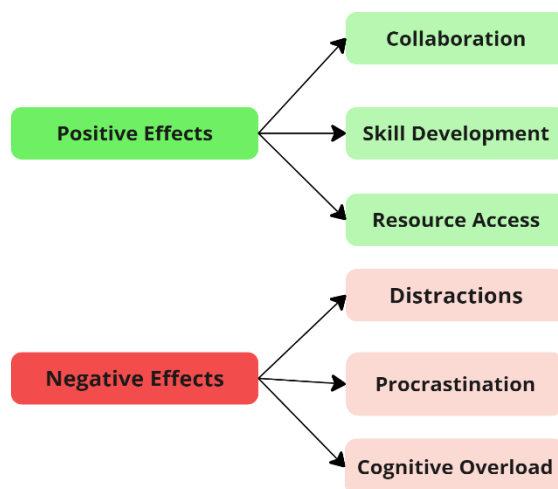


Figure 3: This figure clarifies the dual nature of social media's impact on academics, allowing the reader to visually compare the positive and negative aspects side-by-side.

3.4 Demographic differences

Age

According to current studies, adolescents such as high school students are likely to be negatively affected by social media as they can be distracted from their studies and perform poorly academically. However, university or postgraduate students are more advanced in their use of social media; as they can combine both social aspects and the academic requirements more effectively.

Gender

Genders have been found to engage social media differently in terms of usage patterns. For example, female undergraduates tend to be focused on visual images and as such tend to be active participants on the picture sharing site Instagram or Pinterest, in contrast to male undergraduates who tend to prefer sites that allow them to play games or simply talk about the games such as Reddit. Furthermore, the effect of social media on education may also vary with the gender of the students, whereby social networking sites such as Instagram may predispose young women to social comparison very easily which can lead to detrimental effects on academic performance.

Socio-economic status (SES)

Socially disadvantaged students who come from a lower economic class are often unable to rely on a steady network connection and on the digital devices which may restrict their consumption of social media to personal use rather than for academic purposes. On the other hand, individuals coming from affluent families are less likely to waste time on social media as they have proper facilities such as

private tutors and educational websites which encourage proper use of social media for education related purposes.

Field of study

The way students engross themselves into the use of social networks is also dependent on the course they are taking. For instance, STEM students may use certain sites for academic purposes in order to get connected to relevant academic forums and research laboratories, whereas students in the humanities may utilize the same sites to connect with other users around thematic concerns towards literature or social science related issues. This in turn explains the dominance of this pattern of social networking usage across the disciplines precincts.

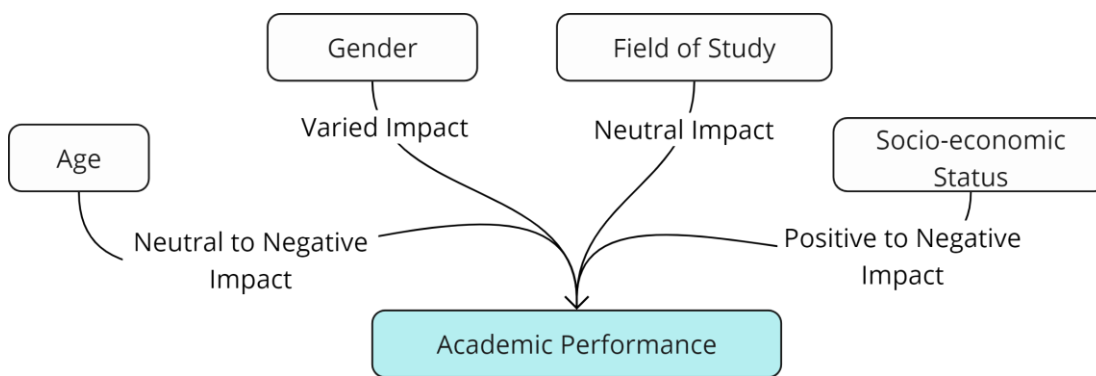


Figure 4: This diagram visualizes how demographic factors influence the relationship between social media use and academic outcomes, making complex relationships easier to understand.

3.5 Mediators and moderators of the social media-academic performance relationship

Psychological factors: Locus of control is very effective in between this relationship as self-regulation has been found to influence the use of social media. Self-regulated students have greater tendencies to use social media for academic reasons and avoid distractions while students with low self-regulation are likely to slack off and wander off. In addition, students who engage in social media and content creating sites such as TikTok and Instagram may find it hard to concentrate on their academic work because their attention span is shortened.

