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# **Social Media Network Participation and Academic Performance in Senior High Schools in Ghana**

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## **ABSTRACT**

This study looks at social media network participation and academic performance in senior high schools. The study was aimed at identifying social media network sites and their usage among students, how students networked and participated on social media networks, time invested by students on social networks, the effects of social media on students' grammar and spelling as well as the effects of social network participation on the student's academic performance within the context of the social learning and the use and gratification theories.

To achieve the objectives of the research, the study used a mixed method approach which involved the survey of students in four senior high schools and interviews of heads of the senior high schools. The study revealed that majority of respondents used Whatsapp and Facebook for making friends and chatting. In addition, majority of respondents experienced negative effects

such as poor grammar and spelling, late submission of assignment, less study time and poor academic performance due to the heavy participation on social media networks. Furthermore, there was a high addiction rate among students in the usage of social media networks. Nevertheless, there were cases where others experienced improvement in their readings skills as a result of participation on social media networks. Also, respondents shared ideas, discussed and shared examination questions among themselves on social media networks.

The study recommended the strict enforcement of Ghana Education Service rule on electronic devices usage in schools, promotion of social media usage for academic purpose, counselling for addicted students and the use of the right grammar and spelling when participating on social networks.

***Keywords:*** *Social Media Networks, Students, Academic Performance, Addiction*

## **Background of the Study**

The Internet revolution changed the information world with regard to sharing, speed, storage and retrieval of information in whatever form regardless of the person's location. Through the Internet a number of web technologies emerged, and one technology that is making waves with regard to information sharing and communication are the social media networks. The evolution of social media has cut across all facets of society with its positive and negative impacts. Social media has transformed and impacted on communication, learning, research and education in general. Among the vast variety of online tools which are available for communication, social networking sites (SNS) have become the most modern and attractive tools for connecting people throughout the world (Aghazamani, 2010).

Davis et al (2012), refer to social media technology (SMT) as “web-based and mobile applications that allow individuals and organizations to create, engage, and share new user-generated or existing content, in digital environments through multi-way communication”. Through this platform, individuals and organizations create profiles, share and exchange information on various activities and interests. An interesting aspect of social media is that, it is not limited to desktop or laptop computers but could be accessed through mobile applications and smart phones making it very accessible and easy to use. Examples of these social media platforms both on the web and mobile application include Facebook, Twitter, YouTube, Whatsapp, Instagram, blogs etc.

According to Boyd & Ellison (2007), “Social networking sites are web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system”. These sites are used to interact with friends, peers and others that are found in groups on these sites. The sharing of information ranges from news, debates, gossips, feelings or statement of mind, opinions, research etc.

According to Internet usage statistics for the world, there were 3,035,749,340 estimated Internet users with a penetration rate of 42.3% as at June, 2014. Also, the estimated population of Africa in 2014 was 1,125,721,038 of which 297,885,898 were Internet users. The penetration of Internet on the continent was 26.5%. By December 2012, the number of Facebook users in Africa was 51,612,460. In Ghana, the number of internet users as at June 2014 was 5,171,993 with 20.1% Internet penetration. Out of the total Internet users in Ghana, 1,630,420 users were on Facebook (Internet World Statistics, 2015).

A report by the National Communications Authority (NCA) Ghana indicated that mobile data subscribers in the country has increased exponentially with a penetration rate of 59.78%. As at the end of March, 2015, mobile data subscriber base had increased to 16,106,218 (NCA, 2015). The statistics indicates that as more people subscribe to the Internet and mobile phone, the more the increase in data subscriptions. This data subscription is used to access the Internet which in effect is used more to participate on social networks. Therefore, the number of users who are and will be using social media will therefore not slow down as more people are getting on to the bandwagon.

A number of studies have been conducted to find out the impact of social media on academic performance of students. According to Ito et al. (2009), teens use these technologies for a number of positive activities, which include delving deeper into interest-driven communities and participating in various activities. Ahn (2011) adds that “Social Network Sites (SNS) provide a platform for the youth to participate in communities that help them to learn, and practice skills within a particular knowledge area”. Similarly, a study by Fishman et al (2005), also indicated that college students produce tremendous volume of writing through various social media tools such as blogs, emails and other social media environments.

Conversely, Banquil et al. (2009), found a continuing drop of grades among students who use social networking sites. This was supported by Kirschner and Karpinski (2010), who found a significant negative relationship between Facebook use and academic performance. They concluded that students who use Facebook spend fewer hours per week studying on an average than Facebook non users and this resulted in lower mean grade point averages (GPAs). Junco (2012), examined the relationship among numerous measures of frequency of Facebook use with time spent preparing for class and overall GPAs. Hierarchical linear regression analysis from the

study by Junco (2012), indicates that time spent on Facebook was strongly and significantly negatively correlated with overall GPA.

Senior High School (SHS) education in Ghana since the year 2000, has gone through a number of changes, previously from secondary school to SHS. It was later changed from three years to four years duration and now back to three years duration. These were done by various governments which in their opinion would help in raising the standards and quality of students who graduate from the SHS. This was necessitated due to the performance of students in the West Africa Senior Secondary Certificate Examination (WASSCE). A number of factors such as the duration of education, quality of teaching, teaching methods etc. were seen as factors that might be affecting performance of students negatively in these examinations.

### **Study Area**

The study covered two public Senior High Schools (SHS) and two private SHS. These are St. Johns Grammar SHS, Tema SHS, Action SHS and Ideal College. St. Johns Grammar SHS and Tema SHS are public SHS which fall into the category “A” and “B” schools as specified by the Ghana Education Service School posting hand book respectively, while Action SHS and Ideal College fall into the private SHS category.

### **Problem Statement**

There have been a lot of debates on various platforms and media as to the impact that social media has on society and specifically, its effect on education. Some of these studies found a drop in students’ grades and academic performance, and lack of time for studies as consequences of social media network participation (Banquil et al, 2009; Kirschner and Karpinski, 2010; Ndaku, 2013). On the other hand, Pasek et al. (2006) “stated that a site-specific culture can both

positively and negatively affect the building of social capital and found that Facebook usage is not positively associated with lower grades of students and rather Facebook users scored higher grades”. Kolek and Saunders (2008), did not find any correlation between GPAs of student users and social network participation such as Facebook. Rather social network sites (SNS) promote interactions among students and teachers (Ahmed & Qazi, 2011).

Preliminary investigation and interviews with some teachers and students revealed a number of challenges in relation to student’s participation on social media networks. These included a high addiction rate among students which affects their time of study, the wrong usage of grammar and spelling in social media discourse as well as distracting students from their studies. As stated by Ndaku (2013), students spend a lot of time on social networking sites than in their academic activities and this affects their academic performance.

Mr. Edmund Oppong Peprah, Chairman of the Kumasi Polytechnic Teachers Association (POTAG), in an interview with the Ghanaian Chronicle newspaper on the 6<sup>th</sup> December, 2013, appealed to the Ministry of Education and other stakeholders to step up education to the teeming Ghanaian youth on the rate of usage of the social media and the Internet at large. According to the Chairman, the emergence of social media had led to the falling standard of students’ articulation in the Queens language (English), which has affected their studies, since English is the universal language teachers use to teach in schools. He lamented that students were fond of using abbreviated words when writing examinations. A situation, he noted that, had affected the spellings of students. “Students spell words raw, as they hear them contrary to prescription of the dictionary.” This is supported by a study conducted by Horton, Alloway, and Dawson (2012) which revealed that the use of Facebook had an effect on the spelling of some of the students.

Wood et al (2014), in another study also noted that the use of texting language harms the grammatical understanding of students.

A number of studies in relation to social media have been conducted in Ghana. These, however have centered on social media use in basic schools (Amofah-Serwah and Dadzie, 2015) and social media usage in tertiary education level (Apeanti and Danso, 2014). Since these studies have been conducted in basic schools and tertiary levels the researcher finds it necessary to conduct this study on the role social network participation plays in the performance of students in Senior High Schools. The researcher believes this will add a new dimension and also fill the research gap between basic and tertiary institutions in terms of the effect of social media on students' academic performance.

### **Objectives of the Study**

The study sought to address the following specific objectives:

1. To identify social network sites and their usage among students
2. To find out how SHS students networked and participated on Social Media
3. To ascertain the amount of time invested by students on social media networks
4. To ascertain the effect of social media on students grammar and spelling in academic work
5. To find out the effects of social network participation on the students' academic performance
6. To make appropriate recommendations based on the findings of the study



## **Theoretical Framework**

A theoretical framework according to Ennis (1999), “is a structure that identifies and describes the major elements, variables, or constructs that organize your scholarship. It is used to hypothesize, understand, or give meaning to the relationships among the elements that influence, affect, or predict the events or outcomes you specify. The theoretical framework grows out of the research focus, guides the design of individual studies, and structures your research presentations and publications”. This study adopted Bandura’s Social Learning Theory (SLT) and Katz’s Use and Gratification theory. The two theories answered two aspects of the study, that is, academic performance (learning outcomes) and competition (social media and academic work).

