

Research Article

THE EFFECT OF SOCIAL MEDIA USE ON STUDENTS' ACADEMIC PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN KALAMA SUB-COUNTY, MACHAKOS COUNTY, KENYA

* Gloria M. Ngui, Prof. David M. Mulwa, Dr. Alex N. Kamwaria

Machakos University, School of Education, Department of Educational Communication and Technology, P.O BOX 136-90100, MACHAKOS.

Received 02th November 2023; Accepted 03th December 2023; Published online 22th January 2024

ABSTRACT

The study sought to examine the effects of social media use on students' academic performance in public secondary schools in Kalama Sub-County. The students' academic performance remains a top priority for educators in the Sub-County. The objectives of the study were to; determine the effect of time spend on social media by students on their academic performance and find out the effect of people's connections with students on socialmedia and students' academic performance in secondary schools in Kalama Sub-County. The study adopted General Systems Theory by Ludwig Von Bertalanffy. The study used descriptive survey research design. The target population was 33 secondary schools, 33 guidance and counselling teachers and 1710 form two students. Proportional stratified technique was used to sample 330 students. 10 teachers were randomly sampled from each of the schools from the entire number of schools. Questionnaires and interview guides were used as the research instruments. The data was analyzed and interpreted both qualitatively and quantitatively using descriptive survey research design. The descriptive statistics included the mean, frequency tally and percentages while inferential statistics included the Pearson's chi-square at 5% level of significance. Analysis of data was conducted with the aid of Statistical Package for Social Sciences (SPSS) version 26. The study further established that majority (52%) of the respondents indicated that social media enhances learning and the frequency of use of social media has effect on student academic performance. The study further established that majority of the teachers face challenges when using social media in teaching due to uncontrolled number of people they connect to. The study recommends that use of social networks by students should focus on the academic relevance of those sites instead of using them for negative purposes. The Ministry of Education should ensure that the education accessible contests are controlled.

Keywords: Social media, Social network, People's connections, Academic Performance.

BACKGROUND TO THE STUDY

Social media entails engagement in the relationships that exist between networks of people; hence students spend most of their time using social media platforms. It would be of great gain if they would tap of its benefits and use it in doing their academic assignments. It would make it easy to use social media to connect to other students who are far from them and share ideas on education matters. Social media can also be used to express feelings towards something or someone, therefore, they would use it to build positive attitude toward education (Brown, 2010). Globally, social media has been a basic requirement that helps all individuals in the society to productively engage in day to day socio-economic and technological advancement (Cople and Brekekamp, 2009).

Past studies indicate that students majorly involved in social media use tend to concentrate more on them than their academics (Mensah,2016). A study conducted by Kasandra, (2015) indicates that students in tertiary institutions in Malaysia have a negative academic performance due to continuous use of social media. Several countries in the world like Ghana have recently showed a great negative impact on academic performance of students. Kaplan (2010) indicates social media application such as Wikipedia, You tube, and WhatsApp, Facebook and Twitter are a challenge to the teenager users who continuously use them. Withdrawal symptoms by learners can be seen as a way of coping with problems, anxieties and uncertainties of growing up. Personality factors and environmental influences are important determinants of social media impacts on academic performance.

Chinooneka and Mupa (2015) conducted a study in Zimbabwe and discovered that teachers' failure to use a variety of social media in teaching and learning process resulted into failure in grasping basic skills of reading and writing. According to Wambura (2017), many parents worry about how exposure to technology might affect toddlers developmentally. Adolescence is an equally important period of rapid development and too few of us are paying attention to how our teenagers use technology. In fact, experts worry that the social media and text messages that have become so integral to teenage life are promoting anxiety and lowering self-esteem. This may drastically lead to change in academic performance amongst the students either negatively or positively.

Research that has been done in Kenya, though minimal concerning effects of social media use on students' academic performance indicates a negative impact. It has been estimated that 45% of the students influence each other on social media use during the holidays and weekends. Further, it was found out that 62% of high school students have a social media profile with 35% of them using a social media site at least daily. Many of these young adults use social media networks to communicate with family, friends and even strangers (Monda, 2012). Social media sites have created new and non-personal ways of people to interact with others and the youths have taken advantage of this technological trend. This calls for community intervention and parental guidance amongst the youths. With the recent emergence of Novel Corona Virus (COVID-19) pandemic, social media platforms were introduced and highly recommended by the Ministry of Education (MoE, 2007) to ensure that the learning process took place at home. The Remote Learning Methodologies (RLM) where the use of social media platform in teaching and learning emphasized aiming at curbing the learning gaps caused by the effects of long stay from school. This can be concluded as a clear

*Corresponding Author: Gloria M. Ngui,

Machakos University, School of Education, Department of Educational Communication and Technology, P.O BOX 136-90100,MACHAKOS

indicator that social media is a very important tool in advancing education objectives. Therefore, it can be concluded that, the use of social media can impact the learners positively or negatively. This study focused on investigating the effects of social media on students' academic performance.

