

# **Electronic and Social Media Use among Secondary Students in Kenya**

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## **Abstract**

In the last decade, we have witnessed a sharp increase in the availability and use of electronic devices. Due to this, electronic devices have become an integral part of adolescent life with reports indicating ownership of at least one electronic media by students. There is increasing concern about the negative effects of excessive use of various electronic media by students but the monitoring of these behaviors is globally low. This necessitated the need for this study which investigated on usage of electronic and social media among students, and perceived influence of electronic media on students' social behaviour. The study was guided by two objectives: To establish student electronic ownership and activities when using internet and to determine influence of electronic and social media on students' social behaviour. The study is anchored on two theories: Social influence theory and the social innovation theory. Descriptive survey design was employed with a sample of 359 students. Data was obtained using a questionnaire. Quantitative data was analyzed by use descriptive statistics. Stratified and random sampling procedures were used to select participants. The study established that students frequently connected to the internet; students concentrated on searching sexual images and listening to sexual discussions and explicit music and that sex-texting was common. Common discussions among students focused on dating and explicit music, movies and celebrities. It was concluded that electronic media has a major influence on students life and students social behaviour. The study recommended that there is need to educate students on more effective use of electronic media.

**Key Words:** Electronic media, social media, Electronic devices, social behaviour

## **Introduction**

Electronic media are media that use electronics or electromechanical audience to access content. This is in contrast to static media (mainly print media), which today are most often created electronically, but do not require electronics to be accessed by the end user in the printed form. The primary electronic media sources familiar to the general public are video recordings, audio recordings, multimedia presentations, slide presentations, CD-ROM and online content. Most new media are in the form of digital media. However, electronic media may be in either analogue electronics data or digital electronic data format (Cortada, (2015). Media covers various means of communication like communication devices which are used to interact and communicate among people. Electronic media uses electromechanical device to access the content, broadcast or store media that take advantage of electronic technology. Electronic media plays a crucial role in promoting communication in the society through various ways (Alexandra, 2014).

New technology and social media sites are constantly changing, evolving and developing, which means the face of personal communication is also changing. These changes often mean that people have less and less face-to-face interaction. Email, texting, Facebook and Twitter are just a few examples of mediums that have diminished verbal communication. Verbal communication has decreased dramatically from just 20 years ago,

when most of the technology used today did not even exist (Atkinson, 2022). Texting has also increased dramatically since it first came about in the '90s and is now used for communicate more than calling someone is. More than 70 percent of people use their smart phones to text. It is no secret that time spent on new technology and social media sites is increasing immensely, creating less time for real-life interactions. Likewise, there is no doubt that as these numbers continue to rise, face-to-face and verbal communication will continue to decrease and possibly even become a mere trend of the past.

Today most of the people specially the youngsters are hooked on to the different social media for keeping in contact with their peers. Social media is media for social interaction as a superset beyond social communication (Chawinga, (2017). The emphasis on electronic media is in line with SDG number 9 which focuses on Industry, innovation and infrastructure. Build resilient infrastructure, promote inclusive and sustainable industrialization, and fosters innovation and specifically with emphasis on significantly increasing access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020.

Technology of media is an important part of students' lives in the twenty-first century and play very important role in creating awareness related various aspects of life and personality Wilcox, & Andrew (2013). We learn skills, values and patterns of behavior from the media both directly and indirectly. There is no doubt that electronic media has significant influence on children from a very early age, and that it will continue to affect children's cognitive and social development (Loneragan, 2020). Over the years, social media has gained conation as a source of information where individuals and organizations interact with their audience. Research shows that that the most popular social media platforms are WhatsApp (83.3%), Facebook (78.0%), Twitter (12.8%), LinkedIn(7.9%), Imo(2.6%), Snapchat (1.8%), Myspsce (1.3%), and Skype (0.9%) Pathak (2022).

