

Which Direction for Secondary School Boys? An Analysis of the Influence of Social Media on Boys' Academic Performance in Bungoma, Kenya

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Abstract

This paper discusses the influence of social media on the academic performance of boys in secondary schools in Bungoma East and Webuye West Sub Counties, Kenya. The period 2011-2014 had shown the performance of secondary school boys in these study area to be lower than that of girls. Purposive sampling was used to select boys' secondary schools in Bungoma East and Webuye West sub-counties while random sampling was used to get a sample of respondents from the boy's schools. The study was informed by the social development theory by Lev Vygotsky. Primary data collection was done by use of questionnaires while document analysis was used to collect secondary data especially on the performance of students in the mid-year exams, 2016. The study used multiple linear regression to analyze the data; findings of which were presented in tables. The study results showed that social media has a significant influence on the academic performance of secondary school boys in Bungoma East and Webuye West Sub Counties. This paper thus concludes that secondary school boys' exposure to social media in is high and, consequently, negatively affects their academic performance.

Keywords: Secondary School, Boys, Education, Academic Performance, Social Media, Technology, Bungoma.

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INTRODUCTION

Background

The evolution of technology and tremendous growth of internet usage has impacted highly on students' development especially on how they socialize and interact. A variety of media platforms, online news rooms, search engines, e- newspapers, e-mails, internet banking, web pages, teleconferencing, e-journals, internet telephony and social networking have become a social norm for computer literates. The study focused on the latter which is social networking, also referred to as social media in this paper. The recognition of these social media platforms that include Twitter, WhatsApp, Instagram, Facebook, and Vibre among others by students has diverted most of their attention from class to media networking, an addiction that is now causing adverse effects on their performance. A study by Nicole [1] indicated that social media platforms have been discovered by students, who use such platforms to communicate to their peers, reinvent their personas, share information and showcase their social lifestyles. This could have both positive and negative effects. For instance, while the interactive participation of students through social media may promote a constructivist approach to learning with learners and educators working together to co-create and understand a

particular topic [2], privacy concerns have also been on the rise such as cyber-bullying, plagiarism, inappropriate actions and non-educational chats [3, 4]. It therefore becomes a social concern when students spend most of their time on social media not for academic purposes but for non academic undertakings affecting how they perform in school.

When schools close, students spend most of their time on social media and parents have found it hard to have them settle to do any holiday assignments. This is a major distracter to most students in secondary schools especially those from affluent homes who own phones at home. They may not be able to draw maximum attention to any details in their assignments. One implication of this can be the fact that students who are regularly exposed to social and electronic media may spend more time doing their homework for an idea of understanding it completely, and this may result in the inability of these students to manage their time efficiently. This paper is an interrogation of the influence of social media on performance of boys in secondary schools.

The study was guided by the social development theory as advocated by Lev Vygotsky. The social development theory by Vygotsky [5]

explains that the environment in which children grow up influences how they think, and what they think about. Every function in the child's cultural development appears twice, first on the social level and later on the individual level. This applies to the voluntary attention, to logical memory and to the formation of concepts. Vygotsky states that cognitive development stems from social interactions from guided learning within the zone of proximal development as children and their partners co-construct knowledge. Adults are an important source of cognitive development. An adult transmits their culture's tools of intellectual adaptation that children internalize [5]. According to Vygotsky [6], learning is a social activity. Our learning is intimately associated with our connection with other human beings such as our teachers, peers, family as well as casual acquaintances. He therefore proposes that children's understanding is shaped through interactions between people in relation to the world.

Vygotsky argues that learning is contextual; we do not learn isolated facts and theories in a land of the mind separate from our lives but in relation to what else we know, believe, and our prejudices and fears. Therefore learning is social and active. A learner's peers determine the learner's interest to learn and therefore ability to construct knowledge which eventually is tested in exams to determine academic performance. If the learner's peers are positive towards academics, this will influence the learner's interest and hence academic performance. However, if the learner's peers are inclined towards non-academics, they will negatively influence the ability to construct knowledge and eventually lead to poor academic performance.