Hypotheses of the Study

Ho1: Time spend (duration) of use on social media has no effect on students' academic performance in public secondary schools in Kalama sub-county.

Ho2: Peoples' connections in the social media have no effect on students' academic performance in public secondary schools in Kalama sub-county.

Theoretical Framework

The study was guided by Ludwig VonBertalanffy's (1968) General Systems Theory. A system can be defined as an interrelated set of elements functioning as an operating unit. An open system has input, transformation process, output, feedback and the environment. (Senge, 2006). Schools are a social system in which two or more persons work together in a coordinated manner to attain common goals. Schools as systems use information resources, human resources and physical resources. Schools are thus open systems with different degree of interaction with their environments. They need to structure themselves to deal with forces in the world around them. The main focus on social media use as a physical resource is very key considering that social media influence, time spent on their use and social lifestyle affect academic performance. (Scott, 2008).

REVIEW OF LITERATURE

The Effect of Time Spend (duration) on Social Media by Students on their Academic Performance

The frequency or how often social media is used by students can impact academic performance. Social media use confers many benefits by providing access to a wide range of information sources which facilitate learning. However, instead of using social networking sites for academic purposes, students tend to be actively involved in online shopping, gaming and entertainment during the day and night. These habits distract them from academic activities, minimize their opportunities to gain knowledge, and result into poor academic performance among some students. Because many students are addicted to social media and use such platforms for non-academic purposes, it is important to determine the negative effects of social media use. There is concern that the risky behaviors of teenage children negatively influence the behavior of other children through their social networks (Akerlof and Kranton, 2000).

Young people are engaged in social activism outside of school time through their social networks. Students are spending too much time online and not enough time in the 'real world', thus influencing their personality and character. This laxity of the learners is prone to poor academic performance and this calls for moral support on the young people who are highly addicted to social media use because if not taken care of, it can lead to cyber bullying (Smith, 2012).

Ellison (2007) avers that the negative correlation between Facebook usage for instance and academic outcomes may be justified by some negative and positive effects related to certain ways students use this social medium. He observes that some specific uses of social media relate to improve academic performance while others contribute to lower academic results. However, there is slightly negative correlation

between time spent on this widely used social medium and academic performance. Depression and anxiety occurs when one spends more than two hours per day in social media. Spending too long on Social Networking Sites could adversely affect ones mood. The more you use social networks, the more likely you are to see that someone is having more fun than you are. Social media especially the use of smart phones is often described as being more addictive than cigarettes and alcohol. This addiction to social media causes students to fail to concentrate in their academics (Kaplan, 2010).

According to Kross, (2013) a minimum of 7 to 9 hours of sleep (on a regular basis) is recommended. Sound sleep is associated with improved attention, behavior, learning memory, emotional regulation, quality of life, and mental and physical health. Sleeping for fewer hours than the recommended duration on a regular basis is associated with attention, behavior and learning problems. Akerlof and Kranton,(2000) argue that late-night social media use is prevalent among adults. As a result, they do not get adequate sleep. Past studies have found that sleep disturbances caused by excessive social media use at night adversely affect day time learning in schools and campuses and lead to poor concentration.

Sleep deprivation is rapidly becoming prevalent, and it has frequently been linked to late night use of social networking sites, television viewing, and gaming. Mobile phone use before bedtime is a common habit among many young adults. Majority of students sleep for fewer hours than the recommended sleep duration because of late-night social media site use. This can lead to delayed bedtime, sleep loss, and irregular sleep-wake patterns. Poor sleep quality results in increased tiredness during the day. Sleep has significant effects on mood, and increasing sleep duration may enhance cognitive performance.

