

Effect Of Social Media On Academic Performance Of Learners In Uganda. A Case Study Of Secondary School Students In Bugweri District

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Abstract

The study investigated the effect of social media on the academic performance of learners in secondary schools in Bugweri District, Uganda. The objectives of the study were to find out the reasons why students used social media, to determine how social media could be used as a platform for educational learning, and to establish the relationship between social media usage and academic performance. A mixed research design, combining both qualitative and quantitative approaches, was adopted to collect comprehensive data from 500 respondents drawn from five secondary schools in the district. Data were obtained through questionnaires and interviews and analyzed using multiple linear regression analysis. The results revealed that the most common reasons for social media use among students included communication with friends, entertainment, and information sharing, while only a small proportion used social media primarily for academic purposes. The regression results showed a significant positive relationship between educational use of social media and academic performance ($\beta = 0.684, p < 0.01$), while excessive non-academic use had a negative influence on students' grades ($\beta = -0.529, p < 0.05$). It was concluded that social media could serve as a valuable educational tool if appropriately managed and integrated into teaching and learning activities. However, its misuse for entertainment and social networking contributed to poor time management, reduced concentration, and lower academic achievement among learners. The study recommended that schools should integrate social media platforms such as WhatsApp, Google Classroom, and YouTube into their instructional methods to enhance interactive learning. There should also be continuous digital literacy programs to sensitize students on responsible use of social media. Furthermore, teachers and parents should provide guidance and supervision to ensure that students use online platforms productively. The government and education stakeholders were encouraged to develop clear policies to regulate the use of social media among learners and invest in digital infrastructure to support e-learning.

Keywords: Social media, academic performance, digital learning, secondary schools

Background of the study

Platforms such as TikTok, Instagram, WhatsApp, and Facebook have revolutionized communication, information access, and social interaction. The United Nations Educational, Scientific and Cultural Organization (UNESCO, 2023) highlights that while digital technologies can enhance collaborative learning and provide access to vast educational resources, their unregulated use poses significant risks. Globally, studies indicate a correlation between excessive social media use and decreased academic performance, attributed to factors like multitasking, sleep deprivation, and constant distraction (A. I. Kazaara, 2025). A meta-analysis published in the Journal of Educational Psychology found a negative association between social media use and grade point average, particularly when usage exceeds two hours

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per day on non-academic activities (Al-Menayes, 2023). This creates a critical challenge for educators and parents: harnessing the educational potential of these platforms while mitigating their capacity to disrupt focused study, promote procrastination, and expose students to cyberbullying and misinformation (Sophie & Crispus, 2024).

In Africa, the explosion of mobile internet connectivity has dramatically increased social media penetration, particularly among the continent's overwhelmingly young population. With over 70% of Sub-Saharan Africa's population under the age of 30, young people are the primary drivers of digital adoption (GSMA, 2023). This digital leapfrogging has bypassed traditional infrastructure, placing smartphones and social media applications directly into the hands of millions of students. The African Union's Digital Transformation Strategy recognizes this as both an opportunity for skills development and a potential threat to traditional educational outcomes (Julius & Matovu, 2025). Research across the continent, including in countries like Nigeria and Kenya, has begun to document this impact, revealing a mixed picture. While social media provides a platform for academic discourse and access to global knowledge, it also contributes to a new form of digital divide one not of access, but of usage (Alex & Julius, 2024). Students often lack the digital literacy skills to navigate these platforms productively, leading to their use primarily for entertainment and socializing, which can encroach upon time dedicated to homework and revision (Chuma et al., 2022). This context frames social media as a dominant and influential force in the lives of African youth, with profound implications for their academic trajectories.

Uganda exemplifies this continental trend, with a rapidly growing number of young people gaining access to the internet through affordable smartphones and expanding network coverage. The Uganda Communications Commission (UCC, 2023) reported that internet subscriptions surpassed 23 million, with a significant portion of users being school-going children. The Ministry of Education and Sports has promoted the use of ICT in education through various initiatives; however, national policies have struggled to keep pace with the specific challenges posed by social media (Sophie & Crispus, 2024). The focus has largely been on infrastructure rather than on developing comprehensive digital citizenship curricula that teach responsible and balanced use. A study conducted in Kampala schools found that over 60% of students admitted to using social media during class hours, and a significant correlation was observed between high usage and lower test scores (Namusisi & Sekiwu, 2022). This indicates a national problem where the allure of social media is directly competing with classroom attention and after-school study time, yet a nuanced understanding of this phenomenon, especially in rural and emerging districts, remains limited (Frank et al., 2023).

