

# An assessment of the effects of social media on academic performance in selected secondary schools: a case study of Wabari District, Banadir, Mogadishu-Somalia

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## Abstract

**Background.** This study concentrated on finding out how social media (SM) affects academic performance in some secondary schools in the Wabari district of Banadir, Mogadishu, Somalia. The study also wanted to find ways to motivate students to do better in school and recognize students for their good behavior, effort, and discipline.

**Methods.** A cross-sectional, descriptive, and quantitative research methodology were all used in this study. 110 people responded to the study. 86 people responded to the sample size calculation in this study, which was based on Slovin's algorithm. A structured questionnaire was used as the study tool, and the sampling method was non-probability. The statistical tools aligned SPSS software with the objectives of the research. For this purpose,

frequency tables, percentages, and also charts were presented.

**Results.** The findings of the study revealed much of the modern academic discussions, and academic performance, and how it affects SM with the students. We went to schools and saw different students with different academic performances. SM is to blame for the difference. This shows that students who don't use SM a lot do better in school than students who do use it a lot.

**Conclusions.** The study recommended that at school, among colleagues, or at the university level there should be qualified and competent teachers/lecturers who have knowledge and mastery of the subject matter and teaching strategies, the government should give training to the teachers/lecturers through the directorate of staff development. It should organize induction training, courses, seminars, and workshops on new teaching methods and their implementation in schools. Parents should make sure their kids have the tools and opportunities to learn at home in this subject, and parents and teachers should improve their communication to help students do well in school.

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## Introduction

Social media (SM) refers to the methods of communication in which individuals create, share, and exchange knowledge and ideas in online networks and communities. The global internet revolution has led to the advancement of information storage, sharing, and retrieval. The development of several web technologies via the Internet and the formation of enormous SM networks are a result of this. The evolution of SM has resulted in both negative and positive effects. The learning, research, and communication spheres of education have undergone changes. The internet has offered a variety of online tools, but immersion social networking sites have improved people's connections on a global scale (among the Autonomy University of Los Andes students, emotional intelligence).<sup>1</sup> In the new millennium, using technology in social settings has become a crucial communication tactic. Even for everyday tasks, the internet has become a crucial component of social life. The availability of electronic communication in society has been dominated by Myspace and Web 2, despite the presence of alternative platforms that have improved communication in society. SM has become more significant in the daily lives of Sri Lankans. Many young people use social networking sites as a regular part of their online lives. Many high schools, universities, and institutes of higher education require internet access. As an online academic community, students connect with one another for fresh information, knowledge exchange, research groups, and other interests. Most people use SM like Facebook. More than three-quarters of students in postsecondary schools use SM.

According to Siibak,<sup>2</sup> students spend about 30 minutes a day

on social networking sites. This shows the extent to which students are utilizing these sites, and this may have both positive and negative effects on students as far as their academic performance is concerned. There are large numbers of Somalis who are using SM and networking sites, despite only having access to the internet in the late 2000s. According to the Arab Social Media Report,<sup>3</sup> there were 56,940 Facebook members in the country in 2011. The data is based on official Facebook data, which only records users who registered in their country's name, so this figure reflects under-reporting. Many people who live outside of the nation list their temporary home country as their home country when they enroll, and they say that many people in the country are reluctant to confirm their identities due to security concerns.

According to Social Bakers,<sup>4</sup> there are more Facebook users in the country. In 2012, there were 105,480 active Facebook users, making up the majority of Facebook users in the nation between the ages of 18 and 24. SM affects education and learning settings; school policies prohibit using smartphones for SM during study hours, even though some individuals use the internet illegally. In schools, teaching and learning processes are negatively affected by SM use. Since the advent of the internet, many students are more focused on SM to the detriment of their education. Students have to balance their schoolwork and internet usage. The effects of SM on academic performance in selected secondary schools have been studied to identify the issue.

There are a lot of issues facing the educational system in the country. There are obstacles ranging from inadequate facilities to education due to the environment, a lack of finance and availability, staff instability in the classroom, politicization of school officials' educational and behavioral issues, poor parenting and guidance among parents and students, and a rapidly growing threat to student and educational system performance, SM usage is widespread in Somalia. SM and the academic work of students divert attention. Nigerian secondary school students spend a lot of time on SM. Students are increasingly using SM, and young people can be seen conversing in highly organized and sensitive public settings such as lecture halls, streets, and public transportation vehicles.

They spend a lot of time on SM chatting and making friends, which may affect how well they do in school. Just as how well one reads and studies affects their performance, there is a problem with students' writing abilities. Long-written pieces are becoming more challenging for students to produce, and even when they do, the majority of their words are shortened. Some students don't know the correct spelling of some terms; shorthand writing has been ingrained in them; abbreviations and incomplete sentences are used in tests and exams. Because changed to *bcos* or *cz*, alright is written as *k*, you are written as *U*, the is written as *d*, and so on. The author wants to find out how SM affects the academic performance of secondary school students in the Obio/Akpor Local Government Area in Waberi District, Mogadishu-Somalia.