Azizi and Khartony (2019) aver that sleep deprivation is rapidly becoming prevalent, and it has frequently been linked to late night use of social networking sites, television viewing, and gaming. Mobile phone use before bedtime is a common habit among many young adults. Majority of students sleep for fewer hours than the recommended sleep duration because of late-night social media site use. This can lead to delayed bedtime, sleep loss, and irregular sleep-wake patterns. Poor sleep quality results in increased tiredness during the day. Sleep has significant effects on mood, and increasing sleep duration may enhance cognitive performance. Adefuye (2006) is of the opinion that Majority of students use social media during games time while in school. The use of social media by students while in schools is also common during breaks and free lessons. Still students use social media anytime they find themselves free especially in the evening. Using any free time they get to access media, the students are able to grasp complex concepts. By spending so much time working with the new technology students develop more familiarity with computers and other electronic devices with the increased focus on technology on education and business. This will help students-built skills that will aid them thorough their lives. The use of social media enable the teacher to use variety of instructional strategies in order to meet individual learning needs and to effectively engage their learners using the available resources in their disposal. Teachers too may only find ample time for consultations after normal class lessons and this may limit the time spent in social media usage.

The Effects of People's Connections with Students on Social Media and their Effects on Students' Academic Performance

Social media is a wonderful breeding ground for friendships and other human connections and its impact on education can either be positive or negative. Thus there is need to control the way students connect with people on social media to ensure that they tap the benefits of

social media in their learning. Social media is not going away instead we need to better understand the relationship between social media use and young person's character and moral values. Schools should determine the extent of friends and people connections among students in order to understand their impact on education. Connections and interactions are easier when people interact with each other online. When it comes to relationships through social media, the rules are more relaxed and connections are made in ways that you may not have thought possible. There is no doubt that the influence of friends and family has a big effect on what we click, view, share and like. Friends have a big impact on the way that we use social media-from unwritten rules to buying decisions and much more. (Asur and Hurberman, 2010)

Senge(2006) is of the opinion that Social media makes it easier to make friends. One of the biggest positives of social media is that it has never been easier to make friends. Just a few decades ago it was pretty rough to connect with people, unless you were the overly outgoing type able to make conversation with anyone and everyone at a party. The rise of Smartphone's helped change this, connecting people in a new way, but the social networks sprang up and the whole idea of friendship changed again and there is no going back. Ellison (2007) avers that it's entirely possible to have hundreds of friends on Facebook. They may not be friends you spend time with in the real world but they're friends nonetheless. There are several people you can consider friends who you have never met in real life, but that doesn't lessen the connection we have thanks to our interactions on social media. With friends and people connections, social media aids in speedy communication since our time is being stretched thinner and thinner by work and family commitments. Social networking sites offer a chance to communicate in a speedy and efficient manner, especially when everyone involved is familiar with social media slang.

According to Brown (2010),social media makes the world seem smaller as it isn't just your inner circle of close friends and even closer family members that social networking sites allow you to communicate with easily and effectively. One of the good things about social media is its power to open the world up to you, making it a smaller place than it has ever been before. So much so that one can't know where many of his /her contacts reside. Social networking sites mean someone physical location has become a lot less important. Social media helps you build relationships. Social networks can put you back in touch with people who you have lots in common with, and that common ground is often the starting point for long-lasting relationships. Facebook, for example asks you to list who and what you are interested in right from the start. This makes it much easier to find common ground with other users. This does require sharing of information and giving up a certain amount of privacy which is enough for some people to reject social networking outright. Wambura (2017) argues that keeping key personal information private is necessary, but sharing your likes and dislikes and interests and obsessions can actually contribute to an open society. Social media helps news travel faster since new lines can make its way around the world and back again with seconds. It has taken this spread of news to the next level with eyewitnesses able to report on new stories as they happen.

METHODOLOGY

The study adopted a descriptive survey research design to investigate the effects of social media on students' academic performance. Mugenda and Mugenda (2003) argue that this design is used to analyze and report events as they occur. Descriptive surveys are used to describe some aspects or characteristics of human

population such a opinions, attitudes, beliefs or even knowledge of certain phenomenon

RESEARCH FINDINGS

Table 1: Time Students Spent on Social Media Daily

Time in hours	No of respondents	Percentage
Less than 1 hour	33	13.2
1-2 hours	116	46.4
2-3 hours	79	31.6
More than 3 hours	22	8.8
Total	250	100

As per the findings in Table 1, most of the respondents spend between 1 to 3 hours daily on social media platforms. This is quite a lot of time considering that they have to study too. This implies that the students spend a considerable amount of time on social media sites other than studying after classroom learning. This can be detrimental to their academic performance. Students have different capabilities and strengths. There are those who are able to grasp everything during classroom learning. Others require doing personal studies on the same in order to understand and comprehend. The latter would be disadvantaged if they spent most time on social media than reading. Also the distraction that social media brings may cause one to forget learnt material easily. The findings are consistent with Smith (2012) assertions that students are spending too much time online and not enough time in the 'real world', thus influencing their personality and character. This laxity of the learners is prone to poor academic performance and this call for moral support on the young people who are highly addicted to social media use because if not taken care of, it can lead to cyber bullying.