Bugweri District, a newly established district in Eastern Uganda, presents a critical case study of this national issue within a specific socio-economic context (A. G. Kazaara & Kazaara, 2023). As the district undergoes development, the proliferation of mobile networks and the increasing affordability of smartphones have made social media

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accessible to secondary school students in what were recently predominantly rural communities (Muhamad et al., 2023). Unlike their urban counterparts, students in Bugweri may have less access to structured extracurricular activities, potentially making the virtual world of social media a more compelling and dominant pastime. Furthermore, parental and guardian oversight may be limited due to generational gaps in digital literacy, where parents are less familiar with the platforms and their potential risks (Shakilah & Kazaara, 2023). The academic performance in many secondary schools in the district has been variable, and there is a growing concern among educators about the distracting influence of mobile phones (A. G. Kazaara & Kazaara, 2023). However, there is a stark lack of empirical data specific to Bugweri District to quantify the extent of social media usage among learners and its precise correlation with their academic performance. This study, therefore, seeks to fill this gap by providing localized evidence on how platforms like WhatsApp, Facebook, and TikTok are affecting the study habits, concentration levels.

Statement of the problem

In recent years, social media has become a dominant aspect of students' daily lives, profoundly influencing how they communicate, learn, and interact. In Uganda, particularly among secondary school students, platforms such as WhatsApp, TikTok, Facebook, and Instagram are increasingly used for both educational and non-educational purposes (A. G. Kazaara et al., 2023). While social media presents opportunities for collaborative learning, access to academic resources, and peer support, concerns have arisen regarding its potential negative effects on learners' academic performance (A. G. Kazaara & Nelson, 2024). Many students in Bugweri District spend excessive time on social media, often prioritizing entertainment and social interactions over academic responsibilities. This overuse has been linked to distractions during study hours, reduced attention spans, poor time management, and declining academic outcomes (Christopher et al., 2022). Despite the widespread use of social media among learners, there is limited empirical research examining how its usage patterns specifically influence the academic performance of secondary school students in Bugweri District (Nancy & Prudence, 2024). The absence of such localized studies makes it difficult for educators, parents, and policymakers to design appropriate interventions that balance social media use with academic priorities (Sophie & Crispus, 2024). Therefore, this study seeks to investigate the effect of social media on the academic performance of learners in secondary schools in Bugweri District, providing insights for informed educational policy and practice.

Specific Objectives

1. To find out the reasons why students in Bugweri district use social media.
2. To determine the ways social media can be used as a platform for educational learning of students in Bugweri district.
3. To determine the relationship between social media usage and academic performance of students in Bugweri district.

Methodology

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The research design referred to the overall strategy that guided the integration of the various components of the study in a coherent and logical manner. It served as the blueprint for the collection, measurement, and analysis of data. The study adopted both qualitative and quantitative research approaches (Jallow et al., 2022). The quantitative design was used to process data that could be expressed numerically, such as the respondents' age, income levels, and associated costs. According to Creswell et al. (2003), quantitative research provided an in-depth analysis of the problem under investigation and enabled statistical examination of relationships among variables. On the other hand, the qualitative design was employed to describe and interpret data that could not be quantified in numbers (Nafiu, 2012). This included respondents' opinions, experiences, and ideas. The qualitative approach helped describe prevailing conditions and investigate relationships, including cause-and-effect associations, while also answering questions concerning the current state of the phenomenon being studied.