Social media forms part of an important form of socialization for the students. According to Vygotsky [5], this socialization may influence the mental constructs that a student forms in constructing knowledge and eventually have an influence on the cognitive development of the student. A student who is exposed to social media may perceive things very differently from one who is not exposed and this may therefore be reflected in different performance in formative evaluation and summative evaluation. Occasionally, deep involvement in social media may be a distracter and may negatively influence the performance of the students involved.

Literature Underpinning

Despite the fact that a relatively large number of Social Network Sites (SNS) including Facebook was initially created for learning purposes, there is some evidence that most SNS users show almost no attitudes towards finding academic information on such platforms. Thus, it is possible that students are spending their time on visiting social options of SNS rather than academic. Researching on this, a study by Rouis, Limayem and Salehi-Sangari [7] identified SNS as a

major mechanism that increases social awareness of the students. The more particular students are involved in the academic tasks, the more chances that they will develop a positive attitude towards their work.

Another study that was conducted by Ishfaq and Tehmina [8] has shown that Internet-addicted people, and SNS users particularly, may experience several problems with their motivation that can possibly lead to low academic performance. The use of social network sites by students has diverted their attention towards non-educational and inappropriate actions. Therefore social networking sites badly affect the academic life and learning experiences of the student as they become addicted to the websites [8].

Further, a study done by Mingle and Adams [9] at The Lancaster University of Ghana on the effect of social networking sites on academic performance revealed that there was a significant relationship between drop in grades after social media network participation and gender ($p < 0.01$). That is, more females affirmed drops in grades after social network participation than their male counterparts. Zahid *et al.*, [10], on the other hand, found out that the participation of male students on social media was higher than the female participation with most male students recording a drop in academic performance.

Haq and Chand [11] sought the opinion of students on usage of social networks and their academic performance. Their study revealed that social network participation adversely affected the male students more than the female students' academic performance. The results of the study showed that many of the students [317 (60.3%)] believed that use of social media networks adversely affects their academic performance. The study, upon which the discussions in this paper are grounded, therefore focused on Bungoma East and Webuye West Sub-counties, Kenya, where no such studies have been conducted.

METHODOLOGY

The study was conducted in Bungoma East and Webuye West sub counties of Bungoma County, Kenya. The study utilized a descriptive survey research design as it sought to describe and establish the association among the key study variables [12]. The descriptive survey was adopted based on the conceptual relationship between the independent variable and the dependent variable. The possible relationship of independent variable in retrospect on the dependent variable was analyzed. The target population for the study constituted secondary school boys in the two sub counties with a total of 54 public secondary schools. Out of the 54 schools, six (6) are boys' schools while ten (10) are girls'; the remaining (thirty eight) 38 are mixed schools. A census sample of all the boys' schools was obtained and considered for the study. In this case, all the six boys' schools in the sub-counties formed part

of the sample because they had the characteristics required for the study. The study adopted purposive sampling technique to select Form 2 and Form 3 students who formed part of the sample because they have been in the school long enough. A sample is a smaller group of subjects obtained from the accessible population [12]. The study employed Mugenda and Mugenda's [12] recommended sample size of 10% of the target population. Random sampling was used to pick members from the two classes to take part in the study. In each of the schools, 10% of the population in each class was used. The study employed use of questionnaire guide for primary data collection. Document analysis was also done for secondary data which included information on the academic performance of the boy students. An average of the students' scores in CATs and midyear exam in Mathematics, English and Kiswahili for the year 2016 were considered for the study.

The collected data was organized, coded and statistical tests run and interpreted in line with the objective of the study. Data analysis was done using both descriptive and inferential statistics and presented in tables. The descriptive statistics were used to present the distributional properties of the data and explain the respondents' characteristics while inferential statistical tests were performed to investigate the nature, direction and strength of relationship between the social media and academic performance. A regression analysis was performed to establish the relationships between the variables. A beta (β) coefficient for social media was obtained from the generated from the model. The regression model that was used to test is shown below:

$$Y = \alpha + \beta X_1 + \epsilon$$

Where,

Y is Academic performance
 α is Model Intercept
 β is Regression coefficient
 X_1 is social media
 ϵ is Error Term

RESULTS AND DISCUSSION

Various items in regards to the usage of social media were mentioned to the students and they were expected to affirm or disagree with the statements. A 5-point Likert scale was drawn that guided the respondents that included: 5-strongly agree, 4-agree, 3-not sure, 2-disagree and 1- strongly disagree. As indicated in Table 1, on whether the students visit social sites for more than 1 hour in a day, the results showed a mean of 2.64 that denoted 52.8% of the respondents. This is quite a large number and implies that at least

more than half of the students responded to visiting social sites such as Facebook, Twitter and WhatsApp more than 12 hours a day. While 30(15%) and 38(19.6%) strongly agreed and agreed to the statement, respectively, majority 61(31.4%) indicated not using the social media platforms 12 hrs a day strongly disagreeing while 42(23.2%) disagreed.