There is a gap in the studies that have been done about the problem. The purpose of this paper is to find out the effect of SM on academic performance in selected secondary schools in Waberi District.

In general, the objectives of this article are as follows: i) the effect of SM on students' academic performance is being assessed; ii) the time spent on SM by students in selected secondary schools in Waberi District will be determined; iii) to investigate the extent to which social networks affect students' academic performance.

## Materials and Methods

The study adopted a cross-sectional and descriptive research design and a quantitative approach to examine how social networks affect secondary school students' academic performance. According to Orodho,<sup>5</sup> descriptive research is the procedure of gathering information to address queries about the current condition of the study subjects. Being a descriptive study, it intended to describe the results of the usage of technology in secondary schools' instruction, learning, and performance. It tried to define things like behavior, attitudes, values, and traits. Private secondary schools in the Waberi District of Somalia were the subject of the study.

The total population was 110, during the study it was gathered from 3 schools that were part of the 16 schools in Waberi District's divisions. The sample size of this paper was calculated using Slovin's formula and became 86 respondents. Only one type of research instrument was used in this study, and it is a questionnaire. Data were analyzed using the statistical package for social science (SPSS). Descriptive analysis was done, and then frequency tables and charts were used to present the study results for easy understanding.

## Results

Figure 1 indicates that the majority of the respondents 54 (62.8%) were male, while 32 (37.2%) were female; however, this table shows that the majority of the respondents were male.

According to Figure 2, the majority of the respondents 75 (87.2%) were between 12-21 years old, 7 (8.1%) were between 22-31 years old, while only 4 (4.7%) were between 32-41 years old.

According to Figure 3, the majority of the respondents 72 (83.7%) were single, 13 (15.1%) were married, while only 1 (1.2%) were divorced.

According to Figure 4, the majority of the respondents 79 (91.8%) were secondary level, 6 (7.0%) were university level, while only 1 (1.2%) were informal education: this shows that the majority was from secondary level.

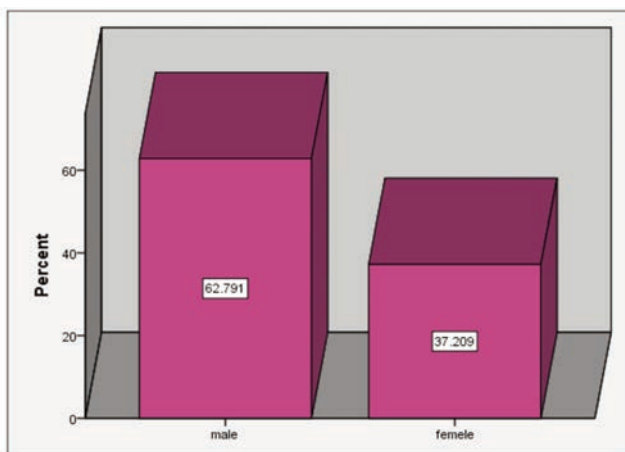


Figure 1. Gender of the respondents.

According to Figure 5, the majority of the respondents 69 (80.2%) were unemployed, while only 17 (19.8%) were employed; however, this figure shows that the majority of the respondents were unemployed.

According to *Supplementary Figure 1*, the majority of the respondents 52 (60.4%) believed that people spend a lot of time on Facebook, while only 34 (39.6%) did not believe that people spend a lot of time on Facebook.

According to *Supplementary Figure 2*, most of the respondents 27 (31.4%) strongly agreed that Facebook has a great impact on a student's academic performance, 24 (27.9%) agreed, 18 (20.9%) were neutral, 13 (15.1%) disagreed, while only 4 (4.7%) strongly disagreed.

According to *Supplementary Figure 3*, most of the respondents 34 (39.5%) agreed that most of the students use Facebook even the class, 16 (17.4%) strongly agreed, 15 (17.4%) strongly disagreed, 12 (15.1%) agreed, while only 9 (10.5%) were neutral.

According to *Supplementary Figure 4*, the majority of the respondents 66 (76.7%) believed that Facebook cause students to come late to school at some times, while only 20 (23.3%) do not believe it.

According to *Supplementary Figure 5*, most of the respondents 29 (33.7%) disagreed that Facebook has an impact on student's academic discipline, 19 (22.1%) strongly agreed, 15 (17.4%) strongly disagreed, 14 (16.3%) agreed, while only 9 (10.5%) were neutral.

According to *Supplementary Figure 6*, most of the respondents 23 (26.7%) agreed that YouTube has a great effect on academic performance for secondary school students, 21 (24.4%) disagreed, 17 (19.8%) strongly agreed, 14 (16.3%) strongly disagreed, while 11 (12.8%) were neutral.