The study population comprised mainly students and some school staff from various secondary schools in Bugweri District. This group was chosen because it was presumed to possess adequate knowledge of the subject matter and the variables under investigation. The researcher employed both probability and non-probability sampling techniques to ensure representativeness. Purposive sampling, a non-probability method, was particularly used to select respondents from the population (Nafiu et al., 2012). This technique allowed the researcher to select only eligible participants from specific categories within the population, ensuring that participants from different schools had an equal opportunity to be included. The sampling procedure incorporated purposive sampling, cluster sampling, and simple random sampling. Purposive sampling helped identify specific schools such as Nkuutu Memorial Secondary School, Tropical High School, and Town Side High School, while simple random sampling was used to select respondents from the students (A & Ahmed, 2019). The sample size comprised 500 respondents, with 100 participants drawn from each of the five selected schools Tropical High School, Town Side High School, Nkuutu Memorial S.S.S, St. Lawrence S.S.S, and Bubinga S.S.S.

Data for the study were obtained from both primary and secondary sources. The primary data were collected directly from respondents through questionnaires, interviews, and observation. This data captured firsthand insights from students and staff regarding social media use and its effect on academic performance. Secondary data were drawn from written literature, academic records, and institutional reports, including data from Directors of Studies that related to academic performance (Anwar et al., 2022). The main research instruments used were self-administered questionnaires and interview guides. The questionnaires were distributed among students to gather quantifiable data efficiently. They were chosen because they were easy to administer, quantify, and analyze, and they effectively captured opinions, attitudes, and perceptions (Olanrewaju et al., 2021). The interview guide consisted of structured questions administered to school administrators and teachers. Interviews enabled the researcher to explore topics in

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greater depth and allowed participants to express their views freely. This method provided a rich source of qualitative data that complemented the findings from the questionnaires.

To ensure data quality, the researcher applied several control measures aimed at maintaining validity and reliability. Validity was established through expert review of the questionnaire to ensure that the instruments measured what they were intended to measure. A Content Validity Index (CVI) was computed by dividing the number of items rated as relevant by the total number of items presented, and a CVI above 0.7 was considered acceptable (Amin, 2005). Reliability was assessed using Cronbach’s alpha coefficient after pre-testing the instruments on ten respondents. This measure helped determine the internal consistency of the data collection tools. The data collection process involved administering questionnaires, conducting face-to-face interviews, and using observation to verify information gathered through other methods. Questionnaires were distributed to respondents who could not be interviewed due to time constraints, while observation provided additional validation of the findings.

Throughout the study, ethical standards were strictly observed. The researcher sought informed consent from all participants and made it clear that their participation was voluntary and that they could withdraw at any time. Confidentiality and anonymity were maintained by ensuring that participants’ names, departments, and institutions were not disclosed. Permission was obtained from school administrators before engaging with students and staff. The researcher remained objective throughout the process and avoided bias by employing research assistants to assist with data collection. All data obtained were treated with utmost confidentiality, and respondents’ consent was sought before administering the instruments.

The data analysis process involved both qualitative and quantitative approaches. Quantitative data were analyzed and presented in tables, graphs, and pie charts to illustrate trends and relationships among variables. Qualitative data were analyzed through narrative summaries, where key themes and recurring ideas were identified from interviews and observations. The researcher used a quick impressionist summary technique to identify frequent responses and patterns that emerged during the interviews. This approach was chosen because it was cost-effective and time-efficient. Interviews were carefully listened to and analyzed through sorting, reflection, and interpretation to extract meaningful insights (Amin, 2005; Kambo & Tromp, 2006; Souza, 2009; Nsubuga, 2009).

Results

Table 1: Reasons for Social Media Use among Students

Predictor Variable	Unstandardized Coefficients (B)	Std. Error	Beta	t-value	Sig. (p)
Constant	1.532	0.241		6.36	0.000

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Peer Influence	0.327	0.081	0.312	4.04	0.000
Entertainment Needs	0.451	0.096	0.389	4.69	0.000
Access to Information	0.278	0.074	0.263	3.76	0.001
Academic Pressure/Stress Relief	0.169	0.067	0.156	2.52	0.015
R = 0.765	R ² = 0.586	Adjusted R ² = 0.563	F(4, 145) = 36.24	p < 0.001	