According to the SLT, three elements, including individual learners, peers, and situations, potentially affect individuals’ learning outcomes (Bandura, 1997). Ainin et al (2015), states that the Social Learning theory “basically explains how the environmental and cognitive components collaborate to affect an individual learning and behaviour pattern”. “Social learning theory views learning as a social process that individuals will self-initiate, regulate learning and actively construct knowledge by acquiring, generating, and structuring information” (Yu et al., 2010).

In relation to the SLT as stated by Bandura (1997), the use of the social networks (by the individual or student) with friends (peers) on various social network platforms (situations) affect his or her academic performance (learning outcomes). This is supported by Ainin et al (2015), who “emphasized that individuals' cognition and behaviour are influenced through observation and interacting with peers and the situations (e.g., learning the environmental norms, cultures,

policies). It is the individuals' interaction with the environment that causes their behavioural consequences". "Therefore, individual interaction with peers, social support from peers and their understanding of situations are important factors which affect individual learning outcome" (DeAndrea, Ellison, LaRose, Steinfield, & Fiore, 2012). Therefore, when students interact with peers on social media platforms through observations, interactions and other activities, these may result in a behavioural outcome which might affect the academic performance positively or negatively.

Also, the gratification theory which answered the second part of the study, holds that people are responsible for choosing a particular media to meet their needs. That media in turn compete with other information sources for viewers' gratification (Katz et al., 1974). Therefore, the academic performance of students is as a result of the competition between social media network participation and academic work. This implies that the amount of time invested participating on social media could affect the time allocated for studies by students and this could affect their learning outcome as a result.

## **Literature Review**

### **Social Network Sites**

According to Boyd & Ellison (2007), "Social networking sites are web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system". Helou and Rahim (2010), also defined online

social networks (OSNs) “as virtual communities which allow people to connect and interact with each other on a particular subject or to just “hang out” together online. Social media sites around the globe provide users with a number of options to interact with each other through entertainment, chats, gossips, and games”. Through these social network platforms students are able to meet to interact with each other on various topics and interests.

Davis et al (2012), refer to social media technology (SMT) as “web-based and mobile applications that allow individuals and organizations to create, engage, and share new user-generated or existing content in digital environments through multi-way communication”. Popular social network platforms on mobile and web applications include Facebook, Twitter, YouTube, Whatsapp, Instagram, snap chat, Google Plus etc. These platforms have specific roles, functions and modes of communication although their functions are mostly related. This relates to the definition by Kaplan and Haenlein (2010), who defined Social media as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content”. Ayiah and Kumah (2011), summed up the definition of social network as a web platform where people from different settings can connect and interact with each other.

### **Educational Use of Social Networks**

Social networks have become an integral part of student social life (Tavares, 2013). These networks have become important as they serve as platforms for users to interact and relate with their peers. Social networks are now been seen as learning platforms or communities that could be utilized to enhance student engagement and performance.

A number of researchers have found several positive outcomes in online community engagement among students and their peers. A study by Tiene (2000), showed that “written communication on cyberspace enables students to take part in discussions at a time convenient to them and articulate their ideas in more carefully thought-out and structured ways. In support of Tiene’s (2000) findings, Deng and Tavares (2013) also concluded that “Web-based discussions can contribute to the development of students’ reflective ability and critical thinking skills. Also, compared to face-to-face (F2F) interaction, students are more willing to voice their views or even disagreement and are more attuned to others’ opinions in online discussions”. According to Apeanti and Danso (2014), students believed that it would be fun for their lecturers to use social media. Also, their grades would be better if they could contact lecturers through social media and lecturers should hold lecture hours on social media. This was revealed in their study among students of the University of Education, Winneba.

A number of researchers have outlined a number of student benefits in relation to education as a result of social network participation. Yunus et al. (2012), indicates that students gained more vocabulary and improved their writing skills as a result of their participation on social networks such as Facebook and Twitter. Asad, Mamun and Clement (2012) stated the exchange of assignments, resources and discussions on academic work and other issues on social networks among students.

According to Salvation and Adzharuddin (2014), students are able to formulate group discussions to exchange ideas and communicate to their teachers as well as appeal to their friends about assignments on SNSs. They indicated that teachers share course related materials with their students and create student groups to collaborate on projects and communicate with their fellow lecturers from other universities through SNSs, thus facilitating teaching and

learning process and the enhancement of academic performance. English and Duncan-Howell (2008), also used Facebook as a tool to enhance peer support among business education students during their training programme and detected that students' exchanges were mostly of the affective type facilitating group cohesiveness through encouragement and support.

### **Social Networks and Academic performance**

There have been mixed reactions from academics and researchers with regard to the impact of social networks and how they affect academic performance. Studies have found that the participation of students and young people on social networks may have both positive and negative impact on their studies and for that matter their academic performance. Tuckman (1975) defined performance as “the apparent demonstration of understanding, concepts, skills, ideas and knowledge of a person and proposed that grades clearly depict the performance of a student”. Hence, their academic performance must be managed efficiently keeping in view all the factors that can positively or negatively affect their educational performance. According to Mehmood and Tawir (2013), the use of technologies such as social media networks and the Internet is one of the most important factors that can influence educational performance of students positively or adversely”.

A study conducted by Roberts and Foehr (2008), in the United States about student extracurricular activity, rather suggested that new media, such as Facebook, Twitter etc. replace or enhance other leisure activities, but do not take away time from the youth. In other words, they were of the view that the time spent by students on social network sites is the same time that normally use for extracurricular activities and therefore do not take away their productive time for studies. Negussie and Ketema (2014), study in Ethiopia also indicated that there is no significant relationship between times spent on social networks such as Facebook with students’

grade point average (GPA). This was also consistent with a study by Ahmed and Qazi (2011) who conducted a study in Pakistan among six universities. They discovered that there no much difference between times spent on social media networks and students' academic performance.

Conversely, a number of researchers and studies have also found a negative impact that social network participation has on students' academic performance. In the study of Kirschner and Karpinski (2010), they found a “significant negative relationship between Facebook use and academic performance. Facebook users reported lower mean GPAs and also reported spending fewer hours per week studying on average than Facebook nonusers. A majority of students claimed to use Facebook accounts at least once day”. Malaney (2005), found that 8.9% of students in 2000, and 4.4% in 2003, reported that their grades had suffered as a result of too much time spent on the Internet as well as on social media networks.

### **Research Methodology**

The study used the cross-sectional survey method to find out how social network participation affects academic performance of students in SHS. A survey design provides a quantitative description of some fraction of the population that is sampled through the data collection process (Frankel and Wallen, 1995). The study also employed the questionnaire as the data collection instrument for the study.

Four Senior High Schools were selected for the study. These were St. Johns Grammar SHS, Tema SHS, Action SHS and Ideal College. St. Johns Grammar SHS and Tema SHS are public schools, whilst Action SHS and Ideal College fall into the private SHS category. Also, these schools are mixed schools with both day and boarding facilities. These will provide a level ground for comparism in terms of how males and females participate on social networks and

how it impacts their academic performance. Also, the researcher will be able to analyse “day” and “boarding” students’ social network participation patterns and how it affects their academic performance. Action SHS and Ideal College will also provide the study with more understanding of the subject as they both admit students who were not able to pass the SHS certificate examination (WASSCE).

The total population for the study was Five Thousand Two Hundred and Forty Nine (5249). The total sample size for the study was 526 (10%) as depicted in the Table 1.2 above. Out of the total sample, 257 were in SHS 2 and 269 were in SHS 3. In relation to the schools, St. Johns Grammar had a sample size of 79 and 83 for SHS 2 and SHS 3 respectively. Also, Tema SHS had 71 for SHS 2 and 74 for SHS 3. Action SHS had 54 for SHS 2 and 57 for SHS 3. Ideal College had a sample size of 53 for SHS 2 and 55 for SHS 3.

The stratified sampling method was adopted for the study. The stratified sampling approach is a sampling type under the probability sampling method where the population is divided into strata. The stratified sampling method is used to divide the population into non-overlapping sub-groups called strata (Tagoe, 2009). Sample from each Senior High School, was divided into two strata, namely, form 2 and form 3. Only the form 2 students and form 3 students were selected because they had written senior high school exams as compared to the form 1s who are yet to write their terminal examination at the time of the study. Each stratum had the sample size as follows; form 2 students - 257, form 3 students – 269 totaling 526.

The Statistical Package for Social Sciences (SPSS) was used to analyze the data collected. The descriptive analysis tools in the SPSS were employed to develop tables and frequencies which was constructively analyzed. The researcher adopted Kendall's coefficient of concordance and factor analysis as analytical tools for the study. Data collected from the interview was also analyzed and organized under the objectives of the study. These were merged with related responses from the questionnaire during the analysis.