Behavioral factors: Use of social media encourages a multitasking behavior, that is moving from an academic task in focus to an active social media task and back, which often results into high levels of cognitive load hence poor academic performance. However, it is also reassuring that students who control their time and do not indulge in unnecessary social media activity do not tend to show diminished academic outcomes.

Social factors: Use of social media is also very much dependent on the socialization level of the person. For instance, there is positive dopaminergic reinforcement for joining academic communities on LinkedIn or Reddit, and this adds to academic enrichment and improvement in performance. On the other hand, under pressure from peers and the use of emphasis on external self-images in social interactions, it becomes easier to lose sight of the academic goal and focus more on these distracting factors.

To Conclude, social media and its relation to the educational performance of an individual is influenced by many dimensions such as usage patterns, age, pattern of psychological regulation and social development. Attention to these aspects will enable educators and policy makers to strategize their interventions so as to maximize the advantages of social media on a learner’s academic performance while reducing its drawbacks.

4. DISCUSSION

4.1 Interpretation of findings

This review has shown that social media has a more complex effect on academic performance than is often assumed. It has both benefits and disadvantages. For instance, social media has positive influences as a means of academic interaction and knowledge dissemination. On the contrary,

students who engage in academic debates, resource sharing and teamwork through social media such as Facebook and WhatsApp, report higher levels of involvement in academic activities and better performance than those who do not (Boahene et al., 2019; Talaue et al., 2018). In addition, these social networking sites also include informative resources, online classes, and professional associations which all help engender motivation and cognitive engagement that assist in enhancing education.

On the other hand, the adverse consequences originate from the capacity of social media to engage and also procrastinate. Overuse of these especially when they're non-education related or entertaining proves directly related to poor grades, unproductiveness and poor self-control (Suganya et al., 2020; Lau, 2017). With social media being readily available at all times and especially with the practice of academic work and browsing social media at the same time, most of the attention is never fully committed towards the study and a good study habit is rarely formed. In explaining the effects of social media on education, the case of academic engagement and distraction is well illustrated. In line with prior studies, this review also confirms the dual nature of impact on social media on academic performance – both positive and negative. Nevertheless, the present review highlights the role of other factors, such as the purpose and the frequency of use, as potential moderators of social media effect as well. There are later works which tend to insist on the largely negative influence of the social networks, whereas the present overview stresses a more nuanced perspective, which allows for optimum, purpose-oriented usage of such networks to be beneficial academically. However, the scope of these conclusions is limited by the specific findings of the studies, who mainly focused on university students in the Asian and Middle Eastern countries. Therefore, these outcomes may not be applicable to populations outside those studied, at different levels of education or in variably different cultures.

4.2 Theoretical implications

The results help expand numerous theories regarding the influence of social networking sites within academic context. Cognitive Overload Theory states that persistent and excessive engagement in social networking can constitute a drain on cognitive resources, thereby hampering one's ability to engage, particularly for a student, on academic work. The act of switching attention from academic work to social programming activities and back again enhances cognitive load which in turn reduces understanding and performance in school. For example, if students keep on studying and in the process turn to Instagram or WhatsApp, there could be cognitive entrapment, and hence lower the productivity, as well as learning, of the students.

Social learning theory is used to explain how social media is constructive in academic situations. In fact, social learning occurs in social media site as they allow for knowledge sharing, learning and working together. Students' focused communications within social networks designed for academic purposes, such as Facebook group or Quora, have been effective for rapid information access, as well as networking and debates among students, which also contribute to improvement of learning experience.

Distraction Digital Theory concerns social media, suggesting that the latter constitutes such an intrusion as to prevent effective concentration on one's studies and associated activities. The desire to respond burgeons due the social media exposure so much so that students are unable to focus on academic work for long. This theory is also related to the above-mentioned issue as it shows how hard it is for the students to balance school with the holistic approach of their life that all countries are embracing today as poor grades have been associated with looking at social media repeatedly (Lau, 2017).

4.3 Practical implications

The article weighs on various purposes for the educators, the policymakers, and the students as well. With regards to teachers, careful and systematic incorporation of social networking sites into the academic sphere may foster students' involvement and learning. However, by forming study groups on the social network sites, comprising of students working on the same project, and encouraging members to upload relevant academic material, these sites can be a source of learning rather than an administrating distraction.