### **Statement of the problem**

Several authors have expressed concerns about the increasing use of cell phones, internet games, and various types of social media by adolescents. The concern is focused both on the inordinate amount of time using these media (which detracts from other developmentally important activities) and on the often sexual and violent content they are exposed to on these media. Excessive use of these media has been associated with increased aggressiveness, early sexual activity, and the use of tobacco and alcohol. Many people and students are educated through using electronic media. It is the most obvious and inevitable element to experience this relation in the routine life too. It is clear that electronic media has a key role in human life. So we need to obtain a lot of important information about electronic media about relations with other variables especially in educational contexts that are important for young generations. The present study was an attempt to study the electronic media use among sampled secondary school students.

### **Objectives of the study**

The study was guided by two objectives:

- 1) To establish student electronic ownership and activities when using internet
- 2) To determine influence of electronic and social media on students social behaviour

### **Theoretical framework**

The study is anchored on two theories: the social influence theory and Social innovation Theory.

The central theme of social influence theory, as proposed by Kelman (1958), is that an individual's attitudes, beliefs, and subsequent actions or behaviors are influenced by referent of others through three processes: compliance, identification, and internalization. He posited that social influence brings about changes in attitude and actions, and that changes may occur at different "levels." This difference in the level of changes

can be attributed by the differences in the processes through which individuals accept influence. According to this theory, there are three primary processes of influence:

- *Compliance* which is assumed to occur when individuals accept influence and adopt the induced behavior to gain approval. Hence, “the satisfaction derived from compliance is due to the *social effect*.”
- *Identification* which happens when individuals adopt the induced behavior in order to create or maintain a desired and beneficial relationship to another person or a group. Hence, the satisfaction occurs due to “the *act* of conforming.”
- *Internalization* which is assumed to occur when individuals accept influence after perceiving the content of the induced behavior is rewarding in which the content indicates the opinions and actions of others. It is also stated that individuals adopt the induced behavior realizing that it is congruent with their value system. In this case, therefore, the satisfaction occurs due to “the *content* of the new behavior.”

Each of the three processes can be represented by a function of three determinants of influence: (a) the relative importance of the anticipated effect, (b) the relative power of the influencing agent, and (c) the prepotency of the induced response. However, for each process, these determinants are qualitatively different. So each process has a distinctive set of antecedent conditions; similarly each process leads to a distinctive set of consequent conditions.

Since social influence can shape an individual’s attitudes, beliefs and actions, the impact of social influence on information systems (IS) acceptance and usage has been studied extensively. According to Dowdell, et al (2011)), the initial theorizing on IS adoption and use is contended to consider the perspective of social normative *compliance*, thereby overlooking the *identification* and *internalization* processes of social influence. It is argued that the *subjective norm* is the dominant conceptualization of social influence and the way it is operationalized that typically emphasizes compliance (Wang et al. 2013). Subjective norm is theorized in several behavioral models such as the theory of planned behavior (TPB) and the theory of reasoned action (TRA).

Realizing that only one aspect of social influence i.e., *compliance* may not predict the true relationship between the system users’ belief and behavior, and IS use, other researchers attempt to bring the perspectives of all three processes of social influence to provide the integrated impact of them (Wang et al. 2013). They believe that the effect of compliance-based social influence may reduce over time, whereas the effects of identification and internalization would persist over longer periods. Therefore, studies that theorize all three processes of social influence indicate that social influence may differ significantly across groups in organizations. Such conceptualization helps us to understand how the system users’ *own* beliefs and judgments also influence their commitment to adopt and use technology, complementing the understanding of previous studies that focus on how the system users *comply* and *conform* to the beliefs of salient others.

Social innovation theory is used to describe a very broad range of activities which include; the development of new products, services and programmes; social entrepreneurship and the activity of social enterprises; the reconfiguration of social relations and power structures; workplace innovation; new models of local economic development; societal transformation and system change; non-profit management; and enterprise-led sustainable development. There is no single, commonly agreed definition of social innovation. This reflects the fact that social innovation is predominantly a practice-led field in which definitions and meanings have emerged through people doing things in new ways rather than reflecting on them in an academic way. Murray et al. (2010) define social innovations as ‘new ideas (products, services and models) that simultaneously meet

social needs and create new social relationships or collaborations. Social innovations ‘deal with improving the welfare of individuals and community’. Social innovation is new responses to pressing social demands, which affect the process of social interactions. It is aimed at improving human wellbeing” (Antiwi (2016).). Social innovation is innovation inspired by the desire to meet social needs which can be neglected by traditional forms of private market provision and which have often been poorly served or unresolved by services organized by the state.