According to *Supplementary Figure 7*, the majority of the respondents 49 (56%) believed that students spent most of their time watching YouTube videos, while only 37 (44%) did not.

According to *Supplementary Figure 8*, most of the respondents 30 (29%) agreed that most of the students pay attention to YouTube dramas instead of their lessons, 20 (29%) disagreed, 17 (19.8%) were neutral, 10 (11.6%) strongly agreed, while 9 (10.5%) strongly disagreed.

According to *Supplementary Figure 9*, the majority of the respondents 28 (31.4%) disagreed that sometimes students watch YouTube videos instead of working on their homework, 19 (22%) agreed, 16 (18.6%) strongly disagreed, 14 (17.4%) strongly agreed, while 9 (10.5%) were neutral.

According to *Supplementary Figure 10*, the majority of the respondents 53 (61.6%) believed that TikTok is the reason why students don't work on their homework or exercises, while only 33 (38.4%) did not believe it.

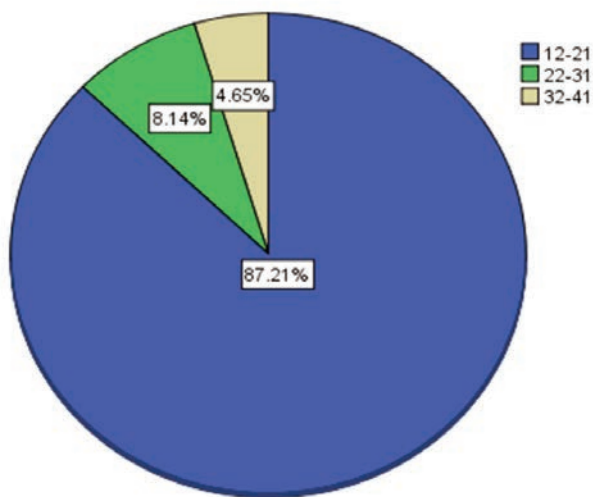


Figure 2. Gender of the respondents.

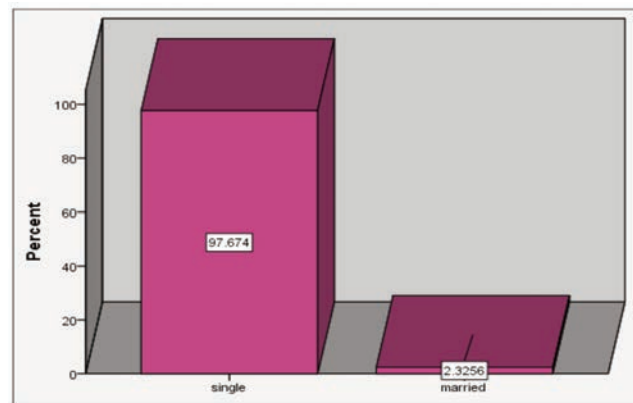


Figure 3. Marital status of respondents.

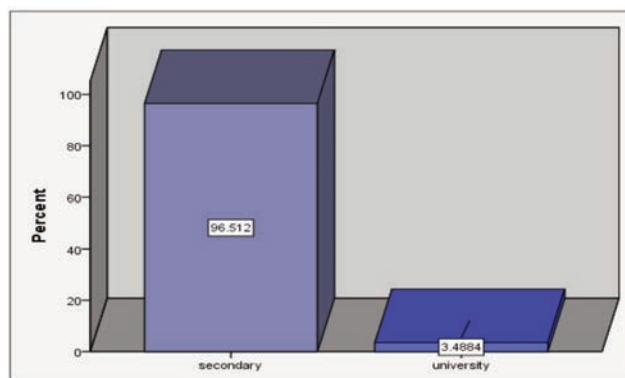


Figure 4. Educational level of the respondents.

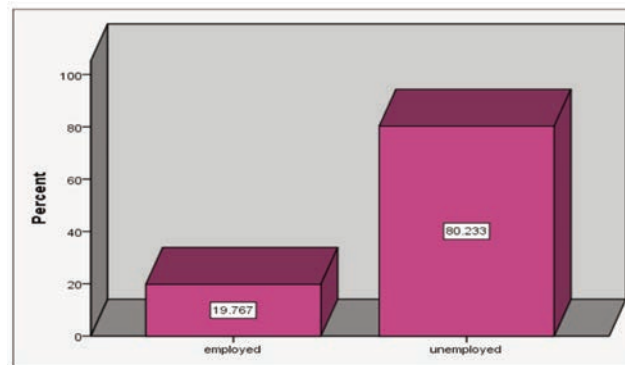


Figure 5. Occupation of the respondents.