## Data Analysis and Presentation of Findings

### Gender of Respondents

**Table 1: Gender of Respondents**

Name of School	Gender of respondents	
	Male	Female
St. Johns	77 (31.6%)	85 (30.1%)
Tema SHS	64 (26.2%)	81 (28.7%)
Action SHS	52 (21.3%)	59 (20.9%)
Ideal College	51 (20.9%)	57 (20.2%)
<b>Total</b>	<b>244 (100%)</b>	<b>282 (100%)</b>

Source: Survey data 2015

From Table 1 above, majority of respondents (282) were females out of which 85 (30.1%) were from St. Johns, 81 (28.7%) from Tema SHS, 59 (20.9%) from Action SHS and 57 (20.2%) from Ideal College. However, 244 were male respondents and these included 77 (31.6%) from St. Johns, 64 (26.2%) from Tema SHS, 52 (21.3%) from Action SHS and 51 (20.9%) from Ideal College. Thus, the female respondents formed the majority of respondents in all the schools.

### Preferred Social Network Sites



All respondents (100%) indicated that they participate on social networks in one way or the other. Respondents were therefore asked to rank the social media networks in the order of usage and importance to them. The results is presented in Table 2 below

**Table 2: Ranking of social media usage among students of secondary schools**

Social Media Networks	Mean Rank	Rank
Whatsapp	1.40	1
Facebook	1.96	2
Twitter	3.21	3
YouTube	4.11	4
Google+	4.96	5
Instagram	5.74	6
Snapchat	6.99	7
Myspace	7.62	8

Source: Survey data 2015

From Table 2, Whatsapp had the highest ranking with a mean rank of 1.40, followed by Facebook with mean rank of 1.96. Twitter was ranked 3<sup>rd</sup> with a mean rank of 3.21 and the least ranked was Myspace with mean rank of 7.62. It can be inferred from the data in Table 4.5 that the social network sites with the highest number of usage were Whatsapp and Facebook.

**Table 3: Test statistics of Kendall's coefficient of concordance**

Number of observation	526
Kendall's W	0.848
Chi-Square	3122.232
Degrees of freedom	7
Asymptotic Significance	0.000

Source: Survey data 2015

In relation to the above, the test statistics shown in Table 3 reveals that the Kendall's coefficient of concordance is 0.848. This suggests that there was 85% agreement in the rankings of the usage of social media networks. The asymptotic significance value of 0.00 indicates that the level of agreement between the rankings of the various social media platforms by the respondents is valid at 99% level of accuracy.

### Rate of Whatsapp Usage by Respondents

This section analyzed responses with a cross tabulation between school and rate of Whatsapp usage. These included a total of 503 respondents who indicated that they used Whatsapp social network.

**Table 4: Rate of Whatsapp Usage by Respondents**

Name of School	Usage of Whatsapp				Total
	Not applicable	Not often	Often	Very often	
St. Johns SHS	9 (56.3%)	23 (44.2%)	18 (23.4%)	95 (26.5%)	145 (28.8%)
Tema SHS	4 (25.0%)	17 (32.7%)	9 (11.7%)	109 (30.44%)	139 (27.6%)
Action SHS	1 (6.3%)	10 (19.2%)	31 (40.3%)	69 (19.3%)	111 (22.1%)
Ideal College	2 (12.5%)	2 (3.8%)	19 (24.7%)	85 (23.7%)	108 (21.5%)
<b>Total</b>	<b>16 (100%)</b>	<b>52 (100%)</b>	<b>77 (100%)</b>	<b>358 (100%)</b>	<b>503 (100%)</b>

Source: Survey data 2015  $\chi^2 = 42.700a$  df= 9 p-value = 0.00

From Table 4, out of the total responses of 503, majority 358 (71.2%) stated that they used Whatsapp very often and these included 95 (26.5%) from St. Johns SHS, 109 (30.44%) from Tema SHS, 69 (19.3%) from Action SHS and 85 (23.7%) from Ideal College. Furthermore, 77

(15.3%) respondents made up of 18 (23.4%) from St. Johns SHS, 9 (11.7%) from Tema SHS, 69 (19.3%) from Action SHS and 85 (23.7%) from Ideal College indicated that they often used Whatsapp. In addition, 52 (10.3%) which included 23 (44.2%) from St. Johns SHS, 17 (32.7%) from Tema SHS, 10 (19.2%) from Action SHS and 2 (3.8%) from Ideal College did not use Whatsapp often. Lastly, 16 (3.2%) indicated they did not use Whatsapp during the period of the study. The level of significance was 0.00 ( $p < 0.01$ ) which indicated a significant relationship between school and rate of Whatsapp usage. Thus, a high proportion of respondents used Whatsapp regularly although respondents in the private schools used it more than their counterparts in the public schools.

### **Rate of Facebook Usage by Respondents**

This section analyzed responses with a cross tabulation between school and rate of Facebook usage. These also included a total 515 respondents who also indicated that they used Facebook social network. Out of the total responses of 515, majority of respondents 324 (62.9%) stated that they used Facebook very often and these included 67 (20.7%) from St. Johns SHS, 101 (31.2%) from Tema SHS, 68 (21.0%) from Action SHS and 88 (27.2%) from Ideal College. Also, 106 (20.6%) respondents made up of 40 (37.7%) from St. Johns SHS, 14 (13.2%) from Tema SHS, 34 (32.1%) from Action SHS and 18 (17.0%) from Ideal College. Moreover, 71 (13.5%) which included 38 (53.5%) from St. Johns SHS, 24 (33.8%) from Tema SHS, 7 (10.0%) from Action SHS and 2 (2.8%) from Ideal College did not use Facebook often. Finally, 14 (2.7%) did not find it applicable as they were not using it at the time of the study. The level of significance was 0.00 ( $p < 0.01$ ) which indicated a significant relationship between school and of Facebook usage.

Thus, a high proportion of respondents from the private schools used Facebook more often as compared to the public school respondents.

### Reasons for Usage of Social Network Sites

This section also sought to find out the reasons why respondents used the social networks very often. Respondents were allowed to choose multiple responses for reasons for using social media platforms. From Table 5 below, 348 (45.7%) and 364 (45.3%) respondents indicated that they used Facebook and WhatsApp respectively because most of their friends also used them. Also, 354 (46.6%) respondents indicated that they found Facebook to be cheap and 354 (44.1%) respondents also found Whatsapp to be cheaper. Other reasons also include, easy interaction Facebook – 16 (2.1%), WhatsApp – 23 (2.9%), ability to chat with multiple friends at the same time Facebook – 42 (5.5%), and WhatsApp – 64 (8.0%).

**Table 5: Reasons for Frequent Use of Social Media Networks**

Reasons for Usage	Facebook	WhatsApp	Twitter	Instagram	YouTube
Most of my friends use it	348 (45.7%)	364 (45.3%)	1 (7.7%)	2 (25.0%)	12 (54.5%)
Cheaper	354 (46.6%)	354 (44.1%)	1 (7.7%)	2 (25.0%)	4 (18.2%)
Easy interaction	16 (2.1%)	23 (2.9%)	7 (53.8%)	3 37.5%)	3 (13.6%)
Chat with multiple friends at a time	42 (5.5%)	64 (8.0%)	4 (30.8%)	1 (12.5%)	3 (13.6%)

Source: Survey data 2015

## Friends Online

This section was devoted to the number of friends respondents had on social media networks. A further cross tabulation analysis was done to differentiate between schools and number of friends they had. These included a total of 526 valid responses from respondents.

**Table 6: Social Media Network Friends of Respondents**

Name of School	Number of Friends on Social Networks					Total
	1-200	201-400	401-600	601-800	801 and above	
St. Johns SHS	13 (38.2%)	30 (39.0%)	8 (44.4%)	77 (26.2%)	34 (33.0%)	162 (30.8%)
Tema SHS	5 (14.7%)	22 (28.6%)	-	87 (29.6%)	31 (30.1%)	145 (27.6%)
Action SHS	8 (23.5%)	15 (19.5%)	6 (33.3%)	66 (22.4%)	16 (15.5%)	111 (21.1%)
Ideal College	8 (23.5%)	10 (13.0%)	4 (22.2%)	64 (21.8%)	22 (21.4%)	108 (20.5%)
<b>Total</b>	<b>34</b> <b>(100%)</b>	<b>77</b> <b>(100%)</b>	<b>18</b> <b>(100%)</b>	<b>294</b> <b>(100%)</b>	<b>103</b> <b>(100%)</b>	<b>526</b> <b>(100%)</b>