### Research Methodology

Descriptive survey design was employed for study. The study targeted 359 secondary school students. Data was obtained using a questionnaire. Data was analyzed by use descriptive statistics.

### Findings and Discussion

This covers information presented in tables as relates to: media device use, mobile phone ownership, materials students look for, internet access and student activities, social networking, and electronic media and students sex activities and pregnancy.

#### Media devices usage

The students were also asked to indicate devices which they personally used at home or at school. The findings are as shown in table 1.

**Table 1: Media devices usage by students at home or at school**

	Frequency	Percentage
A Television	10	3.4
A Radio set	38	13.6
The Internet	113	39.8
Social networking sites	32	11.4
Smart Cell phones	90	31.8
<b>Total</b>	<b>283</b>	<b>100</b>

From the findings, 39.8% of the students indicated that they personally use the internet at home or at school, 31.8% of the students indicated smart call phone, 13.6% indicated a radio set, 11.4% indicated social networking sites while 3.4% indicated a television. From these findings we can infer that students personally use the internet at home or at school.

#### Mobile phone ownership and usage among students

The students were as well requested to indicate the statement which describes them. The results are as shown in Table 3.

**Table 1: Mobile phone ownership and usage among students**

	Frequency	Percentage
I have my own mobile phone	83	29.5
I share a mobile phone with my family members	74	26.1
I share a mobile with my friends	45	15.9
I share SIM cards with my family members	58	20.5
I share SIM cards with my friends	29	10.2
<b>Total</b>	<b>283</b>	<b>100</b>

From the findings, 29.5% of the students indicated that they have their own mobile phone, 26.1% of the students indicated they share a mobile phone with their family members, 20.5% indicated they share SIM cards with their family members while 10.2% indicated they share SIM cards with their friends. From these findings, we can infer that students have their own mobile phone

### Material students look for using the electronic media

The students were also asked to indicate the kind of material they looked for using the electronic media indicated. The results were as shown in Table 2.

**Table 2: Searches using the electronic media**

	Frequency	Percentage
Educational Material /Research for homework	55	19.3
Look for information on sex health and sexuality	10	3.4
Explicit Music	74	26.1
Videos/movies /Pornography	77	27.3
Educational Scholarships	16	5.7
Look for information on Alcohol and Drugs	29	10.2
Look for information on health topics	23	8.0
<b>Total</b>	<b>283</b>	<b>100</b>

From the findings, 27.3% of the students indicated that the kind of material they look for using the electronic media was videos/ movies /pornography, 26.1% of the students indicated explicit music, 19.3% indicated educational material /do research for homework, 10.2% indicated look for information on sex health and sexuality, 8% indicated look for information on health topics, 5.7% of the students indicated educational scholarships while 3.4% of the students indicated that they look for information on sex health and sexuality. From these findings we can infer that the kind of material students look for using the electronic media is adult rated movies /pornography.

### Internet access

The students were also asked to indicate how often they connected to the internet. Their responses were as shown in Table 4.

**Table 2: Frequency of students connecting to the internet**

	Frequency	Percentage
Once a day	23	8.1
Twice a day	31	11.1
3 times a day	43	15.2
4-6 times a day	94	33.3
7-9 times a day	60	21.2
<b>Total</b>	<b>283</b>	<b>100</b>

From the findings, 33.3% of the students indicated that they connect to the internet 4-6times a day, 21.2% of the students indicated 7-9times a day, 15.2% indicated 3 times a day, 11.1% indicated twice a day while 8.1% indicated once a day. From these findings we can infer that they connect to the internet 4-6times a day. A review of literature on the media as a source of information shows that the development of information technology has increased the number of hours that people are engaged in one form of media or another. According to Vircks (2017), young people today spend 6–7 hours each day, on average with some form of

media. This may be through mobile phones where they are either calling, chatting on face book or what Sapp, surfing the internet, listening to music or watching a movie. In the house, they could be watching Television, playing a video game or listening to music on radio where they learn a lot of things.