A more than half mean of 3.23(64.6%) of the respondents said that they use phones and other electronic gadgets for academic purposes. This item had majority of the students who agreed to visiting social media platforms indicate that they used phones and other gadgets for educational purposes with 48(24.7%) strongly agreeing and 56(28.9%) being in agreement. On occasional visiting of pornographic sites, a mean of 2.04 (51.0%) was obtained which indicates quite a huge number. On this, while majority 107(55.2%) strongly agreed to visiting pornographic sites, 15(7.7%) and 30(15.5%) affirmed to the statement denoting strong agreement and agreement respectively that they occasionally visit pornographic sites. With the peer influence experienced among adolescents, these numbers could tremendously rise.

The author also sought students' responses on whether they would go with phones to school if they had a chance. A mean of 2.29 (45.8%) was obtained with 28(14.4%) and 26(13.4%) strongly agreeing and agreeing, respectively, while more than half of the respondents 90(46.4%) strongly disagreed that if they got a chance, they would go with a phone to school.

Similarly an inquiry on whether while at home, students spend time on the internet chatting with friends other than reading and working on their assignments was made. A mean of 2.59(51.8%) - more than half - was recorded. Quite a large number 30(15.5%) and 37(19.1%) held the opinion that while at home, they spend their time on the internet chatting with friends other than reading and working on their assignments. However, most of the students strongly disagreed denoted by 68(35.6%). A more than half mean of 3.00(60.0%) of the respondents was obtained for those who said that social sites such as Facebook, Twitter, WhatsApp are part of their everyday activity while at home and its part of their routine. At least 2.88(57.6%) of the respondents were of the opinion that they feel out of touch when they have not logged onto Facebook or Twitter for a while. While 3.20(64.0%) of the respondents were of the opinion that they would be devastated if Facebook, WhatsApp, Twitter and the other social sites were shut down. These findings are illustrated in Table-1.

Table-1: Usage of Social Media by Secondary School Boys

Statements		SA	A	NS	D	SD	T	M
I visit social sites such as Facebook, Twitter, WhatsApp more than 12 hrs a day.	F	30	38	16	45	61	190	2.64
	%	15.5%	19.6%	8.2%	23.2%	31.4%	97.9%	52.8%
I use phones and other electronic gadgets for academic purposes.	F	48	56	18	33	37	192	3.23
	%	24.7%	28.9%	9.3%	17.0%	19.3%	99.0%	64.6%
I occasionally visit pornographic sites.	F	15	30	10	30	107	192	2.04
	%	7.7%	15.5%	5.2%	15.5%	55.2%	99.0%	51.0%
If I got a chance, I would go with a phone to school.	F	28	26	10	36	90	190	2.29
	%	14.4%	13.4%	5.2%	18.6%	46.4%	97.9%	45.8%
While at home, I spend my time on the internet chatting with friends other than reading and working on my	F	30	37	16	40	68	191	2.59
	%	15.5%	19.1%	8.2%	20.6%	35.6%	98.5%	51.8%
Social sites such as Facebook, Twitter, and WhatsApp are part of my everyday activity while at home and its part of my routine.	F	45	48	11	36	51	191	3.00
	%	23.2%	24.7%	5.7%	18.6%	26.3%	98.5%	60.0%
I feel out of touch when I have not logged onto Facebook or Twitter for a while	F	45	38	12	40	55	190	2.88
	%	23.2%	19.6%	6.2%	20.6%	28.4%	97.9%	57.6%
I would be devastated if Facebook, WhatsApp, Twitter and the other social sites were shut down	F	55	48	12	32	44	191	3.20
	%	28.4%	24.7%	6.2%	16.5%	22.7%	98.5%	64.0%

