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Impact of Social Media on Ghanaian High School Students

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Abstract:

Many high school students in Ghana have access to social media using several devices with internet connectivity including Ipads, mobile phones, laptops, tablets and others. Some parents and educationists believe social media has negative impact on students. They argue that social media makes students incapable of making independent and critical analysis of issues and events. Notwithstanding this, other parents, educationists and students applied the positive impact of social media on learning and social cohesion. The findings of this study reveal that social media has positive impact on the academic and social life of Ghanaian senior high school students.

Keywords: Social media, high school students, educationists, parents

1. Introduction

This study looks at the rate of social media use by Ghanaian senior high school students and its impact on them. Though some studies have been done on the impact of social media on educational standards in Ghana, they mostly concentrated on pupils in basic schools (Amofa-Serwaa & Dadzie, 2015) and students in the tertiary levels (Owusu-Acheaw & Larson, 2015; Yeboah & Ewur, 2014; Apeanti & Danso, 2014), with the senior high school left out. One study on the impact of social media on senior high school students by Mingle and Adams (2015), was however limited because it covered only four schools within the Accra Region. Therefore, its findings are very limited and not representative of the country.

This study focused on senior high schools in half of the country - five of the 10 regions of Ghana, namely: Central, Western, Ashanti, Volta, and Northern. Two districts were selected from each region. The districts are Assin South and Agona West (Central), Sekondi-Takoradi and Wassa East (Western), Kumasi and Amansie West (Ashanti), Keta and South Tongu (Volta), and Tamale and Saboba (Northern). Agona West, Sekondi-Takoradi, Tamale, and Kumasi are urban while Keta is predominantly urban, with the other five being rural areas. The findings of this study are therefore very representative of the country.

The Assin South District has a population of 104,244 all living in rural areas, while Kumasi has 1,730,249 urban population. Agona West has 76.1 per cent of its 115,244 population in urban areas, with Sekondi-Takoradi having 96.1 per cent of its 559,548 population in urban areas, and Tamale with 73.8 per cent of its 223,252 population being urban. Keta has 53.3 per cent urban population. For the rural districts, Wassa East has 92.3 per cent rural population, Saboba and Amansie West with 87.2 per cent and 90.6 per cent rural population respectively, while South Tongu has 87.1 per cent rural population (GSS, 2010).

According to the National Communications Authority, Ghana's total mobile data subscriptions operated by the five companies - MTN, Vodafone, Airtel, Tigo and Glo - stood at 22,865,821 as at September 2017, with a penetration rate of 79.94 per cent (NCA, 2018). The Annual Mobile Report 2018, of the e-commerce company, Jumia, states that Ghana is one of Africa's largest mobile markets, with about 34.57 million subscribers recording a penetration rate of 119 per cent. The report also said the country has 10.11 million active internet users representing 35 per cent of the total 29.15 million population (www.ghanaweb.com; www.myjoyonline.com; www.businessworldghana.com).

Another report by global digital agencies, We Are Social and Hootsuite, indicates that Ghana has 5.6 million active social media users, 19.53 million mobile users and 9.28 million active mobile internet users representing 32 per cent of the total population (www.businessworldghana.com). The country's mobile phone subscription, according to the report, is expected to reach about 40 million by 2020 and a projected penetration rate of over 130 per cent (www.myjoyonline.com). Globally, the number of internet users in 2018 is 4.021 billion, up seven per cent from 2017, while the number of social media users is 3.196 billion, up 13 per cent, with the number of mobile phones reaching 5.135 billion, up four per cent over last year's figure (www.businessworldghana.com).

1.1. Social Media

The word media, the plural of the Latin word medium (Oxford Dictionary and Thesaurus, 2009, p.576), as we have come to understand it, refers to one of the dominant routes, means, channels, or instruments for communication, information-sharing, or entertainment. Traditionally, the different means of communication including newspapers, radio,

television, magazines, and lately the internet, have been collectively referred to as the 'media'. It is also defined by the Business Dictionary Online as "communication channels through which news, entertainment, education, data, or promotional messages are disseminated; including broadcasting and narrowcasting channels such as newspapers, magazines, television, radio, billboards, direct mail, telephone, fax, and internet (www.businessdictionary.com). From the Collins Dictionary Online, 'media' is "the means of communication that reach large numbers of people, such as television, newspapers, and radio" (www.collinsdictionary.com), while the Webster Dictionary Online defines it as "a medium of cultivation, conveyance, or expression" (www.webster.com). It is usually used either as a singular or plural noun.