Source: Survey data 2015  $\chi^2 = 25.5922^a$  df= 12 p-value = 0.012

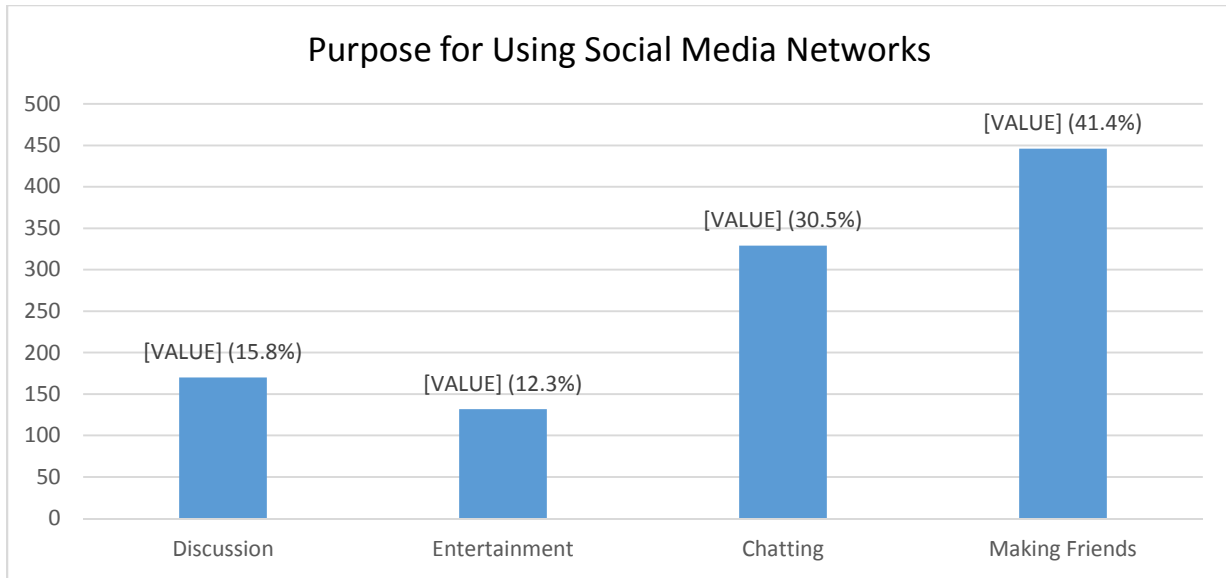
From Table 6 above, majority of the respondents 294 (55.9%) had between 601 - 800 friends online. These included 77 (26.2%) from St. Johns SHS, 87 (29.6%) from Tema SHS, 66 (22.4%) from Action SHS and 64 (21.8%) from Ideal College. Furthermore, 103 (19.6%) had 801 and above friends online. These also included, 34 (33.0%) from St. Johns SHS, 31 (30.1%) from Tema SHS, 22 (21.4%) from Ideal College and 16 (15.5%) from Action SHS. In addition, 77 (14.6%) respondents had a friendship network of 201 to 400. These also included 30 (39.0%) from St. Johns SHS, 22 (28.6%) from Tema SHS, 15 (19.5%) from Action SHS and 10 (13.0%) from Ideal College. The level of significance was 0.01 ( $p \leq 0.01$ ) and indicated a significant relationship between school of respondents and number of friends online. Nevertheless, the high

number of friends online indicates how immensely involved the students are on social networks and the amount of time invested.

### **Purpose for Using Social Networks**

This section dealt with the purpose for which respondents used social media networks. The researcher allowed multiple responses to the question because respondents could find themselves in one or two of the situations. Out of the total valid responses, 132 (12.3%) respondents indicated that they used social networks for entertainment while 170 (15.8%) respondents indicated that they used social media networks for discussions with friends on school matters. In addition, 329 (30.5%) respondents claimed that they used social media networks for chatting while 446 (41.4%) indicated that they used social media networks for making friends. Friendship making was therefore identified as the main purpose for which students used social media networks. This is depicted in Figure 1 below.

### **Figure 1: Purpose for using social networks**



Source: Survey data 2015

### School and Number of Hours Spent Online Daily

This section also sought to find out from the analysis the number of hours respondents spent online as well as the correlation between school attended and number of hours spent online daily.

**Table 7: Number of Hours Spent Online Daily by Respondents**

Name of School	Hours Spent Daily Online				
	1-2 hours	3-5 hours	6-7 hours	8-12 hours	Always online
St. Johns	78 (57.8%)	24 (21.8%)	8 (10.5%)	16 (19.3%)	34 (28.3%)
Tema SHS	37 (27.4%)	26 (23.6%)	20 (26.3%)	27 (32.5%)	35 (29.2%)
Action SHS	8 (5.9%)	31 (28.2%)	27 (35.5%)	19 (22.9%)	26 (21.7%)
Ideal College	12 (8.9%)	29 (26.4%)	21 (27.6%)	21 (25.3%)	25 (20.8%)
<b>Total</b>	<b>135</b>	<b>110</b>	<b>76</b>	<b>83</b>	<b>120</b>

	(100%)	(100%)	(100%)	(100%)	(100%)
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Source: Survey data 2015  $\chi^2 = 89.988^a$  df= 9 p-value = 0.00

From Table 7 above, a high number of respondents 203 (38.7%) spent over 8 hours on social media networks daily. These included 135 (25.8%) respondents spent 1-2 hours daily on social media networks and they included, 78 (57.8%) from St. Johns, 37 (27.4%) from Tema SHS, 8 (5.9%) from Action SHS and 12 (8.9%) from Ideal College. Also, 120 (38.7%) respondents who were always online, and included 34 (28.3%) from St. Johns, 35 (29.2%) from Tema SHS, 26 (21.7%) from Action SHS, and 25 (20.8%) from Ideal College Furthermore, out of the 110 (21.0%) students who spent 3-5 hours daily on social media networks, 24 (21.8%) from St. Johns, 26 (23.6%) from Tema SHS, 31 (28.2%) from Action SHS and 29 (26.4%) from Ideal College. Finally, 83 (15.8%) and 76 (14.5%) of respondents spent between 8-12 hours and 6-7 hours respectively. Further analysis revealed a significant relationship in the number of hours respondents spent on social media networks the school attended. The level of significance was 0.00 ( $p < 0.01$ ), which indicated a significant relationship between the number of hours spent on social media networks by students and school attended. That is, the proportion of respondents from the private schools who were always online was higher than their counterparts in the public schools.

### **Social Media and School Hours**

The study went further to find out from respondents if they participated on social networks during school hours. From Table 8 below, respondents were asked if they participated on social media networks during school hours. Out of the total of 520, 199 (38%) answered in the affirmative while 277 (53%) answered in the negative. Also, 44 (9%) stated that they participated on social networks ‘sometimes’ during school hours. It can be inferred from the data that the



number of students who participated on social media networks during school hours was almost at par with the number of students who did not participate on social media during school hours considering the 9% of respondents who participated ‘sometimes’ during school hours.

**Table 8: Social Network Participation during School Hours**

<b>Responses</b>	<b>Frequencies</b>	<b>Percentages (%)</b>
Yes	199	38
No	277	53
Sometimes	44	9
<b>Total</b>	<b>520</b>	<b>100</b>

Source: Survey data 2015

In relation to the above, the researcher sought to find out from respondents (243) who participated on social media networks during school hours the time they used. In response, 132 (54.3%) respondents indicated that they participated on these networks during break time at school while 41 (16.9%) respondents stated that they used social media during classes’ hours. Also, 70 (28.8%) respondents indicated that they participated on social media networks during free times in between classes hours. The data shows that majority of the respondents participated on social media networks during break time in school.

### **Social Media and Study Time**

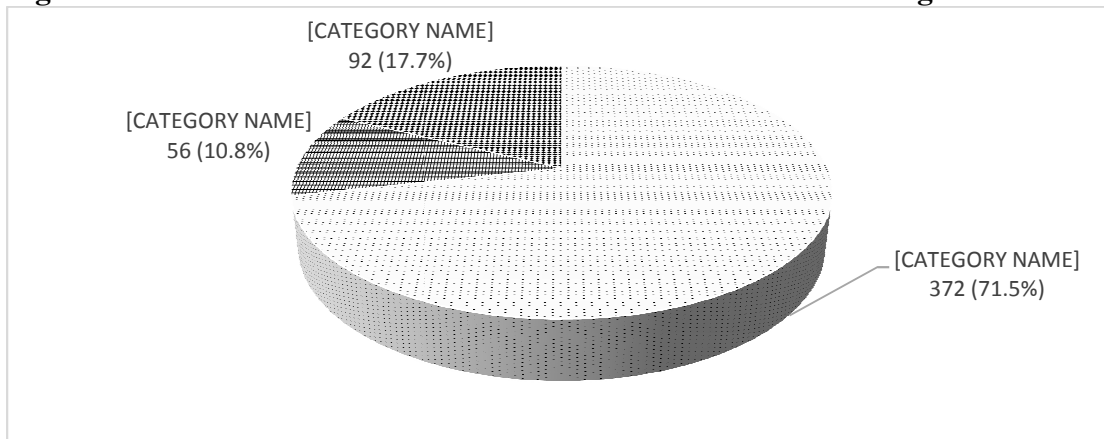
The researcher also sought to find out from the respondents if the use of social media networks affected the time they used to study. Out of the total valid responses of 526, majority of respondents 370 (70.3%) indicated that social network participation affected the time they used to study. These included 100 (27.5%) from St. Johns SHS, 94 (25.4%) from Action SHS, 92 (45.9%) from Ideal College and 84 (22.7%) from Tema SHS. In addition, 156 (29.7%) made up

of 60 (38.5%) from St. Johns SHS, 55 (35.3%) from Tema SHS, 22 (14.1%) from Action SHS and 19 (12.2%) from Ideal College indicated in the negative that social media network participation had not affected their time they used to study. It can be inferred that majority of respondents 370 (70.3%) study time was negatively affected. The level of significance of 0.00 ( $p < 0.01$ ) indicated a significant relationship between school and whether social network participation affected time of study. Thus, the study time of respondents from the private schools time for study was negatively affected more than their counterparts in the public schools.