One teacher notes that;

"Social media is useful among the students now days as they depend on those media to get information about education, for example; social media can be used to get different materials from various sources. Students use social media to find materials as well, but most of the muse these media for non-profitable matters like watching non morals issues like naked pictures and videos, reading sexual stories and many other businesses. Many students are also addicted to social media and this might promote poor academic performance in their studies....."

Table 2: Time on Social Media Versus on Studies

More time on social media rather than studies	Frequency	Percentage
Yes	80	32.0
No	170	68.0
Total	250	100

The results show that majority of the respondents presented by 68.0% disagreed that they spend too much time on social media than on studies. They could have understood that this also included the classroom learning hours. However, from our earlier findings, it was established that the majority of the students spend between 1 to 3 hours daily on social media sites. This is quite a long period of time and is bound to affect their performance negatively.

From interview schedule, one teacher argued that;

"Students can spend some time on social media on daily or weekly basis for their passion which will help them to feel refreshed from the monotonous daily routine. Students should always try to learn new things".

The teachers were requested to indicate the extent to which time duration affected the academic performance of the students. The responses were placed on a five Likert scale from 1-5 where 1-strongly disagree, 2- disagree, 3-Neutral,4- disagree and 5-strongly agree. The findings were displayed in Table 3

Table 3: Teachers Perception on Social Media Duration

Statement	Mean	STD Dev
Teachers allocate time to use social media in teaching	3.50	0.9864
Time allocated on use of social media has effect on students academic performance	3.77	0.8976
Time allocated on use of social media in teaching motivate learners in class	3.69	0.8639
School administrators encourages more time in social media use in teaching/learning	3.55	0.8621
Social media platforms are allocated time for teaching/ learning in school	3.71	0.8712
Different social media affect students' academic performance based on time duration	3.89	0.9187
Time allocation on social media has perfected the student learning skills thus improving their academic performance	3.99	0.8871

From the findings presented in Table 3, the teachers agreed that use of social media has perfected the student learning skills thus improving their academic performance (mean =3.99) followed by different social media affect students' academic performance (mean =3.89), use of social media has effect on students' academic performance (mean=3.77) social media are available for teaching/learning in school (mean=3.71), use of social media in teaching motivate learners in class (mean =3.69), school administrators encourages use of social media in teaching (mean=3.55) and that teachers always use social media in teaching (mean=3.50). This depicts that use of social media has perfected the student learning skills thus improving their academic performance. The findings are in line with the findings of a study by Adefuye (2006) who established that when various digital learning resources are used in learning institutions like secondary schools they arouse students' interest towards learning and definitely might have positive effects on performance. This availability can be of immense importance towards the academic development or performance of the students.

Also one of the interviewed teachers said that;

"... The uses of social Media among the students influence their behaviors. This can be either negative or positive. Therefore teachers should allocate time to use social media in their classroom teaching. Social media can perfect the skills of learners if used wisely..."

The findings are in congruent with those of Saleh (2011) who established that social networking sites can become useful instruments in improving correct spellings and writings among students as it offers elasticity in learning, inspires inventive ideas and increases interpersonal interactions among students and instructors.

Table 4: Students Views on Social Media Connection with People

Statement	Strongly Agreed		Agreed		Disagreed		Strongly Disagreed	
	F	%	F	%	F	%	F	%
I joined social media because of my friends	157	62.8	70	28	14	5.6	9	3.6

The way I source for information on social media is different from the way I source for information in the library	154	61.6	74	29.6	13	5.2	9	3.6
I see social media as a place where I can get my information needs either academic or non-academic	146	58.4	73	29.2	17	6.8	14	5.6
In sourcing for my information on social media, I usually make use of comment interface to ask question	159	63.6	67	26.8	16	6.4	8	3.2
Sometimes my decisions are made based on the information I get on social media	159	63.6	63	25.2	15	6.0	13	5.2
If I did not get the information I need in a particular social media, I usually make use of another social media site	158	63.2	67	26.8	15	6.0	10	4.0
I follow up any information I see on social media	153	61.2	74	29.6	15	6.0	8	3.2

Table 4 reveals that (90.8%) of the respondents joined social media because of their friends, (91.2%) agreed that the way they source for information on social media is different from the way they source for information in the library, (97.6%) agreed that they see social media as a place where they can get my information needs either academic or non-academic, (90.4%) agreed that in sourcing for their information on social media, they usually make use of comment interface to ask question, (88.8%) agreed that sometimes their decisions are made based on the information they get on social media, (90.0) agreed that if they did not get the information they need in a particular social media, they usually make use of another social media site and (90.6%) they follow up any information they see on social media.