Key: F: Frequency, %: Percentage, 5: Strongly Agree, 4: Agree, 3: Not sure, 2: Disagree, 1: Strongly Disagree, T: Total, M: Mean

The study further assessed the influence of social media on academic performance. A four-point Likert scale was employed for this item with respondents expected to indicate 4-very strong, 3-strong, 2 - weak and 1-very weak. The findings, as shown in Table 2, revealed that M=2.99(74.75%) of the respondents were of the view that they finish homework assignments by deadline despite visiting social sites. On this, majority 78(40.2%) of the respondents responded with a very strong answer while 60(30.9%) indicated strong. Quite a number 27(13.9%) and 26(13.4%) gave responses denoting weak and very weak, respectively.

The researcher also sought information on whether students preferred studying when there were other interesting things such as chatting with friends on social media to do. A mean of 2.20(55.0%) was achieved for this with more than half of the respondents responding with very strong 53(27.3%), strong 35(18.0%), weak 49(25.3%) and very weak 54(27.3%) for studying when there are other interesting things such as chatting with friends on social media.

Similarly, a mean of 2.46(61.5%) was obtained for those who said that they concentrate in class even after engaging in visiting social sites such as Facebook, Twitter, WhatsApp etc. On this, similar responses as in studying when there are other interesting things such as chatting with friends on social media were recorded for each response.

In addition the author sought to find out if students made arrangements for a place to study without distraction even when they had a phone. A mean of 2.60(65.0%) was drawn with majority of the students showing very strong 62(32.0%) and strong 40(20.6%) responses. At least 38(19.6%) and 50(25.8%) indicated weak and very weak, respectively, to the item that they arranged a place where to study without distraction even when they had phones.

Of interest was also on students' participation in class during lessons and group discussions even after chatting on social sites. The mean obtained was 2.75(68.75%) showing that students participated in class during lessons and group discussions even after chatting on social sites. In line with this, majority of the respondents indicated very strong 66(34.0%) with 47(24.2%), 40(20.6%), 37(19.1%) showing strong, weak and very weak responses, respectively.

A mean of 2.61(65.25%) of the respondents showed that the students remembered information presented in class and in text books even after engaging in surfing and chatting on social media while 3.00(75.0%) of the respondents held that they plan their work well despite their engagement in social media while at home. The results of the study are indicated in Table-2.

Table 2: Influence of Social Media on Academic Performance

Statements		VS	S	W	VW	T	M
Finish homework assignments by deadline despite visiting social sites.	F	78	60	27	26	191	2.99
	%	40.2%	30.9%	13.9%	13.4%	98.5%	74.75%
Study when there are other interesting things such as chatting with friends on social media to do.	F	53	35	49	54	198	2.20
	%	27.3%	18.0%	25.3%	27.3%	98.5%	55.0%
Concentrate in class even after engaging in visiting social sites such as Facebook, Twitter, WhatsApp etc.	F	53	35	49	54	191	2.46
	%	27.3%	18.0%	25.3%	27.8%	98.5%	61.5%
Arrange a place where to study without distraction even when I have a Phone.	F	62	40	38	50	190	2.60
	%	32.0%	20.6%	19.6%	25.8%	97.9%	65.0%
Participate in class during lessons and group discussions even after chatting on social sites.	F	66	47	40	37	190	2.75
	%	34.0%	24.2%	20.6%	19.1%	97.9%	68.75%
Remember information presented in class and in text books even after engaging in surfing and chatting on social media.	F	51	49	54	36	190	2.61
	%	26.3%	25.3%	27.8%	18.6%	97.9%	65.25%
Plan your work well despite my engagement in social media while at home.	F	83	54	23	30	190	3.00
	%	42.8%	27.8%	11.9%	15.5%	97.9%	75.0%

Key: F: Frequency, %: Percentage, 4: Very important, 3: Somewhat important, 2: Not too important, 1: Not at all important, T: Total, M: Mean

An analysis of variance was further conducted to explain the relationships between the independent and dependent variables. On this, the author introduced

other variables i.e. peer pressure, social economic status to compare the means. This is illustrated in Table-3.