## Literature review

The online world has undergone significant transformation in the past ten years, and young people use it to the fullest extent for social and academic purposes. The majority of American youths use SM sites regularly. Knowing how SM affects students' academic performance is important.

Various forms of SM use have taken place over the years. A study demonstrates how interaction can be displayed on SM. SM gives users the chance to connect effectively. Immigrants and natives are the target users in this scenario.<sup>6</sup>

Around the world, there are over one billion Facebook users and over one billion Twitter users. There are 55 million Facebook users in the Arab world. Over five million people in the Arab world use Facebook. Egypt is a heavy user of SM. Its internet penetration rate is only about 13%, but it has 11 million users and a 25% presentation. In the first half of 2012, there were one million, six hundred and eight thousand, and four hundred and twenty users on Facebook in Egypt.<sup>8</sup>

The future of the country has been influenced by SM. According to a survey conducted by the Pew Research Center,<sup>9</sup> Facebook has over two billion active users and is the largest SM platform. More users are using SM platforms like Facebook, which is used by 70% of college and high school students. Students prefer SM networks because they are trustworthy sources of information where everything is packaged. According to Gagne,<sup>9</sup> "media generally refers to a variety of elements in a student's setting that will encourage students to learn more effectively". The use of several SM platforms benefits pupils in more than one way. It helps them meet academic requirements, but it also supports their development of a sense of identity and helps them hone their networking abilities.

The majority of students use social networking sites because of their desire to do so. They use these to satisfy their social wants more than their academic needs. They have the freedom to act whenever they please, the ability to make new acquaintances, and even start their own business. Today, they have online identities, which are not permitted in the real world. They say that most of their time is spent conversing with their friends instead of reading their lessons, playing online games, watching movies, and doing assignments.

One of the key conclusions of the study is that SM, websites with a learning focus, and most respondents concur that they use SM as a tool for informal learning and for connecting with friends to receive assistance with their academics. In the event of contact with teachers, there is an equal divide between opposing views.

## The amount of time spent on social media by students

Multiple research projects have been done on the effects of SM on student performance. According to Ito and his associates,<sup>11</sup> the use of the internet by teens has led to indiscipline, which has resulted in reduced academic performance in class during study hours. Social networking sites offer a platform for young people to engage in groups that support learning and develop abilities related to a specific field of knowledge. According to Fishman and Casarett,<sup>11</sup> students can use SM platforms to produce large amounts of writing and research.

According to Rideout *et al.*,<sup>12</sup> many students spend more than twice the average amount of time in school, using their time to do other things. They might be listening to music or posting on Facebook. Rideout observes that the amount of time spent on the internet has soared because of its accessibility.

Garton *et al.*<sup>13</sup> say that social networking is where people con-

nect for things like camaraderie and knowledge sharing. Information technology and online social networking are both advanced. Since the advent of the World Wide Web (WWW), online social networking services (SNS) have been a staple. Emails that develop communication patterns in which people exchange pictures, graphics, or engage in conversation are examples. A new trend shows the potential of social technology to provide users' social lives with more effective support.

Millions of people have used SM platforms since their launch. The most popular social network is Facebook. All of this began at Harvard and spread to Boston-area universities, Ivy League institutions, and eventually every university in North America. Estimates show that one in seven people on the planet use Facebook. The website was started at Harvard University by Mark Zuckerberg and a few friends.

As a result of information collection, content creation, and repository moves, the WWW has undergone a significant transformation. Collaboration zones, information sharing, community formation, and extension have been established due to the socializing characteristics of virtual spaces produced by Web-based technologies. Potential collaboration, social interaction, and stakeholder deliberation are some of the things that facilitate SM. They include media, blogs, virtual worlds, social networking sites, sharing tools, and wikis.

SM has drawn the attention of all students, who have accepted it as a very important part of their everyday lives. The majority of adults have used the internet for a variety of purposes in the past ten years. The consequences of exposure to various technological platforms are being felt by college students all over the world. They use computers, tablets, e-readers, and cell phones. To actively participate in social networking, text messaging, content sharing, online learning, and blogging, desktop computers, laptops, e-readers, tablets, and laptops are frequently used.

Many generations have embraced the use of the internet, a crucial tool for communication in both social and academic settings, and SM sites have long been a favorite among students. Several institutions have implemented LinkedIn, other networking sites, Facebook, and social networking to engage with present and potential students to provide teaching content.

Kaya and Bicen looked at the effects of using SM in the school.<sup>14</sup> Both good and negative effects were found. About 85% of them were able to manage their academic issues as a result, and at least 65 to 75% of the class achieved the average level of performance. It is best for students to limit the amount of time they spend on SM and instead spend their time reading books, short stories, and other learning resources. The use of SM has negatively impacted the academic performance of the students because there is a need to introduce them to different information resources that would motivate and assist them in performing well in their academics.<sup>15</sup> As time goes on, it is clear that demand for internet access is rising. Users can communicate in more sophisticated, reliable, and inventive ways with online SM platforms. Humans are social creatures. We try to fit in with groups that match our preferences.