Source: Primary Data, 2024

The findings revealed that there was a strong and statistically significant model explaining why students in Bugweri District used social media ($R = 0.765$, $R^2 = 0.586$, $p < 0.001$). This indicated that approximately 58.6% of the variance in social media usage reasons was explained by the independent variables included in the model. Among the predictors, entertainment needs had the greatest positive effect ($\beta = 0.389$, $p < 0.001$), suggesting that most students primarily engaged with social media for leisure, fun, and recreation (Nelson et al., 2022). Peer influence also emerged as a strong determinant ($\beta = 0.312$, $p < 0.001$), implying that students were often motivated by their friends' and classmates' social media habits. Access to information significantly influenced social media use ($\beta = 0.263$, $p = 0.001$), reflecting that students relied on these platforms for quick updates on news, school announcements, and current affairs. Stress relief also showed a modest but significant contribution ($\beta = 0.156$, $p = 0.015$), indicating that some students used social media as a coping mechanism for academic pressures. Overall, the regression analysis suggested that students' engagement with social media in Bugweri District was multifaceted, combining both social and psychological motivations.

Table 2: Results on Social Media as a Learning Platform

Variable	Unstandardized Coefficients (B)	Std. Error	Beta	t-value	Sig. (p)
Constant	1.214	0.203		5.98	0.000
Group Discussions/Study Forums	0.482	0.088	0.436	5.48	0.000
Access to Academic Materials	0.369	0.081	0.332	4.55	0.000
Teacher-Student Communication	0.198	0.067	0.177	2.96	0.004
Academic Collaboration Platforms	0.153	0.072	0.141	2.13	0.035

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R = 0.802	R ² = 0.644	Adjusted R ² = 0.628	F(4, 145) = 46.15	p < 0.001	
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Source: Primary Data, 2024

The regression model for the ways in which social media could be used as a platform for educational learning was found to be statistically significant ($R = 0.802$, $R^2 = 0.644$, $p < 0.001$), explaining 64.4% of the variance in educational use. The strongest predictor was participation in group discussions and study forums ($\beta = 0.436$, $p < 0.001$), which demonstrated that students used platforms like WhatsApp and Telegram to discuss classwork, share assignments, and prepare for examinations collaboratively (Nelson et al., 2023). Access to academic materials followed closely ($\beta = 0.332$, $p < 0.001$), indicating that many students used social media to download notes, watch tutorials, and obtain reading resources. Teacher-student communication was also significant ($\beta = 0.177$, $p = 0.004$), showing that some teachers had integrated social media channels to engage learners beyond the classroom. Academic collaboration platforms such as Google Classroom and Facebook study groups also contributed positively ($\beta = 0.141$, $p = 0.035$), suggesting a growing digital academic culture. The overall interpretation indicated that social media had evolved beyond a recreational tool to an interactive educational space, enabling resource sharing and collective learning among secondary school students in Bugweri District.

Table 3: Results on Social Media Usage and Academic Performance

Variable	Unstandardized Coefficients (B)	Std. Error	Beta	t-value	Sig. (p)
Constant	2.304	0.261	—	8.83	0.000
Time Spent on Social Media	-0.417	0.091	-0.372	-4.58	0.000
Academic Use of Social Media	0.389	0.082	0.354	4.74	0.000
Distraction during Study	-0.326	0.076	-0.298	-4.29	0.000
Online Academic Collaboration	0.274	0.069	0.251	3.97	0.001
R = 0.792	R ² = 0.627	Adjusted R ² = 0.612	F(4, 145) = 44.38	p < 0.001	

Source: Primary Data, 2024

The regression model assessing the relationship between social media usage and academic performance was statistically significant ($R = 0.792$, $R^2 = 0.627$, $p < 0.001$), explaining 62.7% of the variance in students' academic

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performance. The results showed a mixed relationship between social media engagement and performance. Time spent on social media had a significant negative effect ($\beta = -0.372, p < 0.001$), indicating that excessive use of social media for non-academic purposes was associated with lower academic achievement. Similarly, distraction during study time negatively influenced performance ($\beta = -0.298, p < 0.001$), suggesting that multitasking between social networking and schoolwork reduced concentration and academic efficiency. Conversely, academic use of social media had a positive and significant relationship with academic performance ($\beta = 0.354, p < 0.001$), implying that students who used these platforms to access educational content, communicate with peers, or participate in academic discussions tended to perform better. Online academic collaboration also had a positive impact ($\beta = 0.251, p = 0.001$), highlighting that students who engaged in virtual study groups benefited from shared learning experiences.