The findings concur with Asur and Hurberman (2010) observations that schools should determine the extent of friends and people connections among students in order to understand their impact on education. Connections and interactions are easier when people interact with each other online. The use of social media enables the teacher to use variety of instructional strategies in order to meet individual learning needs and to effectively engage their learners using the available resources in their disposal. This may include the use of radio, television, mobile phones, internet connectivity among others. The implementation of strategies of remote learning using WhatsApp, zoom, Google classroom, Microsoft team among others may be of great positive use to academic performance.

From the interviews one teacher had this to say;

"Usage of social media by students is high; these social media platforms are being used by students to make new friends, chat with their friends, to upload their photos and videos, to research about their assignments and other educational materials, to stay up to date with latest trends and news, to reach out to their classmates for group assignments, to research about future academic career".

RECOMMENDATIONS

- i. Teachers should ensure they use the social media as a tool to improve the academic performance of students in schools.
- ii. The teachers should emphasis the importance of social media with the aim of raising the academic performance as the school as it has been proved that social media in teaching and learning enhanced the performance of the students.
- iii. The Ministry of Education should ensure that the education accessible contests are controlled.
- iv. The use of Social media network by students should focus on the academic relevance of those sites instead of using them for negative purposes.

REFERENCES

- Adefuye, M.(2006). Teacher's Awareness and extent of utilization of information communication technologies for effective Science and Health Education in Nigeria. Singapore journal of scientific research, 5,26-58
- Akerlof G. A & Rachael E. K (2000), Economics and Identity. The quarterly Journal of Economics
- Asur, S. & Hurberman, B.A (2010). Predicting the future with social media. Social computing lab: HP labs, Palo Acto, California. PP1-8.
- Azizi,S.M, Soroush A, and Khatony A.(2019). The relationship between social networking addiction and academic performance in Iranian students of medical sciences: a cross-sectional study. BMC pshol, 7(1) 2019. Pp 1-8
- Brown, T. (2010). Knowledge and practical reason, Philosophy compass,3,6 (1135).
- Chinooneka, T.I & Mupa, P. (2015). Factors contributing to ineffective teaching and learning in primary schools: Why are schools in Decadence? J.Educ.pract.6(19):125-132.
- Copple,C. (2009). Contemporary Issues in Early childhood. SAGE Journals: Altmetric.
- Ellison, P.D. (2007). Multiple regression: A primer. Thousand Oaks, CA: Pine Forge press.
- Kaplan, A.M, & Haenlein, M. (2010). Users of the world, Unite! The challenges and opportunities of social media, Business horizons, 53(1).
- Kasandra, P. (2015). The Jakarta post. Kasandra and Associates. Jakarta
- Kross R.D,& Johnson H.L(2013). Relationship between Facebook use and subjective well-being in young adults. Plos one 2013; 8(pub med).
- Mensah G.A,(2016), Monitoring and threat assessment of the spotted: Necked Otter. Southern Benin Wetlands, IUCN Otter spec. Group Bull 28A: 45-59.
- Ministry of Education, (2007). Kenya education sector support programme: procurement procedures manual for secondary schools and colleges. Nairobi: Government printer
- Monda, T.M. (2012). Influence of Teaching and learning materials on children performance in pre-schools in Borabu district, Nyamira county, Kenya. Master of Education Unpublished Dissertation, University of Nairobi.
- Moses, J. (2018). Use of New Arthroscopic Joint Spreader/Stabilizer. Review of selected cases: Journal of oral and maxillofacial surgery.

- Mugenda M.O & Mugenda A.G,(2003). Research methods: Qualitative and Quantitative Approaches. Nairobi: Acts press.
- Scott, R. W. (2008). Organizations and organizing: Rational, natural and open systems Perspectives. Upper Saddle River, NJ: Prentice Hall.
- Salehi-Sangari, E. (2011). Impact of facebook usage on students' academic achievement. Electronic journal of Research in psychology, Van3-KTH.
- Senge, P. (2006). The fifth discipline: The art and practice of the learning organization. New York, NY: Currency /Doubleday.
- Smith, D.R. (2012). Thematic Bibliography on large class teaching/ Teaching in Difficult circumstances. Linguistics: University of Warwick.
- Wambura, C. (2017). The extent of computer usage among school teachers and students in Ipala municipality, Dar es Salaam. Master of Education unpublished dissertation. The open University of Tanzania