## Facebook

Facebook may be referred to as a web-based service that allows users to create different profiles within a closed network that can be made public or semi-public. Exchanges with other users can effectively express connections.

Establishing and fostering connections with family members and friends, organizing social gatherings, and exchanging information are possible on Facebook.

Comments on photos, updates to profiles, messages on walls, postings of public messages, and instant social networking are some of the things that can be done.

Sharing and SNS facilitation can be achieved through different types of content.

A lot of recent disputes in the educational sector have been caused by SNS like Facebook. According to some teachers, the applications kill young people's interest in the conventional educational system. According to some teachers, the applications kill young people's interest in the conventional educational system. The significance of social networking for students' learning is acknowledged by the other instructors.

Facebook is used to create learning communities and exchange learning experiences. The generation-approved and relevant technologies allow students to participate in online learning communities. The value of Facebook is that it allows pupils to express themselves, deepens learning, and serves as a memory aid. Communication, socializing, and student pressure are all improved by doing so.

SM has quickly evolved into a popular option and an important part of the academic experience. More robust teaching and learning possibilities are needed by accepting the educational framework and incorporating Facebook as a requirement.

Facebook is used by 25 students in institutions for collaborative learning. Students' ability to work well in teams is impressive as a means of cooperation or sharing. The life stages of creativity, social skills, optimism, physical activity, and invention seem to be weakened by SM platforms.

Bösch says that using Facebook in education could benefit from the growth of educational micro-communities.<sup>16</sup> The research showed that professors and students had nice things to say about using Facebook for knowledge sharing. The lecturers' improved relationships with students are a result of regular communication on Facebook. Students who frequent teachers' Facebook pages report more effective learning.

Some of the best teachers create informal relationships with their students. Studies have shown that interaction between students and instructors has a significant impact on learning outcomes. A survey of 300 students at Sains Malaysia (USM), Penang, revealed that they were enthusiastic about using Facebook in an online setting to help them learn English.

Most educational activities are supported by social networking platforms because of active involvement, critical thinking, interactions, knowledge and resource sharing, and cooperation, according to researchers. Student expectations are reflected in learning that is connected to their learning settings.

In Lulea, Sweden, high school pupils' academic performance was compared to their personality qualities. The impact of Facebook on students' achievement is examined in the suggested research model. The study wants to explain the findings. People with an outgoing personality who use Facebook perform worse academically. Students have a high level of self-control when using SM sites. Cognitive absorption is a personality trait that is taken into account in this study.

Junco looked into the impact of Facebook's role as a SM platform on high school students' academic performance.<sup>17</sup> The study looked at data from students who attended high schools in the northeastern United States. The amount of time students spend on Facebook and how often they visit the site have a negative impact on their grade point average, according to an analysis of the statistics. There is an inverse relationship between study time and grades. Although there is a negative correlation between SM use and academic achievement, in practical applications, this associa-

tion does not seem to represent a significant barrier to academic success. Junco emphasizes the importance of conducting additional research to identify additional factors that may be related to academic performance.<sup>17</sup> Negative academic effects associated with specific ways students use SM help explain the poor link between Facebook usage and academic outcomes. He noticed that some of their applications are related to academic performance.

Research shows that Facebook is equally popular with male and female students at the university. Most users agree that this type of SM has a negative impact on their academic achievement. The majority of the respondents were men. Some people believe that using Facebook makes it difficult for them to perform at their highest levels in their professional lives. The researcher believes that the latter opinion needs more research because it isn't obvious and established.

Negussie and Ketema conducted further research into the effects of using various devices to view SM platforms.<sup>18</sup> There is a correlation between using social networking sites on other platforms and using them on Facebook. Students' grades are on mobile devices. The negative effect is due to the fact that not all students are equally good at multitasking. According to the report, students should be allowed to use social networking sites for educational purposes rather than being prevented from doing so.

Gupta studied how SM affects the academic performance of distance learning students.<sup>19</sup> This study is important because of the reliance on distance learning. The psychological attitudes of the respondents about using technology for educational purposes and the selection of appropriate tools and technologies to accomplish academic aims and objectives are the focus of this study. Information and communication technologies are used for online course management and delivery in this study.

There is no correlation between students' use of Facebook for academic purposes and their academic performance, according to this study. The necessity of using new online tools and technologies to foster social networking and online engagement is demonstrated in this study. According to Gupta, students' use of Facebook didn't have any positive effects on their academic achievement.