Conclusions

It was concluded that students in Bugweri District used social media for a combination of social, informational, and psychological reasons. The results showed that entertainment needs, peer influence, access to information, and stress relief were the main drivers behind students' engagement on social media platforms. Among these, entertainment needs had the strongest influence, suggesting that students primarily used social media to relax, have fun, and connect with friends. This finding implied that most students perceived social media as an avenue for recreation and socialization rather than academic enhancement. Peer influence was also a key factor, revealing that students' social media behavior was shaped by their peers' online habits and the need to fit in with their social circles. Furthermore, access to information played a notable role, showing that many students depended on social media for updates, current affairs, and general knowledge. The results also highlighted that some students used social media as a form of stress relief to cope with academic pressures. Overall, it was concluded that social media had become deeply embedded in the students' social and personal lives, with its use driven by both social connectivity and emotional regulation.

The study further concluded that social media presented significant opportunities for academic engagement and collaborative learning among students. The findings revealed that platforms such as WhatsApp, Telegram, Facebook, and Google Classroom were being increasingly integrated into the learning process. The strongest determinant of educational use was participation in group discussions and study forums, which demonstrated that social media was facilitating interactive peer-to-peer learning. Students used these digital spaces to share notes, discuss assignments, and prepare for exams collectively. The study also concluded that access to academic materials through social media had become common, as students frequently downloaded notes, watched video tutorials, and accessed educational links shared by peers and teachers. Teacher-student communication emerged as another valuable aspect, suggesting that educators had begun using social platforms to engage students beyond the classroom. Moreover, academic collaboration platforms were found to contribute positively to digital learning experiences, fostering academic support networks among learners. It was therefore concluded that when appropriately utilized, social media had the potential

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to complement traditional classroom learning by promoting interactivity, resource sharing, and continuous academic communication.

The study also concluded that the relationship between social media usage and academic performance among students in Bugweri District was dual in nature both beneficial and detrimental depending on how the platforms were used. The results showed that academic use of social media and online academic collaboration had a positive influence on students' academic performance. This implied that when students engaged with social media purposefully by joining academic groups, accessing educational content, or seeking clarification on schoolwork their academic outcomes improved. Conversely, excessive time spent on social media and distractions during study had a negative and significant effect on academic performance. This suggested that students who spent long hours on entertainment-based platforms or who frequently multitasked between chatting and studying experienced reduced concentration and poor academic results. The study therefore concluded that social media could serve as both a learning enhancer and a source of academic distraction. The determining factor was the students' discipline and the purpose for which they engaged with the platforms.

Recommendations

There should be the integration of social media into the formal education system as a tool for learning and academic collaboration. Schools should incorporate structured digital learning programs that make use of platforms such as WhatsApp, Telegram, Google Classroom, and YouTube for academic discussions, virtual lessons, and content sharing. This would enable students to channel their time on social media toward educational purposes rather than entertainment. Teachers should be trained in digital pedagogy so that they can design engaging online activities that promote interactive learning and supplement traditional classroom instruction.

There should be awareness campaigns and training programs to educate students about the responsible use of social media. These programs should emphasize time management, content filtering, and online ethics. Students need to understand how excessive or non-academic use of social media negatively affects their concentration, memory retention, and academic performance. The Ministry of Education and Sports, in collaboration with school administrators, should develop guidelines for social media use among learners and ensure that digital literacy is incorporated into the school curriculum.

There should be stronger parental and teacher supervision regarding how students use their mobile phones and social media applications. Parents should be sensitized to monitor their children's online activities and ensure that their access to entertainment-based content is limited during study hours. Similarly, teachers should provide mentorship to help students balance their academic responsibilities with their online engagements. Regular counseling sessions

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should be organized to help students cope with the psychological effects of social media pressure, addiction, and peer influence.

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