Social, which comes from the Latin word socius, meaning 'friend' or 'ally' on the other hand, refers to things relating to human societies, communities, or groups of persons living together or doing things together (Collins English Dictionary, 2016, p.762; Oxford Dictionary and Thesaurus, 2009, p.882). It is defined by the Merriam-Webster Dictionary Online as "relating to or involving activities in which people spend time talking to each other or doing enjoyable things with each other"; "relating to people or society in general" (www.merriam-webster.com).

From the above, therefore, social media in simple term refers to the media circulated through social interactions. Basically, it is the cybernetic and simulated relations among peoples, organisations, and companies. This involves the creation, exchange or sharing of information through texts, images, and other symbols. It is also "the interaction among people in which they create, share or exchange information and ideas in virtual communities and networks" (Ahlqvist et al., 2008 p. 13). Also, it is internet-based applications built on the Web 2.0 ideology and technology (Kaplan & Haenlein, 2010), and web-based facilities permitting the construction of public or semi-public profiles by individuals or groups (Boyd & Ellison, 2007). Among the many social media platforms mushrooming are Facebook, Twitter, YouTube, Wikipedia, LinkedIn, Reddit, Instagram, and Pinterest.

According to Hauben, Hauben and Truscott (1997) Geocities, is believed to be the forerunner social network site that enabled users to connect by chat rooms, basic online publishing and blogs. This opened the gates for the creation of other sites and social media providers including Americaonline.com, but the first to achieve extensive acknowledgement was SixDegrees.com which empowered people to connect and send messages. Millions of users were attracted by SixDegrees.com yet it was unsuccessful in turning itself into a sustainable business and thus collapsed in 2000 (Boyd & Ellison, 2007).

More social networking platforms emerged later including Friendster and LinkedIn in 2002. Between 2003 and 2006 Flickr and Facebook (restricted only to Harvard) surfaced; with Hi5, Orkut, and MySpace emerging in 2003, and YouTube, Cyworld (China), and Yahoo!360 in 2004. In 2005, Windows Live Spaces, Facebook (for high school and corporate networks), Ning, Asian Avenue, Bebo (relaunched) followed, while Twitter, Facebook (non-restricted), and Cyworld (USA) followed in 2006 (Boyd & Ellison, 2007). In October 2012, Soray Jain named Facebook as occupying the top spot followed by Myspace, Twitter, LinkedIn and Bebo (eBizMBA.com, 2014; Vaughan-Nicholas, 2013; Top Ten Reviews, 2013; Jain, 2012). However, other sources name Twitter, a social networking and microblogging site which permits users to 'tweet' (140-character posts) and connect to external links as second to Facebook (Top Ten Reviews, 2013; Jain, 2012), with YouTube, Instagram, and Pinterest following. These sites seem to be the most attractive to students in addition to Whatsapp, which is not a social networking service, but an instant-messaging platform for smart phones. Users of this platform can send images, video, and audio messages to one another. Viber, Facebook Messenger and Telegram are similar to Whatsapp.

With the multiplication of social media networks, it became necessary for scholars to assess their usage rates and impacts. Social media has become one of the main channels through which people quickly and regularly interact with others who are physically far away (Miah, Omar, & Allison-Golding, 2012). It noted to enhance communication skills, social participation and commitment, improve peer support, and ensure realisation of education based on collaborative strategies (Gülbahar, Kalelioğlu & Madran, 2010). Arguably, social media has become a global phenomenon enabling organisations, businesses, groups and individuals to easily and quickly connect with their clients, partners, relatives and friends.

According to Rideout et al. (2010) and Kaplan and Haenlein (2010), teenage students dominate social media use worldwide, spending a substantial volume of their time on the internet on various platforms. These teenagers spend more time usually multi-tasking by visiting several sites accessing volumes of content. This is confirmed by the Pew Internet and American Life Project which notes that 64 per cent of teens on social media have presence on one or more platforms (Lenhart et al., 2007). About 55 per cent of teenagers have created a profile on social networking sites, 47 per cent uploaded photos, 14 per cent posted videos, with nearly all of them having posted an image or comment on a platform (Lenhart et al., 2007).