## YouTube

Some academics have abused their position to make presentations, movies, and images that earlier generations might not have seen. The extra resources are beneficial to the scientific endeavor, according to Price *et al.*<sup>20</sup>

Science is being used to create breakthroughs that will increase communication. Some scholars still focus on unconventional methods of content development that don't adhere to the criteria for evaluating information. Novel publishing ideas need mechanisms to support them.

In August 2012, it was the third-most popular website in the world. Users who freely share short videos and have a minimum account duration of 30 minutes can use YouTube. In May 2010, the United States only had about 14 million video watchers. Videos, music, and other nonpornographic and legal content can be uploaded on the website.

The illegality of distributing copyrighted TV shows and other content has previously come under fire, and the majority of these films are amateur productions. There are examples of regular people performing unusual acts in most of the content. Music videos are the most popular on the platform.

Academicians all over the world have benefited from YouTube videos. Information on the Afghanistan and Iran Wars is available. Clinical studies and online radicalization are included. There are medical studies and public health issues. The H1N1 flu, as well as

tanning beds, are included in the press.

A study found that universities in the USA had a high concentration of health sector educators. 42% of people used YouTube in 2009.<sup>21</sup> Some respondents to a survey in Germany said they used YouTube for classroom instruction or university instruction.

The internet is the best way to spread information and education in general throughout society and in all educational institutions, as many people enjoy the roles of academics and teachers in education. Responsibility and transparency are promoted in academia. Academics can now reach a larger audience thanks to the internet. Scientists can use a variety of learner-friendly formats and influence the creative process thanks to original stories and custom programming on YouTube. They have plenty of time to interact with other academics on a variety of research and project-related topics.

The video's comments section encourages interactions between viewers. Researchers are worried about the extent of harm being done because many dangerous beliefs can be found without restriction. Young people are at risk of being exposed to bogus medical videos on online platforms. There is a lot of public criticism of academic work from the general population.

Studies have shown that using educational media like YouTube has increased student performance and accomplishment.

Several teachers struggled with the challenging subjects due to their inadequate conceptualization.<sup>22</sup> Reports of literature on the poor achievement trend among students in biology cite the lack of instructional resources in schools. The difficulty for principals is due to the fact they are not given enough teaching resources. On YouTube, all registered users can view videos for free, and it is considered one of the most popular websites and a significant source of educational content. Instructors, students, and researchers have submitted millions of educational films to the website. If you want to help your audience learn, you should use YouTube in eLearning. It's not just for digital amusement. There is a website called eLearningIndustry.com. According to Jones and Cuthrell's citation of probable uses of YouTube in the educational process in 2019,<sup>23</sup> videos can be used directly in the classroom as part of the teaching and learning process. They are commonly used at the beginning of a lecture to recommend websites or at the end to introduce and explain new concepts.

The instructor can use videos as a template for discussions and activities in the classroom by using them as teaching tools. Universities and educational institutions are using free video platforms in their lesson plans. One can easily use learnable tools to create educational content. The sessions are created by teachers. The link is included in the course materials so that students can access it whenever they want. The videos can be set to be public or private.

Giving students a variety of online learning options boosted their learning. Berk says that a scientific lesson on YouTube will make representations better because more senses will be on alert.<sup>24</sup> He wants teachers to use instructional technology to promote student engagement, concentration, interest in the subject matter, imagination in the classroom, and attitude toward the subject matter to make learning enjoyable.

## TikTok

Some believe that comments, emails, and letters from viewers are the most trustworthy approaches to assessing the impact of YouTube videos, as they claim that quantitative data from the site has limitations. It is clear that this qualitative approach is not appropriate for users to evaluate the level of perfection, but it might have an impact on video creators' work.

According to a statistical report conducted in January 2021, TikTok is available in over 150 countries with over 1 billion users. According to Greenhow *et al.*,<sup>25</sup> most of the TikTok audience is in the 13-40 age range.

TikTok has some advantages in content creation: the videos last a couple of seconds. The time to create and post a video is reduced without the need for a PC and complex editing programs because you can make a video on your phone. The content categories from which users can choose are one of the advantages of TikTok. By watching videos within the organization, users can watch videos from a specific segment. A video added in the educational field is viewed by other students on the platform, from other regions and schools, but also by users who are not pupils or students but individuals from society. One may discuss an extension of the school education towards an informal, social one. TikTok has disadvantages in the educational environment. Due to the impossibility of conducting video conferences, the time allotted to a video is reduced in comparison to other platforms, so lectures may not be posted or activities to conduct a lesson in class. Being a video platform, it does not allow the sharing of text files, spreadsheets, or presentations in a designated space in comparison to the other platforms.

TikTok is one of the most popular Chinese SM platforms. It was formerly known as "Musical.ly" and it has gained global popularity, especially among teenagers who use the app to watch, make, and comment on lip-sync videos. Children and adolescents are constantly plugged into their gadgets in a technological environment that is always evolving, and new emerging trends in entertainment media have the potential to have negative health effects on patients. This assessment aims to give pediatricians explanations of specific patterns on streaming services, the well-liked new mobile app TikTok, recent widespread internet challenges with children as participants, and new technology.