Educators are also suggested to put an effective policy on the use of social media to reduce cases of misuse while promoting its use for educational objectives. It may be appealing to also recommend media literacy programs targeting the students and the appropriate use of social networking sites for educational purposes which may also be abused. Other strategies could involve non-cognitive strategies that would wish to advocate for non-academic social networking use. For the students, there is a possibility of balancing the positive aspects of social networks with the adverse ones by embracing better social networks usage practices. Such practices include limiting the time spent on social networks, restricting the use of non-educational materials, minimizing the overlap between educational activities and non-educational activities, and active engagement in educational content rather than passive comprehension.

4.4 Limitations of the review

The studies included in this review have limitations. Most of them were based on self-reported measures, which are not only bias-prone but also jaded an empirical depiction of actual usage of social media or their academic workload. The studies themselves had follow-up periods which were very short hence making it impossible to ascertain the long-term effects of social media usage on academic grades. In addition, the majority of these studies examined a narrow geographic area which resulted in cultural geography biases that hindered the applicability of results.

The review process itself has limitations such as publication bias, where statistically significant findings are more likely to be published than negative ones, and the fact that there are no reviews of journals which are published in other languages than English, which many have been copyrighted. Less constructively, the problem of social media is dynamic in nature, it does not allow for proper commencement and completion of the review since in the newer context some social media platforms such as TikTok may not be represented in the studies being reviewed.

4.5 Future research directions

In order to fill in the existing research gaps, the studies in the future need to take into account the longitudinal designs so that the longitudinal effects of social media on academic performance can be researched. Constant follow up studies on media use alongside its effects on school performance would give a fuller understanding of the prolonged use of media. In addition, experimental research is warranted in order to determine social media as an independent or dependent variable on academic performance. For instance, media exposure studies in which the student's use of certain social media sites is restricted or one that encourages using such sites for academic work only would help determine how varied media uses affect the learning of students. Also, there needs to be more research on this, especially on the particularly recent ones that have gained usage in a very short time such as TikTok, Instagram, and LinkedIn. This understanding is important especially in today's context where these education-related social media platforms can be different from other platforms such as Facebook or Twitter, which are typically less academic in nature.

Last but not the least, social media might improve academic performance through several means such as interactivity, sharing information, as well as access to content but at the same time, it has destructive tendencies such as addiction, overthinking, and poor concentration. This can be done by providing a balance and emphasizing the need for the use of social media for specific reasons as intended with the strategies of the students, educators, and the policy makers able to utilize the social media advantages for learning and in turn mitigate the adverse effects. Hence, this calls for more education on the changing face of social and its different ramifications within the academic sphere.

5. CONCLUSION

The article under examination discusses the positive and negative effects of social media use on academic performance and seems to have an equal weight of remedies and challenges. As for the benefits, social networks like, for example, Facebook or WhatsApp, network engagement and supply of educational materials as well as learning from each other, thus promoting improved academic performance and involvement (Boahene et al., 2019; Talaue et al., 2018). On the contrary, the situation turns negative upon reaching certain level of socializing or relevant content cutting off, causing annoyances and overload, as well as an attention shift which are all associated with the lower academic achievement (Suganya et al., 2020). Also, consideration of age and its effects reveals that,

among adolescents like high school students, social networks are more likely to cause negative effects than among older and mature tactical adults. The variation in impact is also evident across genders, as there are preferred platforms used especially when it comes to performance. Also, those regarding socio-economic status show how different social media is utilized by students for educational activities as students from higher socio-economic class are able to access more resources and technologies.

Social media and education have a complex and demanding relationship. It has the possibility of improving learning and socialization but also runs the risk of making people lose their focus which brings the need for regulations. This can be made possible through self-regulation as well as time management and strategic use by the students. Teachers may support students' engagement with the learning process by social networks making them an active learning environment, while appropriate regulations should be provided by the authorities. The enhancement of education through the use of social media will rely on the active involvement of the students, the educators, and the policy makers in order to ensure the effective realization of its purpose while limiting its effectiveness and inhibiting distractions. Since social media is in a constant change and its potential to alter the behavior of students is high, further research and policy changes are needed.

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