1.2. Ghana's Education System

Ghana's education system is in three phases - basic (kindergarten, primary, junior high - three to 14 years); secondary (senior high, technical, and vocational education – 15 to 17 years); and tertiary (colleges, polytechnics, and universities - 18 to 21-plus years). This study dwells on senior high school students, a large percentage of whom, based on the hypothesis and findings of this study, has access to social media.

To prevent abuse and minors from using them, most social media platforms or networks have age restrictions (Abram, 2006; facebook.com, 2007). Despite these restrictions, many of these sites are accessed by minors (facebook.com, 2011; Journalist's Resource.org, 2011), some aided by their parents to create accounts with inflated ages. Many Ghanaian senior high school students therefore started using social media while they were in basic school. This was confirmed

during interviews with respondents for this study. Many of them said they started using social media when they were aged between 10 and 14 years (Author's Interviews, 2017).

2. Literature Review

Social media has become an important wing of the media. Tom Truscott and Jim Ellis from Duke University, by 1979, had created a worldwide discussion system, the Usenet, that allowed internet users to post public messages. However, tracing the evolution of social media, we might go back to about 20 years when Bruce and Susan Abelson founded Open Diary, an early social networking site that brought together online diary writers into one community. An associated term which goes with social media is 'weblog', which was first used at the time Open Diary was founded, but was condensed to 'blog' a year later "when one blogger jokingly transformed the noun 'weblog' into the sentence we blog" (Kaplan & Haenlein 2010, p.60).

The growing availability of high-speed internet access, according to Kaplan and Haenlein (2010) increased the popularity of the concept, leading to the creation of social networking sites such as MySpace (in 2003) and Facebook (in 2004), giving birth to the term Social Media, which has now become very prominent.

Web 1.0 and Web 2.0 are concepts frequently associated with social media. Web 1.0 covers personal web pages, Encyclopaedia Britannica Online, and content publishing. This was replaced in 2004, with Web 2.0, first used to describe a new way by which software developers and end-users began the use of the World Wide Web (www) - "a platform whereby content and applications are no longer created and published by individuals, but instead are continuously modified by all users in a participatory and collaborative fashion" (Kaplan & Haenlein, 2010, pp.60-61).

According to Kaplan and Haenlein, "although Web 2.0 does not refer to any specific technical update of the www, there is a set of basic functionalities that are necessary for its functioning. Among them are Adobe Flash (a method for adding animation, interactivity, and audio/video streams to web pages), RSS (Really Simple Syndication, web feed formats frequently used to publish updated content, such as blog entries or news headlines, in a standardised format), and AJAX (Asynchronous Java Script, a technique to retrieve data from web servers asynchronously, allowing the update of web content without interfering with the display and behaviour of the whole page) (Kaplan & Haenlein 2010, p.62).

Web 2.0 is therefore the platform for the evolution of social media, representing "the ideological and technological foundation - User Generated Content (UGC) ... regarded as the totality of ways through which people use social media" (Kaplan & Haenlein 2010, p.62). Therefore, the term social media which became popular in 2005, is used to describe the various forms of media content that are publicly available and created by end-users. These include Facebook, YouTube, Instagram, LinkedIn, Twitter, TumbIr, Whatsapp, and many others (Kaplan & Haenlein, 2010).

With the prominence of social media, it is now common knowledge that many people around the world, including young people particularly students, use it. Records indicate that about 250 million people log in to Facebook daily, with Twitter having 15 million regular users sending 65 million messages each day. On YouTube, it is noted that there are more than two billion watching video clips daily while 24 hours of video content are uploaded in every hour (WCER, 2011).

According to Mark Connolly, a researcher of the Wisconsin Centre for Education and Research, social media highlights value in educational settings when it is prudently used. He says, "many acknowledge its educational benefits of encouraging students to engage with one another and to express and share their creativity". He however, cautions that students who use social networking tools "might pay significant hidden cognitive costs" because Facebook, Google and other web services concurrently seize and fragment people's attention. He adds that these social media platforms "can subvert higher-order reasoning processes, including the kind of focus, concentration and persistence necessary for critical thinking and intellectual development" (WCER, 2011).