### Student activities when using internet

The students were also asked to indicate activities they were involved in while on internet. Their responses were as shown in Table 5.

**Table 3: Student activities using in the internet**

	Frequency	Percentage
Sending a message via What Sapp	38	13.6
social networking through Facebook	52	18.2
Twitting	45	15.9
Used you Tube	35	12.5
Connecting with friends	23	8
Chatted with someone I have not met in person	32	11.4
Sending sexual text	58	20.5
<b>Total</b>	<b>283</b>	<b>100</b>

From the findings, 20.5% of the students indicated that they sent a sexual text on my mobile phone, 18.2% of the students indicated they used a social networking site like Facebook, 15.9% of the students indicated they used Twitter, 13.6% indicated sent a message via Whatsapp, 12.5% indicated they used Them Tube, 11.4% indicated they used chatted online with someone I have not met in person, while 8% indicated they shared pictures or videos of themselves online. From these findings we can deduce that they sent a sexual text on my mobile phone.

### Topics on social networking sites

The respondents were requested to indicate the topics they discussed on social networking sites. The findings are presented in Table 6.

**Table 6: Topics students discuss on social networking sites**

	Mean	Std. Deviation
Love life and/ or dating	4.4564	.86545
Schoolwork and homework	3.5328	.79848
Explicit Music, movies and celebrities	4.1079	.96722
Gossip /stories about people at school or in the community	3.7522	.96893

Regarding topics discussed, the respondents indicated that the topics that their students discuss on social networking sites (Facebook, Twitter and WhatsApp) are love life and/ or dating as shown by a mean score of 4.4564, explicit music, movies and celebrities as shown by a mean score of 4.1079, gossip /stories about people at school or in the community as shown by a mean score of 3.7522 and schoolwork and homework as shown by a mean score of 3.5328. A study by Kalinga, (2011) showed that 72% of youth said their source of sexual knowledge was media and peers with the rest (28%) reporting parents, school, and church.

### Chatting about with people

The students were also asked to indicate topics they chat about with people using their mobile phone or computer. Their responses were as shown in Table 7.

**Table 7: Topics students chat on**

	<b>Frequency</b>	<b>Percentage</b>
Love life and/ or dating	16	5.7
Schoolwork and homework	19	6.8
Explicit Music, movies and celebrities	71	25.0
Gossip /stories about people at school or in the community	93	33.0
Sports	74	26.1
<b>Total</b>	<b>283</b>	<b>100.0</b>

From the findings, 33% of the students indicated that they chat about gossip /stories about people at school or in the community using their mobile phone or computer, 26.1% of the students indicated sports, 25% of the students indicated explicit Music, movies and celebrities, 6.8% indicated schoolwork and homework while 5.7% indicated Love life and/ or dating. From these findings we can infer that student chat about gossip /stories about people at school or in the community with people using the mobile phone or computer.

### **Electronic Media and student Pregnancy**

The study further sought to determine the influence of electronic media on pregnancy among students.

#### **Electronic media influence on teenagers**

The respondents were additionally requested to indicate whether they thought that electronic media influences teenagers to have sex at an early age. The findings were as shown in Table 8.

**Table 8: Electronic media influencing teenagers to have sex at an early age**

	<b>Teachers</b>		<b>Students</b>	
	<b>Frequency</b>	<b>Percentage</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	43	63.6	148	52.3
No	25	36.4	135	47.7
<b>Total</b>	<b>68</b>	<b>100</b>	<b>283</b>	<b>100</b>

From the findings tabled above, 63.6% of the respondents indicated that electronic media influences teenagers to have sex at an early age while 36.4% indicated it does not. From the students findings, 52.3% of the students indicated that electronic media influences teenagers to have sex at an early age while 47.7% of the students indicated that electronic media does not influence. From these findings we can deduce that electronic media influences teenagers to have sex at an early age.