### Social Media and Submission of Assignments

The study also sought to find out from respondents if the use of social media affected the submission of assignments in school. A question was posed if the use of social media affected the submission of assignments in school. The responses are depicted in Figure 4.3 below.

**Figure 2: Effects of Social Media Use on Submission of School Assignments**



Source: Survey data 2015

From Figure 2 above, 372 (71.5%) respondents indicated that the use of social media affected the time for submission of school assignments while 56 (10.8%) respondents answered in the

negative. Furthermore, 92 (17.7%) respondents stated that the use of social networks sometimes affected their submission of assignments in school. Thus, the usage of social media networks affect the time school assignments are submitted by students.

Furthermore, the researcher sought to find out reasons why the submission of assignments were affected by participation of students on social media networks. Out of the total responses of 464 (89.2%), 274 (59%) respondents indicated that the use of social networks caused them to procrastinate in doing their assignments while 129 (28%) added that social networks distracted them from doing their assignments and lastly, 61 (13%) respondents also indicated that they spent little time in doing their assignments because of the participation on social networks. We can therefore infer from the data that social media usage propels students to procrastinate on school assignments and other academic activities.

### **Social Network Participation and English Language Usage**

The study sought to find out from respondents if their participation on social media networks affected usage of English language negatively. From Table 9 below, it can be observed that majority of respondents had indicated that social media network participation affected their English language usage. These included 51 (23.9%) from St. Johns SHS, 53 (24.9%) from Tema SHS, 56 (26.3%) from Action SHS and 53 (24.9%) from Ideal College. Also, 81 respondents which included 33 (40.7%) from St. Johns SHS, 26 (32.1%) from Tema SHS, 12 (14.8%) from Action SHS and 10 (12.3%) from Ideal College strongly disagreed with that assertion. Furthermore, 97 respondents neither agreed nor disagreed with the assertion that social media use affected their English language usage. These included 30 (30.9%) from St. Johns SHS, 29 (29.9%) from Tema SHS, 22 (2.7%) from Action SHS and 16 (16.5%) from Ideal College. The

level of significance was 0.064 ( $p > 0.01$ ) which indicated that there was no significant relationship between school attended and effect of social media participation on English language usage. Thus, social media participation affects one's English language usage notwithstanding the school attended.

**Table 9: Negative Effect of Social Media on Respondents English Language Use**

Name of School	Social Media affects my English Language usage negatively					Total
	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	
St. Johns SHS	29 (33.0%)	51 (23.9%)	30 (30.9%)	18 (40.0%)	33 (40.7%)	161 (30.7%)
Tema SHS	22 (25.0%)	53 (24.9%)	29 (29.9%)	14 (31.1%)	26 (32.1%)	144 (27.5%)
Action SHS	16 (18.2%)	56 (26.3%)	22 (22.7%)	5 (11.1%)	12 (14.8%)	111 (21.2%)
Ideal College	21 (23.9%)	53 (24.9%)	16 (16.5%)	8 (17.8%)	10 (12.3%)	108 (20.6%)
<b>Total</b>	88 (100%)	213 (100%)	97 (100%)	45 (100%)	81 (100%)	524 (100%)

Source: Survey data 2015  $\chi^2 = 24.050a$  df= 15 p-value = 0.064

In relation to the above, the researcher went further to find out how their communication in English language have been affected as a result of their participation on social media networks. A summary of reasons from respondents included; the fact that on social network platforms attention is not paid to grammar and spelling, the use of wrongly constructed sentences and Pidgin English, pronunciation of words as they sound, use of shorthand words etc. which affected their English language usage.

### **Effects of Social Media on Grammar and Spelling**

This section sought to find out if the use of social media affects the grammar and spelling of respondents in the English language usage. Out of the total respondents of 520, 323 (62%) respondents indicated that the use of social media had affected their grammar and spelling in the English language while 197 (38%) respondents answered in the negative, that the use of social media had not affected their grammar and spelling in the English language.

In relation to the above, the respondents were asked how the usage of social media affected their grammar and spelling in the English language. Respondents were allowed to choose more than one answer to this question. Most respondents 343 (48.9%) indicated that they have become addicted to shorthand writing while 287 (40.9%) respondents cannot write their notes without the use of shorthand. Also, 71 (10.1%) respondents claimed that they spelt the words just the way they sounded when communicating on any of the social media networks.

### **Social Network Participation and Academic Performance**

One of the objective of the study was to find out if social network participation affected the academic performance of students. A number of questions were posed in relation to the usage of social media networks and their effect on academic performance using a five point Likert scale with closed ended responses. The Likert scale helped in analyzing the data using Factor Analysis. The factor analysis is an exploratory approach to reduce large variables into components or factors which groups the groups based on common patterns of responses (Thompson, 2004).

### **Kaiser-Meyer-Oklin and Bartlett's Test**

In order to analyse the data in relation to social media network and academic performance, the researcher measured the responses using Kaiser-Meyer-Oklin test to make sure the sample was adequate to proceed. The Kaiser-Meyer-Oklin (KMO) measure of sampling adequacy and Bartlett's test of Sphericity is presented in Table 10 below.

**Table 10: Analysis of responses with KMO and Bartlett's Test**

<b>KMO and Bartlett's Test</b>		
<b>Kaiser-Meyer-Oklin Measure of Sampling Adequacy.</b>		0.625
Bartlett's Test of Sphericity	Approx. Chi-Square	1774.162
	df	78
	Sig.	0.000

Determinant = 0.032

The KMO statistic varies between 0 and 1. A value of 0 indicated that the sum of partial correlations is largely relative to the sum of correlations, indicating diffusion in the pattern of correlations (hence, Factor Analysis is likely to be inappropriate). A value close to 1 indicated that patterns of correlations are relatively compact and so Factor Analysis should yield distinct and reliable factors. Kaiser (1974), recommends that values greater than 0.5 are acceptable and appropriate. Values below 0.5 should lead to either collecting more data or rethink which variables to include. Since the data reported 0.625, the researcher was confident that Factor Analysis was appropriate for this data. Bartlett's test of Sphericity was employed to test the null hypothesis that the original correlation matrix is an identity matrix. At 1% level of significance, the results show that the data is highly significant ( $p < 0.001$ ), and therefore Factor Analysis is appropriate.

## **Academic Performance**

This section presents results on how participation on social media networks affects the academic performance of students. Variables with loadings greater than 0.4 are considered to be highly loaded and important to interpret that particular factor. Details of variable groupings under each factor is summarised in Table 11 below. Each factor is assigned a common name based on the variables that fall in that category. These include performance, addiction, educational use, grammar, spelling and reading, and examination questions.

**Table 11: Effect of Social Network Participation on Academic Performance**

<b>Rotated Component Matrix<sup>a</sup></b>					
	<b>Component</b>				
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Comparing my grades before and after participating on social media networks and I experienced drop in my academic performance as a result	0.814				
During vacation I spend a lot of time participating on social media than reading my books	0.719				
These networking sites influence my academic performance negatively, because they distract me from my studies	0.674				
Finding it hard concentrating on my study knowing that I can play online games and visit these sites just by logging into them	0.633	0.415			

Social Media use has affected my spelling when writing examination	0.524			0.441	
Addiction to social media is a problematic issue that affects my academic life		0.823			
Addicted to social media networks		0.736			
My grades will improve if I stop participating on social networks		0.518			
I do examination discussions with my friends on social media			0.758		
Social network sites are personal/ social and cannot be used for educational purposes			0.695		
Social Media has improved my reading skills			0.575	0.540	
Social Media affects my English Language usage negatively				0.814	
I receive examination questions and papers through social media					0.748

Source: Survey data 2015

## Performance

The first factor (factor 1) was labelled as ‘performance’ and measured time spent on studies and grades. A high score for this factor indicated that social media networks affected students’ academic performance adversely. This performance factor looked at the comparison of grades before and after social media network participation, time spent on social networks during vacation and effect of social media networks on academic performance. From Table 11 above, there was a high loading (0.814) when respondents compared their grades before they started participating on social networks and when they started participating on social networks. This meant that majority of the respondents indicated that their grades dropped when they began participating on social networks.

Furthermore, the use of social media during vacation also loaded very high (0.719) which also meant that majority of the respondents spend most of their time during vacation participating on



social media networks rather than reading their books. In addition, there was a high loading (0.674) with respect to respondents who indicated that social networking sites affected their academic performance negatively because they were distracted from their studies. This also meant that most respondents affirmed that social networks distracted them from their studies thereby affecting their academic performance negatively.