The content that is displayed to a TikTok user is tailored to their preferences and previously-liked content. It's popular with the 13-29 age group because it's easy to target, but according to data from the United States, 32. Anyway, the majority of TikTok users are preteens. TikTok was designed as an extremely original video-based SM app with distinctive technical architecture and unparalleled user adoption, unlike any other platform, making it a unique online network where imitation and mimetic characteristics further accelerate its varied user interaction. The subjects of waves of popular TikTok videos have been mental health, eating disorders, developmental challenges, and health. There are some notable exceptions to the fact that there aren't many psychologists using TikTok efficiently.

The app global popularity has led to the expansion of TikTok research. We looked into 58 studies that examined TikTok, its users, and its content. We examined the approaches used to investigate TikTok as well as ethical issues, with a focus on publications published in journals and conferences throughout the domain of human-computer interaction, communication, and other relevant disciplines. Most studies on TikTok use content analysis as their main methodology and focus on user behavior and culture, the effects of use, and the platform's rules and regulations. The ethical ramifications of gathering and analyzing such data are not addressed in a lot of studies. Conventional methods of data gathering are used when TikTok's features are different from those of other SM platforms. We contributed to the discussions regarding SM data ethics by discussing potential options for the future.

TikTok research is in its early stages, and the app has gained more scholarly attention as a result of its rapidly perceived cultural influence, which led to other SM powerhouses duplicating the app

features. To better understand how academics in the disciplines of human-computer interaction are using the app as a platform for research, we conducted a systematic review. TikTok is more reliant on duration than most other networks.

### Academic performance

How well students perform academically is determined by the tasks and studies they complete. Outcomes include attendance, extracurricular activities, standardized tests, grades, and behavior. Individual differences in academic performance led to differences in intelligence and personality. Students are the most valuable asset to any college or university.

These are the new generations of nations that need a reliable human resource to grow. Every nation's ability to develop economically and socially is related to its higher education students. Through excellent, pertinent, and high-quality education, these educational institutions prepare the workforce for a variety of professions needed by the target country.

The academic performance of the students has received a lot of attention. Pupils' performance is affected by psychological, environmental, social, and environmental factors. The variables vary from nation to nation and from person to person, but they all have an impact on how well children perform in their nations. The majority of researchers favored using the world application of the GPA to assess student performance. Students' achievement was evaluated using the grade point average. The results of various subjects were evaluated by others. Other researchers have used the test results from Bin-Tahir *et al.*<sup>27</sup>

Many previous studies relied on a variety of variables, such as class size, lesson plans, classroom atmosphere, reading materials, work assignments, classroom, and test structure technology, as well as family and extracurricular activities. Several studies have been done to determine students' academic performance. The grade point average was used as a standard descriptor of student achievement in all of these studies. Students who struggle with issues like a lack of correlation between achievement and ability, flawed learning strategies, or flawed study habits need competent assistance in their institutions. The impact on students' academic achievement has been noted by many academics and researchers. Learning the English language proficiently has a positive outcome.

Students' deserving performance is determined by good communication skills. All educational institutions should use new languages for instruction and communication. The student's command of the language builds confidence in their ability to convey ideas and engage in academic discussion. Those with higher grade point averages are more engaged in the educational process at their institutions, according to researchers.

### Conclusions

Using social networking sites solely for social and non-academic purposes had a negative impact on academic performance. The general objective of the study is to assess the influence of SM on students' performance at some selected private and secondary schools in Mogadishu – Somalia. The study specifically focused on: i) investigating the influence of Facebook on students' performance; ii) identifying the influence of YouTube on students' performance; iii) determining the influence of TikTok on students' performance.

This study was descriptive, quantitative, and cross-sectional in design. Teachers, students, educational managers, and parents were

the target population for this type of study. 86 respondents were selected as a sample size. This study used a questionnaire. Data was analyzed using SPSS. During our study, we met only one challenge that we couldn't reach anymore, which was the number of secondary schools in Mogadishu as a whole.

### Recommendations

The researcher recommended the following: i) students should be prohibited from using Facebook because it damages their performance; ii) there should be rules in schools regulating students against watching YouTube videos in class; iii) there should be penalties against those students who play mobile games in school in order to promote student academic performance.

Some additional research should be done in some selected schools, in Mogadishu, Somalia, regarding: i) factors contributing to SM addiction among students; ii) effects of Facebook addiction on students' performance; iii) the role of SM addiction on school dropout.