### **Pregnancy and student Dropout**

The respondents were further requested to indicate whether pregnancy is a major cause of dropout in school .The results are as shown in Table 9.

**Table 9: Pregnancy and school dropout**

	<b>Frequency</b>	<b>Percentage</b>
Yes	255	90.1
No	28	9.9
<b>Total</b>	<b>283</b>	<b>100</b>

From the findings tabled above, 90.1% of the respondents indicated that teenage pregnancy is a major cause of school dropout in their school while 19.3% indicated it is not. From this, we can infer that teenage pregnancy is a major cause of school dropout.

### Electronic media and student sex behaviour

The respondents were as well requested to indicate whether electronic media influenced their sex behavior. The findings are as shown in Table 10.

**Table 10: Students response on whether Electronic media influenced their sex behaviour**

	Frequency	Percentage
Yes	250	73.9
No	18	26.1
<b>Total</b>	<b>68</b>	<b>100</b>

From the findings tabled above, 73.9% of the respondents indicated that the influence of electronic media on teenage sex should be taught in secondary schools while 26.1% indicated it should not be taught. From this, we can infer that the influence of electronic media on teenage sex should be taught in secondary schools.

### Electronic media and influence on sex

The students were requested to indicate electronic media that significantly influences sex behaviours. The responses are in Table 11.

**Table 11: Social media that significantly influences student sex behaviour**

	Frequency	Percentage
Online Television	23	8
Social Networking sites	74	26.1
The internet	52	18.2
Online Radio	45	15.9
Sexting on Mobile Phones	90	31.8
<b>Total</b>	<b>283</b>	<b>100</b>

From the findings, 31.8% of the students indicated that sexting on mobile phones significantly influences teenage sex, 26.1% of the students indicated social networking sites, 18.2% indicated the internet, and 15.9% indicated online radio while 8% indicated online television. From these findings we can infer that sexting on mobile phones significantly influences teenage sex.

### Sex solicitation

Further students were requested to indicate whether they have a report of having been solicited for sex. The findings are presented in Table 12.

**Table 12: Students report on having been solicited for sex**

	Frequency	Percentage
Yes	201	71 .0
No	23	29 .0
<b>Total</b>	<b>283</b>	<b>100</b>

From the findings tabled above, 65.9% of the respondents indicated that students in their school report have been solicited for sex while 34.1% indicated they have not. From this, we can infer that students in the school report have been solicited for sex.

### Students' sexting in class

Students were additionally requested to indicate whether they did sexting in class. The results are as shown in Table 13.

**Table 13: Sexting in class**

	<b>Frequency</b>	<b>Percentage</b>
Once a week	12	17
2 times a week	28	40.9
3 times a week	15	22.7
5 times week	13	19.3
<b>Total</b>	<b>68</b>	<b>100</b>

From the findings shown above 40.9% of the respondents indicated that they catch their students sexting in class 2 times a week, 22.7% indicated 3 times a week, 19.3% indicated 5 times a week while 17% indicated once a week. From these findings we can infer that students sext in class 2 times a week. A body of literature in psychology research suggests that the use of electronic devices in class can lead to a distracting learning environment (Ravizza et al. (2016) and that students who used laptops in class for nonacademic reasons had poorer class performance in their final grade.

Advancement in information technology, such as mobile phones, face book, whatsapp and twitter has resulted with creation of a social network that enables the peers to exchange information of all sorts. 'Is your child texting or sexting' (Nation, 8th Sept, 2010) refers to the widespread use of the Short Message Services (SMS) among the young people in Kenya to exchange sex messages. Parents were being called upon to pay more attention to their adolescent children's use of the mobile phones as it had become a major platform for transmitting sexuality messages.

### Sexual image

The students further asked to indicate whether they have ever seen any sexual images or heard sexual discussions when using their phone, television, radio or the internet. Their responses were as shown in Table 14.