In relation to the above, the Likert scale also confirmed that majority of respondents affirmed that their grades had dropped as a result of their participation on social media networks. These included, 62 (11.8%) respondents who strongly agreed that their grades had dropped whilst 255 (48.5%) agreed. In addition, 60 (11.4%) respondents neither agreed nor disagreed with the assertion that their grades had dropped. Nevertheless, 43 (8.2%) and 106 (20.2%) respondents disagreed and strongly disagreed respectively that their grades had dropped. This is depicted in Table 12 below

**Table 12: Grade Comparism before and after Social Media Network Participation**

<b>Responses</b>	<b>Frequency</b>	<b>Percent (%)</b>
Strongly Agree	62	11.8
Agree	255	48.5
Neither Agree or Disagree	60	11.4
Disagree	43	8.2
Strongly Disagree	106	20.2
<b>Total</b>	<b>526</b>	<b>100.0</b>

Source: Survey data, 2015

## **Addiction**

The second factor was labelled as 'addiction' which measured the level of addiction of social media usage. A high score for this factor indicated that there is high level of addiction to social media networks. From Table 11, there was a significant loading (0.415) for respondents who indicated that they found it hard concentrating on their studies when they knew they could play games and chat just by logging in. This meant that majority of the respondents found it hard concentrating on their studies because they chatted when they had the least opportunity to participate on social media networks. Also, there was a high loading for addiction to social media networks (0.736) and addiction being a problematic issue affecting academic life (0.823). It also meant that majority of the respondents felt addicted to social networks which they indicated affected their academic life negatively. Lastly, majority of the respondents indicated that their grades would improve if they stopped participating on social media networks with a loading of 0.518. Thus, the study has revealed that most students were addicted to the use of social media networks.

### **Educational Use of Social Networks**

The third factor was labelled as 'educational' use which measured benefits of social media to education. A high score for this factor indicated that social media is beneficial to education. In relation to examination from Table 11 above, there was a high loading (0.758) of respondents doing examination discussions with friends on social media networks. This implied that majority of the students used social media networks for discussion on examinations. In relation to the above, there was also a high loading (0.695) for respondents who believed that social media networks were personal and social, and therefore could not be used for educational purposes.

This also indicated that most respondents did not agree with the fact that social networks could be used for educational purposes.

Responses from the interviewees indicated that there were some positive outcomes in relation to the usage of social media networks. These included improvement and learning of new words, working on assignments and research works and discussion of questions after class hours to share ideas. Also, a lot of the respondents were able to exchange and share examination questions from each of their schools on these networks.

### **Grammar, Spelling and Reading Skills of Respondents**

The fourth factor was labelled as 'grammar, spelling and reading skills'. This factor only applies to English language. A high score for this factor indicates that social media affects negatively the grammar and spelling of the students whilst it improves the reading skills. From Table 11 above, there was a relatively low factor loading (0.441) for respondents who indicated that their spelling of words had been affected negatively during examinations. Thus, most respondents attested to the fact that their spelling of words have been negatively affected as a result of their participation on social media networks. Secondly, some respondents also stated that their reading skills have improved with a relatively low factor loading of 0.540. Finally, there was also a high loading (0.814) of respondents who indicated that their English language usage had been affected negatively as a result of their participation on social media networks. Data from the above indicates that even though social networks improved the reading skills of the respondents it had affected their spelling and English language usage negatively.

### **Examination Questions**

The fifth and last factor was labelled as examination questions. A high score for this factor indicated that social media is used more often to share examinations questions among students. From Table 11 above, most of the respondents (with factor loading of 0.748) indicated that they shared examination questions on social media networks. Therefore, social networks have become one of the main channels through which respondents shared questions on examinations with their peers in other schools.

### Gender and Grade Comparism

This section presented the relationship between gender and comparism of grades before and after social media network participation.

**Table 12: Gender and Grades Comparism before and after Social Network Participation**

Gender of Respondent	I Experienced Drop in my Grades after Participating on Social Media Network by Gender				
	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
Male	24 (38.7%)	110 (43.1%)	30 (50.0%)	11 (25.6%)	69 (65.1%)
Female	38 (61.3%)	145 (56.9%)	30 (50.0%)	32 (74.4%)	37 (34.9%)
<b>Total</b>	<b>62 (100%)</b>	<b>255 (100%)</b>	<b>60 (100%)</b>	<b>43 (100%)</b>	<b>106 (100%)</b>

Source: Survey data 2015

$\chi^2 = 52.6125.268^a$  df= 4

p-value = 0.00

From Table 12 above, out of the 62 respondents who strongly agreed that their grades have been affected after participation on social networks, 24 (38.7%) were males and 38 (61.3%) were females. Furthermore, out of the 255 respondents who agreed, 110 (43.1%) were males and 145 (56.9%) were females. Again, 60 respondents neither agreed nor disagreed and these included 30 (50.0%) males and 30 (50.0%) females. In addition, 11 (25.6%) male and 32 (74.4%) female students disagreed while 69 (65.1%) male and 37 (34.9%) female respondents strongly disagreed that the use of social networks had caused a drop in their grades. Furthermore, there was a significant relationship ( $p < 0.01$ ) between gender and those who agreed that their grades had fallen after participating on social media networks. That is a significant number of female respondents experienced drop in grades as compared to their male respondents. This is depicted in Table 12 above.

### **Gender and Addiction**

This section presents further analysis on the relationship between gender and addiction to social media networks.

**Table 13: Gender and Addiction to Social Media Networks**

<b>Gender of respondent</b>	<b>Addiction to Social Media Affected my Academic Life Negatively by Gender</b>				
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neither Agree or Disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>

Male	43 (65.2%)	110 (53.6%)	20 (23.3%)	21 (23.6%)	50 (63.3%)
Female	23 (34.8%)	95 (46.3%)	66 (76.7%)	68 (76.4%)	29 (36.7%)
<b>Total</b>	<b>66 (100%)</b>	<b>205 (100%)</b>	<b>86 (100%)</b>	<b>89 (100%)</b>	<b>79 (100%)</b>

Source: Survey data 2015

$\chi^2 = 59.855^a$

df= 4

p-value = 0.00

From Table 13 above, the 66 students who strongly agreed that they were addicted to social media networks, 43 (65.2%) were males and 23 (34.8%) were females. Also, out of 205 students who also agreed on addiction to social media networks, 110 (53.6%) were males and 95 (46.3%) were females. Out of the 86 students who neither agreed nor disagreed, 20 (23.3%) were males and 66 (76.7%) were females. In addition, out of the 89 students who disagreed, 21 (23.6%) were males and 68 (76.4%) were females while 79 respondents who strongly disagreed, 50 (63.3%) were males and 29 (36.7%) were females. There was a significant relationship ( $p < 0.01$ ) between gender and addiction. That is, a high proportion of males were addicted than the females.

## Discussion of Findings

### Social Media Networks and Usage among Respondents

Davis et al (2012), refer to social media technology (SMT) as “web-based and mobile applications that allow individuals and organizations to create, engage, and share new user-generated or existing content, in digital environments through multi-way communication”. Popular social network platforms on mobile and web applications include Facebook, Twitter,

YouTube, Whatsapp, Instagram, snap chat, Google Plus etc. As indicated by the UGT, people choose the kind of media they use for various reasons and gratification. Therefore, the study sought to identify various social media networks available to these students and their usage among them. It was also the intention of the researcher to ascertain the social networks with the highest usage among students and the reasons for their usage.

The findings of the study showed that Whatsapp and Facebook had the highest number of users among the respondents with a mean rank of 1.40 and 1.96 respectively. It was also revealed from the statistical analysis performed with the Kendall's coefficient of concordance that there was 85% level of agreement in the rankings of the use of social networks. Church and Oliveira (2013) as well as Haq and Chand (2012) back this assertion that Whatsapp and Facebook are the most popular and largest social network sites used by students. This is also supported by Amofa-Serwa and Dadzie (2015), who found Facebook as mostly used among pupils in school. Hargittai (2008), studied a sample of 1,060 students and found that overall 88% of the students used social network sites and found Facebook as the most popular service among these students, with almost four in five using it, and over half of the overall sample doing so repeatedly.

It was also revealed from the findings of the study that the major reasons why most students used Whatsapp and Facebook was because most of their friends used it, they were cheaper and they could as well chat with multiple friends at the same time. This was consistent with the assertion made by Marion and Omotayo (2011) that "Facebook is a great way to meet friends and keep up on what they are doing. Once you add a friend to your Facebook friend list you will always know when they are adding things to their blog or updating their profile".

### **Number of Online Friends**

The study also conducted a cross tabulation analysis between school and number of online friends, and gender and number of online friends. The findings of the study revealed that majority of respondents 395 (75.5%) had more than 600 friends on social media networks. Gender wise, there were 204 (38.8%) males who had friends above 600 and 191 (36.3%) females who had friends above 600 on social media networks. This gender disparity in friendship numbers indicates how males are more likely to send friend requests than their female counterparts on social media networks. This is backed by Haq and Chand (2012), who indicated that male students generally have lesser social restrictions on having social interaction so they can meet their friends around while females are restricted socially by their parents. Therefore, male students spend a lot of time more on social media networks such as Facebook, Whatsapp, Instagram etc. Tufekci's (2008), raised another dimension which indicates that females are more likely to use social networks to keep in touch with friends either living nearby or in other schools. This implies that while females are more concerned with making friends and maintaining them, the male counterparts are interested in expanding their friendship net.