### References

- Serrano Castañeda JE, Martínez-Santos JC. Advances in Computing: 13th Colombian Conference, CCC 2018, Cartagena, Colombia, September 26–28, 2018, Proceedings. Springer; 2018.
- Siibak A. Constructing the self through the photo selection-visual impression management on social networking websites. *Cyberpsychol J Psychosoc Res Cyberspace* 2009;3:1.
- Ghannam J. Social Media in the Arab World: Leading up to the Uprisings of 2011. Center for International Media Assistance 2011;3:1-44.
- Bakers S. Media insights and benchmarks Africa Q1 2017. Social Bakers. 2017.
- Moh'd SS, Uwamahoro J, Joachim N, Orodho JA. Assessing the Level of Secondary Mathematics Teachers' Pedagogical Content Knowledge. *Eurasia J Math Sci Tech Ed* 2021;17.
- Mayfield A. What is social media. 2008. Available from: [https://crmexchange.com/uploadedFiles/White\\_Papers/PDF/What\\_is\\_Social\\_Media\\_iCrossing\\_ebook.pdf](https://crmexchange.com/uploadedFiles/White_Papers/PDF/What_is_Social_Media_iCrossing_ebook.pdf)
- Couldry N. Media, society, world: Social theory and digital media practice. 1st ed. Polity; 2012.
- Perrin A. Social media usage: 2005-2015. Pew Research Center 2015;125:52-68.
- Gagne RM. Media and the Learning Process. ERIC 1968.
- Ito M, Baumer S, Bittanti M, et al. Hanging out, messing around, and geeking out: Kids living and learning with new media. The MIT Press; 2013.
- Fishman JM, Casarett D. Mass media and medicine: when the most trusted media mislead. In Mayo clinic proceedings. Elsevier 2006;81:291-3.
- Rideout VJ, Foehr UG, Roberts DF. Generation M2: Media in the Lives of 8-to 18-Year-Olds. The Henry J. Kaiser Family Foundation; 2010.
- Garton L, Haythornthwaite C, Wellman B. Studying online social networks. *J Comput Mediat Commun* 1997;3: JCMC313.
- Kaya T, Bicen H. The effects of social media on students' behaviors; Facebook as a case study. *Comput Human Behav* 2016;59:374-9.
- Cain J, Linos E, Chretien KC. Cyberbullying in academic medicine: a framework for managing social media attacks.

- Acad Med 2019;94:626-9.
16. Bösch F. Mass media and historical change: Germany in international perspective, 1400 to the present. Berghahn Books; 2022.
  17. Junco R. The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Comput Educ* 2012;58:162-71.
  18. Negussie N, Ketema G. Relationship between Facebook practice and academic performance of university students. *Asian J Human Soc Sci (AJHSS)* 2014;2:1-7.
  19. Gupta C, Sharma M. Communal constructions: media reality vs real reality. *Race Class* 1996;38:1-20.
  20. Price D, Wagstaff CR, Thelwell RC. Opportunities and considerations of new media and technology in sport psychology service delivery. *J Sport Psychol Action* 2022;13:4-15.
  21. Burke SC, Snyder S, Rager RC. An assessment of faculty usage of YouTube as a teaching resource. *Internet J Allied Health Sci Pract* 2009;7:8.
  22. Apeanti WO, Danso ED. Students' use of social media in higher education in Ghana. *Innov J* 2014;3:3-9.
  23. Jones T, Cuthrell K. YouTube: Educational potentials and pitfalls. *Comput Schools* 2011;28:75-85.
  24. Berk RA. Multimedia teaching with video clips: TV, movies, YouTube, and mtvU in the college classroom. *Int J Technol Teach Learn* 2009;5.
  25. Greenhow C, Galvin SM, Brandon DL, Askari E. A decade of research on K-12 teaching and teacher learning with social media: Insights on the state of the field. *Teachers College Record* 2020;122:1-72.
  26. McCashin D, Murphy CM. Using TikTok for public and youth mental health—A systematic review and content analysis. *Clin Child Psychol Psychiatr* 2023;28:279-306.
  27. Bin-Tahir SZ, Amri M, Nagauleng AM, et al. The social media use for digital natives: Parenting model of muslim cleric families. *Int J Sci Technol Res* 2019;8:2871-4.

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*Supplementary material*

*Figure S1. People spend a lot of time on Facebook.*

*Figure S2. Facebook has a great impact on a student's academic performance.*

*Figure S3. Most of the students use Facebook even the class.*

*Figure S4. Facebook causes students to come late to school sometimes.*

*Figure S5. Facebook has an impact on student's academic discipline.*

*Figure S6. YouTube has a great effect on academic performance of secondary school students.*

*Figure S7. Students spend most of their time watching YouTube videos.*

*Figure S8. Most of the students pay attention to YouTube dramas instead of their lessons.*

*Figure S9. Sometimes students watch YouTube videos instead of working on their homework.*

*Figure S10. TikTok is the cause students don't work on their homework or exercises.*