Table-3: Determination of How Well Regression Model Fits the Data [Prediction of the Dependent Variable (Academic Performance)]

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.646	3	.215	.412	.044 ^b
	Residual	69.943	134	.522		
	Total	70.589	137			
a. Dependent Variable: academic performance						
b. Predictors: (Constant), peer pressure, social economic status, Social media						

Table-3 indicates that the regression model predicts the dependent variable (Academic performance) significantly well. This is evident when we look at the "Regression" row and go to the "Sig." column. It indicates the statistical significance of the

regression model that was run. Here, $p < 0.044$, which is less than 0.05, indicates that, overall, the regression model statistically significantly predicts the outcome variable (therefore it is a good fit for the data).

Factors Influencing Academic Performance based on the Regression Model

The findings revealed that there was a significant effect between social economic factors ($p = 0.014$) and academic performance. It was also established that a significant effect ($p = 0.030$) of social media on academic performance existed. The results, however, showed that there was an insignificant effect ($p = 0.113$) between peer pressure and academic performance. These results showed that social economic status and social media were crucial factors which largely influenced the academic performance of secondary school boys in Bungoma East and Webuye West Sub Counties. This was interpreted to mean that despite the effect of peer pressure and social economic status on academic performance, social media played a crucial role and had an influence on academic performance.

From the study results presented in Tables 1, 2 and 3, it has been established that social media affects academic performance of boys in secondary schools. These results are similar to those found by Haq and Chand [11] and Mingle and Adams [9] which revealed that social network participation adversely affected the male students' academic performance. Nonetheless, Mingle and Adams noted that in some instances, other students recorded improvements in their readings skills as a result of participation on social media networks.

Elsewhere, in a study conducted by Nalwa and Anand [13], a negative association of social media and academic performance was drawn which was observed to be much more than the academic benefits derived through the social media usage. The addiction on the use of students in this study with students using mobile phones and other internet gadgets more than 12 hours a day can be explained by Nalwa and Anand who note

that everyone around the world is getting used to the use of internet in most of their activities and with this there is a rise to more students using social media more often than before.

Other studies have additionally found a negative impact of social media on students' academic grades attributing it to the amount of time students spend on social networking sites. They explain that the usage of social media exposes students to a lot of stimulation on the activities on internet thus distracting students from completing their coursework [14, 15]. Another reason for this may be that students who spend more time on social media may have difficulty balancing their online activities and their academic preparation.

CONCLUSION

This paper was drawn on a hypothesis that Social media does not have a significant influence on the academic performance of secondary school boys in Bungoma East and Webuye West Sub-counties. As evident in the study findings, coefficients of ($\beta=0.120$, $p=0.030$) for the social media aspect were obtained. Thus the null hypothesis was rejected in favour of the alternative hypothesis that social media has a significant influence on the academic performance of secondary school boys in Bungoma East and Webuye West sub-counties. The study determined that secondary school boys' exposure to social media in Bungoma East and Webuye West is high and consequently this had had a negative effect on their performance in academics.

IMPLICATIONS TO RESEARCH AND PRACTICE

Though it is popularly believed that secondary school boys are strong, hardy, intelligent and do not require much attention, from the KCSE performance of the schools in Bungoma East and Webuye West Sub-counties from 2011 to 2014, it is shown that the boy child too encounters challenges especially in the internet world. This study thus provides a source of reference and knowledge bank for researchers in conducting a similar study in a different location other than Bungoma and Webuye. Through this study, the learning institutions would be enlightened on how to alleviate the negative influence of social media on the academic performance of the secondary school boys and promote academic benefits attached to the use of internet.

RECOMMENDATIONS

Based on the findings in this study, several aspects were noticed in the study which elicited recommendations that the author hopes should be adopted by the parents, school principals, heads of departments, guiding and counselling teachers, and class teachers in order to enhance the academic performance of the secondary school boys. The author therefore recommends that:

- The schools should intensify guiding and counselling programs to handle the issue of social media among secondary school-going boys.
- Students should be encouraged to reduce their exposure to social media and pay more attention to their studies if they are to achieve better results in their education.
- The government, schools and other well-to-do individuals should encourage hard work by rewarding successful students in scholarship schemes and other incentives.
- The government should consider the possibility of introducing a policy on teenagers' exposure to social media.

FUTURE RESEARCH

The author recommends further research on the influence of social media on the performance of girls in secondary schools in various regions of the country to ascertain whether the same would apply to performance of girls in secondary schools.

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