### **Time Invested on Social Media Networks by Respondents**

The issue of time on social media networks has been one of the most controversial ones as many researchers have given various views on the subject. One of the main objectives of the study was to find out the amount of time invested by respondents on social network sites as these could influence the amount of time they had for their studies.

Rithika and Selvaraj (2013), posit that students who spend more time on social media may have difficulty balancing their online activities and their academic preparation. This will in turn affect their academic performance. The study found majority of respondents 203 (38.7%) who spent



over 8 hours daily on social networks which was quite disturbing. In addition, a combined total of the 186 (35.5%) respondents also spent between 3 and 7 hours on social networks per day. Lenhart and Madden (2007), have stated that this amount of time spent by these young people on social networks robs them of enough time for productive academic activities. Iorliam and Ode (2014), also confirmed that majority of the students are always active online and this was made possible by the sophisticated handheld devices that are connected to the Internet 24 hours a day.

A study by Rithika and Selvaraj (2013) in Indonesia, came out with a number of findings in relation to social network participation and academic performance. The results of the study indicated that there was a significant impact of social media usage on student's academic performance. The authors stated that there is a correlation between late submission of assignments and time spent on social networking sites. They concluded that there is a significant negative impact of social network participation on students' performance through the use of mobile technologies as these increases the frequency and flexibility of visits to these sites. In addition, the study further revealed that most of the students' 372 (71.5%) time for submitting assignment was affected due to the use of social media. Majority 274 (59%) added that this was as a result of the distraction caused by social media and which in turn made them to procrastinate on their assignments. This was backed by Kubey, Lavin, and Barrows (2001), who found a number of issues such as psychological dependence, and academic impairment as some of the resultant effects with the use of the Internet and social media. They also indicated that students who use the Internet and participate on social networks more often reported that their schoolwork has been hurt. This was also confirmed by Yeboah and Ewur (2014), who indicated that social

networks take away the time of students and tend to lead to procrastination of school academic works.

A study conducted in Ghana by Yeboah and Ewur (2014), revealed how distractive social media networks are when it comes to academics. They indicated that social media networks such as Whatsapp distracts students' academic life and affects their concentration during classes. This study confirmed the findings of the Yeboah and Ewur (2014) that some of the students 199 (38%) participate on social media networks during school hours and majority did that during break time 132 (54.3%) and free times between periods 70 (28.7%) while a few during classes hours 41 (16.9%). Wade and Renata's (2011) study in Utah confirmed the above which also revealed that about two-thirds of the students in the study reported using electronic media while in class, studying, or doing homework. They indicated that multitasking is likely to increased distraction, something prior research has shown to be detrimental to student performance.

### **Social Media, Grammar, Spelling and Reading Skills**

Interestingly, social network participation has also developed a form of communication that is affecting linguistic habits of students. Words are used in their raw state as pronounced and this is transferred to the class room environment. A study conducted in Oman by Mehmood and Taswir (2013), on how social network participation affects linguistics of students found out that many students indicated there was a change in their linguistic habits as a result of their constant communication on the social networks. Some of these students also indicated that they used slang language in communicating on social networks and this adversely affects their writing skills in the class room. This study revealed that majority of the respondents 323 (62%) grammar

and spelling have been affected negatively as a result of their participation on social networks. On how they had been affected, they stated addiction to shorthand writing 343 (48.9%) respondents, writing notes with shorthand 287 (40.9%) and spelling of the words the same way they sound 71 (10.1%) as reasons for negatively being affected. As confirmed by Yeboah and Ewur (2014), social network participation destroys students spelling and grammatical construction of sentences. This is also supported by Horton, Alloway, and Dawson (2012), whose study revealed that the use of Facebook had an effect on the spelling of some of the students. Wood et al (2014), in another study also noted that the use of texting language harms the grammatical understanding of students.

### **Social Media and English Language Usage**

In relation to the above, the study also revealed that majority of the students 301 (57.4%) had been affected negatively in the use of English language during their discourse with their peers. These included the usage of Pidgin language, construction of wrong sentences, shorthand writing and the lack of attention paid to grammar and spelling on social media networks. It was further revealed from the interviews that these social networks have made students lazy in using correct grammar and spelling in the English language. These the heads indicated are evident in examination scripts. This was confirmed by Mehmood and Taswir (2013), who indicated that slang language and Pidgin English are affecting the speaking and writing of English language.

### **Social Media and Reading Skills**

The study also revealed an improvement in the reading skills of the students who participated on social media networks. This was confirmed by a high number of respondents 237 (45.1%). As

stated by Yunus et al. (2012), students gained more vocabulary and improved their writing skills as a result of their participation on social networks and this in turn improved on their reading skills.

### **Academic Performance**

Findings of the study revealed that majority of the respondents saw a drop in their grades when they started participating on social networks. That is, when they compared their grades before and after participating on social media networks, they saw a drop in their performance. This was confirmed with a high loading of 0.814 of factor analysis. Majority of respondents (loading of 0.674) also added that their performance had been negatively affected as a result of their participation on social networks. This was supported by the study of Kirschner and Karpinski (2010), who found a “significant negative relationship between Facebook use and academic performance. Users of social media networks such as Facebook reported lower mean GPAs and also reported spending fewer hours per week studying on average than Facebook nonusers.” Further, a high number of respondents (0.518) also confirmed that their grades could improve if they stopped participating on social media networks. Malaney (2005), found that 8.9% of students in 2000, and 4.4% in 2003, reported that their grades had suffered as a result of too much time spent on the Internet as well as on social media networks.

### **Gender**

A further analysis also revealed 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. This finding was in disagreement with the study conducted by Haq and Chand (2012) about 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. 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. However, participation on social media adversely affected more of the female respondents 183 (34.8%), than the male respondents 134 (25.5%). The findings of Haq and Chand (2012), stem from the fact that the male had more friends as compared to the females. This study however, found the opposite where the female students had more friends than the male students. Therefore, the more friends one tended to have, the higher the level of engagement and participation on social media networks and its resultant effect on academic performance.

### **Social Media Networks and Addiction**

Also, a study by Oye, Mahamat and Rahim (2012), in Malaysia, revealed that most students unconsciously get addicted to the use of social media networks and get obsessed with them. The participants indicated that they always intended to spend few minutes but always ends up spending hours surfing and updating profiles as well as viewing photos. This was also confirmed in this study. It was revealed that there was a high rate of addiction (0.736) to social media networks. The students indicated that they found it hard concentrating on their studies when they knew they could play games and chat with their friends.

### **Educational Use of Social Media Networks**

The study revealed that students used social networks in sharing education materials and discussing examination questions. The interview also revealed that students made use of these

sites for sharing ideas, and exchange of examination questions. Also, “the ability to explore unasked questions inside a less formal atmosphere, getting a strong voice through web technology, and getting a location to go over issues within an open, public format are other provisions of social media” (Al-Rahmi et al., 2014; Kirkup, 2010). In effect, the social network platforms provide students with an environment to share and exchange information such as ideas, examinations questions etc. Tiene (2000), also adds that “written communication on cyberspace enables students to take part in discussions at a time convenient to them and articulate their ideas in more carefully thought-out and structured ways. Salvation and Adzharuddin (2014), conclude that students are able to formulate group discussions to exchange ideas and communicate to their teachers as well as appeal to their friends about assignments on SNSs.

## **Conclusion**

The study has revealed that despite the benefits that come with the participation of students on social media networks, it could impact negatively on their academic performance if not used properly. A lot of benefits abound in the use of social media networks such as sharing information and ideas, improving reading skills etc. Despite the benefits that comes with the participation of students on social media networks, its misuse could affect the academic life of the student and thereby their performance. As stated by Katz et al. (1974) in their gratification theory, that the media chosen by people would compete with other sources of information. Therefore, social media networks compete with academic work for students’ attention. It is therefore the responsibility of the student to make the right decision in relation to the use of social media networks. Also, Bandura’s (1997) social learning theory states that as the learning outcomes of students are influenced by the students decision on his choice of situation (social

media networks and participation) and peers (friendship networks) they could make the right decision in the usage of these media to bring about the positive outcome (academic performance) that is desired.