**Table 14: Students seeing any sexual images or heard sexual discussions**

	<b>Frequency</b>	<b>Percentage</b>
No	16	5.7
Yes I opened an attachment by mistake	80	28.4
Yes, it popped on my screen when I was browsing the internet	61	21.6
Yes, I wanted to see /hear it	83	29.5
Yes, a friend sent me a photo or a video	42	14.8
<b>Total</b>	<b>283</b>	<b>100</b>

From the findings, 29.5% of the students indicated yes, that they wanted to see /hear it, 28.4% of the students indicated yes that they opened an attachment by mistake, 21.6% of the students indicated yes, that it popped on my screen when they were browsing the internet, 14.8% indicated yes, that a friend sent me a photo or a

video while 5.7% indicated no. From these findings we can deduce that the students wanted to see /hear sexual images or hear sexual discussions.

### Statements on electronic media and teenage pregnancy

The respondents were also asked to indicate the extent to which they agree with the following statements on electronic media and teenage pregnancy. The results are as shown in Table 15.

**Table 15: Level of agreement with statements on electronic media and teenage pregnancy**

Statement	Mean	Std. Deviation
Seeing characters in popular online television shows and the internet acting a certain way about sex significantly influence how I feel about sex and sexuality in real life.	4.0348	.96032
Facebook, WhatsApp and other SNSs do not influence how teenagers feel about sex and sexuality in real life.	4.1673	.86545
Parental control on their children access to social networking sites and the internet reduces chances of sexual relationships among teenagers and teenage pregnancy	3.6384	.79848
The watching of adult rated movies and explicit music online by students does not influences teenage pregnancy.	4.0348	.96722
Teachers control of their students access to social networking sites, the internet reduces chances of sexual relationships among students and teenage pregnancy	3.8930	.96893
Teachers limited technological savvy hinders their ability to control students access to explicit content on social media	4.1044	.38524
Students only use the internet as a good educational research tool.	3.9115	.86728

Regarding statements on electronic media and teenage pregnancy, the respondents agreed that Facebook, WhatsApp and other SNSs do not influence how teenagers feel about sex and sexuality in real life as shown by a mean score of 4.1673. The respondents also agreed that teachers' limited technological knowledge hinders their ability to control students' access to explicit content on social media as shown by a mean score of 4.1044. Further, the respondents agreed with a mean score of 4.0348 that watching of adult rated movies and explicit music online by students does not influences teenage pregnancy. Also, the respondents agreed with a mean of 3.9115 that students only use the internet as a good educational research tool, teachers control of their students access to social networking sites, the internet reduces chances of sexual relationships among students and teenage pregnancy as shown by a mean score of 3.8930 and that parental control of their children on access to social networking sites and the internet reduces chances of sexual relationships among teenagers and teenage pregnancy as shown by a mean score of 3.6384.

### Conclusion

Electronic and social media were in high use among students both at home and in schools with high ownership of mobile phones. Many students accessed internet between 4- 6 times a day. Common searches using electronic media were on videos/ movies/pornography and explicit music with limited use in search for educational material. Internet has immense potential for informing students. It enables students to get instant information for their varied purposes. Main student activities while using internet included sending sexual text and social networking through Facebook where they discussed topics on life dating, explicit music, music and celebrities. Electronic media influenced student engagement in sex which contributed to students dropping

out of school. Sex solicitation case were high among students .Due to association with searches on sex related material, it exposed learners to early sex and early teenage pregnancies.

### Recommendations

- i. At the school level, it is necessary to develop certain regulations over the use of such social networking sites.
- ii. As a control measure, teachers and the department of guidance and counseling should create awareness among learners on the influence of electronic media on teenage sex.
- iii. In order to make electronic media more beneficial and effective, awareness programmes for maximum use of Internet should be undertaken by those in charge of ICT in schools.
- iv. To prevent misuse of Internet facilities, proper monitoring of services should be ensured as restricted sites should be blocked.
- v. Teachers should be in the frontline in the use of technology in their classrooms to motivate their learners to use electronic media for education purposes
- vi. Teachers to should involve learners in the use of electronic media to search for educational materials especially for home work.
- vii. Since students have smartphones, teachers should make most of them. They should not forbid technology in their classrooms; instead use it to their advantage by assigning them appropriate research work.
- viii. There is need to develop teachers on technological knowledge to empower them to control students' access to explicit content on social media.

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