Experts note that lengthy and extensive Internet use exposes students to interactive, repetitive, and addictive inducements that produce permanent changes in brain structure and function. Generally, many believe that the more one uses the Internet and social media, "the better the brain can skim and scan", yet research has shown that prolonged use of these media damage the "capacity for concentration, reasoning and reflection, the very sort of critical thinking and evidence-based reasoning needed to honestly appraise the full costs of using social media" (WCER, 2011).

In Ghana, like other countries, students are among the highest group of users of social media (Author's Interviews, 2017). Despite evidence that social media is beneficial to students because it gives them the platform to link up with one another to share information, ideas, and strategies for solving problems, including school and homework, there are concerns that it negatively impacts their lives, especially their academic work. This study therefore tried to confirm the veracity or otherwise of these concerns.

Social media has become a global phenomenon, becoming very central to the lives of many people. Incidentally, students form a major percentage of the population in almost every country using social media. A 2007 PEW Internet and American Life Project study by Lenhart et al. revealed that 93 per cent of teens used the internet with more of them considering it as a venue for social interaction, where they can "share creations, tell stories, and interact with others". The same report noted that 55 per cent of online teens aged 12-17 years had created a profile on a social networking site such as Facebook or MySpace (Lenhart et al., 2007). Some experts have argued that over 90 per cent of college students visit social network sites (WCER, 2011).

Records indicate that by September 2016, there were over 1.79 billion monthly active Facebook users worldwide, with 1.18 billion people logging onto the site daily, while there were 1.66 billion mobile active users (SBT, 2016). A total of 510 comments are posted, 293,000 statuses updated, and 136,000 photos uploaded every minute (The Social Skinny, n.d.), and 300 million photos uploaded every day on Facebook (Gizmodo, 2012). Additionally, Whatsapp had 500 million, Twitter, 284 million, and Instagram, 200 million monthly active users. More than 1.1 billion people use Facebook on a

mobile device monthly (CNBC, 2017). An amazing revelation is that 50 per cent of 18 to 24-year-olds go to Facebook straight away after waking up (zephoria.com, 2016).

3. Methodology

The methodology for this research involved the use of the multi-stage sampling method, merging both the probability and non-probability methods, which we considered most suitable for this research. This technique of multi-stage sampling is easy to apply as it aids the precise calculation of the estimation, where the proposal is progressively refined by taking account of the feedback of the classifier (Guadi, Prati & Cucchiara, 2010).

With the probability method, we ensured that each element in the target community (both male and female senior high school students, parents with students in high schools, and teachers) had a fair chance of being selected. With this, the result of the study is generalis able, while it also enables the calculation of the margin of error (Charoenruk, 2007).

3.1. Sample Design

The sample for this study was designed to represent senior high school students from two selected districts from each of the five regions of Ghana. Senior high school students are usually aged between 15 and 17 years. The sampling covered students, teachers and parents or guardians with wards in secondary schools in the districts. Thirty students, 10 parents, and 10 teachers (to talling 50) were selected from each district for the study, made up of equal numbers of females and males. With 50 respondents from each district, the total sampling population for the study was 500.

In each region, one urban or predominately urban and a rural district was chosen. The selection of the districts was made using the simple random sampling method, which gave each district an equal chance of being selected. Names of urban and rural districts in each region were written on pieces of paper with same sizes and put into different hats from them one was chosen from each group. To avoid a sampling error where all those 30 students, 10 parents or 10 teachers would either be females or males, the proportionate stratified sampling method was used, since respondents should fall within stratified groupings – male and female. This helped us to get equal number of females and males in all categories.

3.2. Data Collection

Primary information was collected using questionnaires to enable the process to be structured and more reliable. Our choice of questionnaires was based on the fact that apart from being inexpensive and a cost-effective research tool for data collection, they could also be used to cover a large geographical area. Again, while they could be used to collect data in either quantitative or qualitative research, they enable researchers to reduce bias in their interviewing because questionnaires prevent verbal or visual clues which could influence participants' way of answering questions. Also, questionnaires are one of the best ways of collecting numerical data in a quantitative research (Dube, 2010; Mersdorf, 2016), the type which this research adopted.