## **References**

- Aghazamani, A. (2010). How do University Students Spend Their Time on Facebook? An Exploratory Study. *Journal of American Science*, 6, 730-735.
- Ahmed, I. and Qazi T. F. (2011). A Look Out for Academic Impacts of Social Networking Sites: A Student Based Perspective. *African Journal of Business Management*, 5(12), 5022-5031. doi:10.5897/AJBM11.595

- Ahn, J. (2011). The Effect of Social Network Sites on Adolescents' Social and Academic Development: Current Theories and Controversies. , . *Journal of the American Society for Information Science and Technology*, 8(62), 1435–1445. doi:DOI: 10.1002/asi.21540
- Ainin, S., Naqshbandi, N. M., Moghavvemi, S., Jaafar, N. I. (2015). Facebook Usage, Socialization and Academic Performance. *Computers & Education* 83 (2015) 64-73. <http://dx.doi.org/10.1016/j.compedu.2014.12.018>
- Apeanti, W. O. and Danso, E. D. (2014). Students' Use of Social Media in Higher Education in Ghana. *Innovative Journal*, Vol. 3, No. 1, pp. 3-9.
- Asad, S., Abdullah-Al-Mamum M. D. and Clement, C. (2012). The Effect of Social Networking Sites to the Lifestyles of Teachers and Students in Higher Educational Institutions. *International Journal of Basic and Applied Sciences*, 1(4), 498-510.
- Ayiah, M. E., & Kumah, C. H. (2011). Social Networking: a Tool to Use for Effective Service Delivery to Clients by African Libraries. *77<sup>th</sup> IFLA Conference* (pp. 1-14). Puerto Rico: IFLA.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Banquil, K., Chuna, N. A., Leano, G. A., Rivero, M. A., Bruce, C. A., Dianalan, S. N., Matienzo, A. R., & Timog, N. U. (2009). *social networking sites affect one's academic performance adversely*. Retrieved August 12, 2014, from <http://www.ust.edu.ph>.
- Boyd, D. M. and Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 1(13), 11. Retrieved July 1, 2010, from <http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html>
- Davis, C. H. F., Canche, M. S. G., Deil-Amen, R. and Rios-Aguilar, C. (2012). *Social Media in Higher Education: A Literature Review and Research Directions*. Arizona: The Center for the Study of Higher Education at the University of Arizona and Claremont Graduate University.
- DeAndrea, D., Ellison, N. B., LaRose, R., Steinfield, C., & Fiore, A. (2012). Serious social media: on the use of social media for improving students' adjustment to college. *Internet and Higher Education*, 15, 15-23.



- Deng, L. and Tavares, N. J. (2013). From Moodle to Facebook: Exploring Students' Motivation and Experiences in Online Communities. *Computers and Education*, 68, 167-176.
- English, R. M. and Duncan-Howell, J. A. (2008). Facebook Goes to College: Using Social Networking Tools to Support Students Undertaking Teaching Practicum. *Journal of Online Learning and Teaching*, 4(4), 596-601. Retrieved December 13, 2014, from [http://jolt.merlot.org/vol4no4/english\\_1208.pdf](http://jolt.merlot.org/vol4no4/english_1208.pdf)
- Fishman, J., Lunsford, A., McGregor, B. and Otuteye, M. (2005). Performing writing, performing literacy. *College Composition and Communication*. 2(57), 224–252.
- Ghana Web. (2014). *72% Students Fail 2014 WASSCE*. Retrieved October 20, 2014, from
- Ghauri, P. and Grönhaug, K. (2005). *Research methods in Business studies- a practical guide*. 3rd edition. Prentice Hall, Financial Times.
- Hargittai, E. (2008). Whose Space? Differences Among Users and Non-Users of Social Network Sites. *Journal of Computer Mediated Communication*, 276-297
- Horton, J., Alloway, T. P., and Dawson, C. (2012). Social networking sites and cognitive abilities: Do they make you smarter? *Journal of Computers & Education*, Vol. 63, pp 10-16.
- Internet World Statistics*. (2014). Retrieved from Usage and Population Statistic: [internetworldstats.com/stats1.htm](http://internetworldstats.com/stats1.htm).
- Iorliam, A. and Ode, E. (2014). The Impact of Social Network Usage on University Students Academic Performance: A Case Study of Benue State University Makurdi, Nigeria. *International Journal on Computer Science and Engineering*, Vol. 6 No.07, 275-279
- Ito, M., Baumer, S., Bittanti, M., Boyd, D., Cody, R. and Herr-Stephenson, B. (2009). *Hanging Out, Messing Around, and Geeking Out: Kids Living and Learning with New Media*. Cambridge, MA: MIT Press.
- Junco, R. (2012). Too much face and not enough books: The relationship between multiple indices of Facebook use and academic performance. *Computers & Education*(28), 187-198.

- Kaplan, A. M. and Haenlein, M. (2010). Users of the world, unite: The challenges and opportunities of Social Media. *Business Horizons*(53), 59-68. doi:10.1016/j.bushor.2009.09.003
- Katz, E., Blumler, J., & Gurevitch, M. (1974). *The uses of mass communication: Current perspectives on gratifications Research*. Beverly Hills, CA: Sage, pp. 19–34.
- Kirschner, P. A. and Karpinski, A. C. (2010). Facebook and academic performance. *Computers in Human Behaviour*, (26), 1237–1245.
- Malaney, G. D. (2005). Student Use of the Internet. *Journal of Educational Technology Systems*, 33(1), 53-66
- Marion, A. and Omotayo, O. (2011). Development of a Social Networking Site with a Networked Library and Conference Chat. *Journal of Emerging Trends in Computing and Information Sciences*, 2(8), 396-402. Retrieved October 3, 2014, from [http://www.cisjournal.org/journalofcomputing/archive/vol2no8/vol2no8\\_6.pdf](http://www.cisjournal.org/journalofcomputing/archive/vol2no8/vol2no8_6.pdf)
- Mehmood, S. and Taswir, T. (2013). The Effects of Social Networking Sites on the Academic Performance of Students in College of Applied Sciences. *International Journal of Arts and Commerce*, 2(1), 111-125. Retrieved December 13, 2014, from [http://www.ijac.org.uk/images/frontImages/gallery/Vol.2\\_No.\\_1/10.pdf](http://www.ijac.org.uk/images/frontImages/gallery/Vol.2_No._1/10.pdf)
- National Communication Authority (2015). *Mobile Data Subscriptions for March, 2015*. Retrieved April, 2015 from <http://www.nca.org.gh/73/34/News.html?item=500>
- Ndaku, A. J. (2013). *Impact of Social Media on the Students' Academic Performance: A Study of*
- Negussie, N. and Ketema, G. (2014). Relationship between Facebook Practice and Academic Performance of University Students. *Asian Journal of Humanities and Social Sciences*, 2(2), 1-7.
- Oye, N. D., Mahamat, A. H. and Rahim, N. Z. (2012). Model of Perceived Influence of Academic Performance Using Social Networking. *International Journal of Computers and Technology*, 2(2), 24-29.

- Rithika, M. and Selvaraj, S. (2013). Impact of Social Media on Students' Academic Performance. *International Journal of Logistics and Supply Chain Management Perspective*, 2(4), 636-640.
- Rithika, M. and Selvaraj, S. (2013). Impact of Social Media on Students' Academic Performance. *International Journal of Logistics and Supply Chain Management Perspective*, 2(4), 636-640.
- Roberts, D. and Foehr, U. G. (2008). Trends in media use. *The Future of Children*, 18(1), 11–37
- Salvation, M. and Adzharuddin, N. A. (2014). The Influence of Social Network Sites (SNS) upon Academic Performance of Malaysian Students. *International Journal of Humanities and Social Sciences*, 4(10), 131-137. Retrieved December 4, 2014, from [http://www.ijhssnet.com/journals/Vol\\_4\\_No\\_10\\_1\\_August\\_2014/16.pdf](http://www.ijhssnet.com/journals/Vol_4_No_10_1_August_2014/16.pdf)
- Students of University Of Abuja*. Unpublished thesis submitted to Department of Mass Communication Management and Social Sciences Caritas University, Amorji-Nike, Enugu.
- Tagoe, M. (2009). *Handbook for Writing Research Proposal*. Accra: Ghana Universities Press.
- Thompson B. (2004). *Exploratory and Confirmatory Factor Analysis: Understanding Concepts and Applications*. Washington, DC: American Psychological Association, pp 3-7.
- Tiene, C. D. (2000). Online Discussions: A Survey of Advantages and Disadvantages Compared to Face-to-Face Discussions. *Journal of Educational Multimedia and Hypermedia*, 9(4), 371-384.
- Trochim, W. T. (2005). Sampling, <http://www.apdip.net/publications/iespprimers/eprimer-edu.pdf>, retrieved: 10 Oct. 2012
- Tuckman, H. (1975). Teacher Effectiveness and Student Performance. *Journal of Economics and Education*, 34-39. Retrieved December 12, 2014
- Wood, C., Kemp, N., Waldron, S. and Hart, L. (2014). Grammatical understanding, literacy and text messaging in school children and undergraduate students: A concurrent analysis. *Computers and Education*, Vol. 70, pp 281-290.

www.ghanaweb.com

Yeboah, J. and Ewur, G. D. (2014). The Impact of Whatsapp Messenger Usage on Students Performance in Tertiary Institutions in Ghana. *Journal of Education and Practice*, Vol. 5, No. 6, pp157- 165.

Yu, A. Y., Tian, S. W., Vogel, D., and Kwok, R. C. (2010). Can Learning be Virtually Boosted? An Investigation of Online Social Networking Impacts. *Computers and Education*, 55(4), 1494-1503

Yunus, M., Nordin, N., Salehi, H., Embi, M. A. and Salehi, Z. (2013). The Use of Information and Communication Technology in Teaching ESL Writing Skills. *English Language Teaching*, 6(7), 1-8. Retrieved January 12, 2015, from <http://www.ccsenet.org/journal/index.php/elt/article/viewFile/27998/16886>