All the respondents were given questionnaires to answer on the spot, immediately after being selected. This was to avoid any outside influences in their answers. For students, the questions included how many times they accessed social media in a day or a week, how much time they spent on average on each visit, and how social media has impacted their academic work and social life (positively or negatively), The parents answered questions about their impressions about social media, and how it had impacted their children's studies and social life. The teachers were asked about their impression about social media and whether it has affected the academic work of their students.

Secondary information was sought from the Ghana Statistical Service's (GSS) Population Census reports, textbooks, online publications, some reports from district assemblies and district education offices, the Ghana Education Service and other sources. Tables, charts and graphs have been provided for easy analysis of the research findings. This research lasted from March 2016 to April 2018.

3.3. Limitations of the Study

This study dwelled on five of the 10 administrative regions of Ghana. From each region, two districts were chosen. The findings are representative of Ghanaians living in urban and rural areas, but still do not cover the entire country. To ensure a nationwide coverage, there would be the need for a further research with a bigger sample size covering all the regions of the country and a higher number of districts. Despite this shortcoming, this study would serve a useful purpose for future researchers, while it also provides a verifiable analysis of the impact of social media on senior secondary schools in Ghana.

4. Findings and Analysis

4.1. Social Media Use by Students

Findings of this study have shown that social media is very prevalent among senior high school students in Ghana. All the 300 student-respondents confirmed that they used one social media platform or another, with many being present on more than one. They have access to devices with internet connectivity such as desktop or laptop computers and mobile devices like tablets, and mobile phones (and smartphones). The majority, especially those in rural areas said they used mobile phones. In addition to the social media platforms, they also use instant messaging applications such as WhatsApp, Facebook Messenger, Viber and Tango. Table 1 and Figure 1 below show the type of social platforms students visit regularly.

Area	Facebook	Instagram	YouTube	Whatsapp	Others	Total
Rural Districts	50	21	18	55	6	150
Urban Districts	59	17	28	39	7	150
Total	109	38	46	94	13	300

Table 1: Social Media Platforms Used By Students Source: Author's Own Research, April 2018

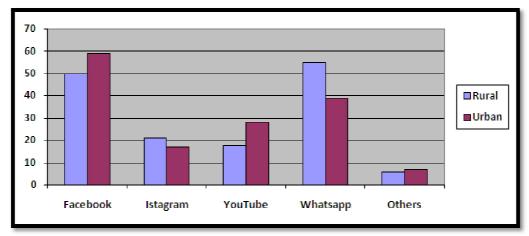


Figure 1: Social Media Platforms Used by Students Source: Author's Own Research, April 2018

The reasons for students' social media usage are varied, but the principal among our respondents included searching for information for homework and school assignments, making friends, re-establishing contacts with relatives and friends, sharing information among classmates, friends, and relatives, and sharing photos. Others included finding entertainment – music, films, operas, modelling – and starting or maintaining relationship. A tiny minority (2%) of respondents indicated that they sometimes used social media to 're-activate themselves' when they were bored and did not feel like engaging in any academic work or talking to anyone in person. They do this by visiting variety of sites and getting stuck to whichever gave them the needed attraction. Not surprising, some of them said they also use social media for gossip – either putting something on a site or reading gossips put there by others. The study showed that majority of the respondents (85.2%) spent most of their time on social media during their out-of-school period.

In most rural districts, there are towns and villages without electricity while others have limited supply. For that reason, the people living there including students usually have limited time for using their mobile phones, computers, and other devices with which they access social media. For instance, in the absence of electricity, whenever the power in the batteries of their gadgets run down they would have to wait hours or even days before recharging when electricity supply comes back. For those in communities without electricity, they would usually go to nearby towns to recharge. During those times when there was no electricity and their batteries had run down they would have no access to social media.

The study also revealed that most students in rural districts use mobile phones more than any other devices to access social media; this is because most of them said their parents could not afford desktop or laptop computers because of their high prices and the fact that many of their parents are peasant farmers or petty traders. Some respondents also said sometimes they were not able to buy top-up vouchers for their phones to enable them access social media sites regularly. Nationally, only 2.3 per cent of the population has household fixed telephone, while 7.9 per cent has desktop/laptop computers. Again, only 47.7 per cent (8,049,408) of the population owns mobile phones with a mere 7.8 per cent (1,312,971) mostly living in urban areas having internet (GSS, 2010).

These and other situations create severe limitations on the frequency of social media use in most rural districts. This explains why only 6 (4%) out of the 150 student respondents in the rural districts said they visited social media sites seven days a week, with 14 (9.3%) and 49 (32.7%) accessing the sites five to six and three to four days a week respectively. Majority of the respondents (54%) visited the sites between one and two days a week. For instance, only 0.3 and 0.4 per cent of the populations of Amansie West District in Ashanti and Soboba District in the Northern Region respectively have internet, while less than 8.7 per cent and 7.6 per cent respectively have mobile phones. Likewise, in the Wassa East District of the Western Region, only 0.9 per cent have internet while in the South Tongu only 1.7 per cent has internet (GSS, 2010).

On the contrary, the urban or predominantly urban districts where electricity supply is more frequent and reliable, and more people own mobile phones and internet, students regularly access social media. These are areas with populations belonging to the top or middle level status and therefore could afford to provide computers and other devices for their children in high school. Many of the student-respondents said they either had a desktop or laptop computer plus a mobile phone, smart phone or a tablet. It is therefore not surprising that the study result shows that students in urban districts used social media more frequently and spent more hours in a week on it than those in rural districts.

For instance, whereas in rural districts only four per cent of the 150 student-respondents said they visited social media sites seven days a week, 34.7 per cent of urban students spent the same time a week, with 22.6 per cent of urban respondents visiting sites five to six days a week compared with only 9.3 per cent rural respondents. Also, while 2.7 per

cent urban students used social media one to two days a week, as high as 54 per cent rural respondents used social media one to two days a week (see Table 2 and Figure 2).

Area	1-2 Days	3-4 Days	5-6 Days	7 Days	Total
Rural Districts	81	49	14	6	150
Urban Districts	4	60	34	52	150
Total	85	109	48	58	300

Table 2: How Many Days Students Use Social Media in aWeek Source: Author's Own Research, April 2018

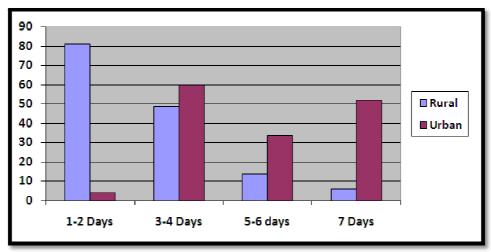


Figure 2: How Many Days Students Use Social Media in a Week Source: Author's Own Research, April 2018

On how many hours students spent on social media, the disparity between the two areas is once again clear. In rural districts only six per cent (nine) visited sites for nine hours or more in a week, while 54 per cent (81) urban respondents spent over nine hours a week. Again, whereas 75.3 per cent (64) of rural students spent between one and four hours a week, none of the urban- respondents spent less than five hours a week. This clearly shows that the frequency of social media use by senior high school students in Ghana is dependent on where they live – rural or urban, with or without regular electricity - and depending on the incomes of their parents which would enable them acquire devices with internet connectivity (see Table 3 and Figure 3).

Area	1-2	3 - 4	5 - 6 Hours	7 - 8 Hours	Over 9	Total
	Hours	Hours			Hours	
Rural Districts	20	62	32	27	9	150
Urban Districts	0	0	15	54	81	150
Total	20	62	47	81	90	300

Table 3: How Many Hours Students Spend On Social Media Each Week? Source: Author's Own Research, April 2018

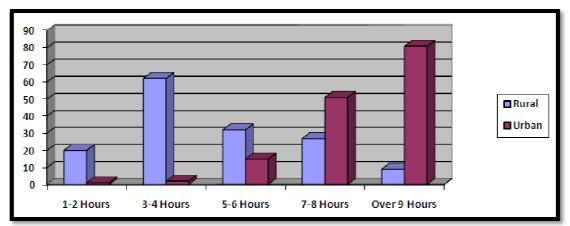


Figure 3: How Many Hours Students Spend On Social Media Each Week? Source: Author's Own Research, April 2018.

4.2. Impact of Social Media

The media has always had an impact on its audiences, either positively or negatively (Baker, 2011; Khan, 2012). Some believe that the media has a direct and controlling effect on its audiences as it influences their behaviour (Katz & Lazarsfeld, 1995). Going by the media agenda-setting theory which explains the media's ability to dictate what people should think about, it could be argued that the media has great influence on people. Consumers of news learn from the media not only about issues, but also how much importance and prominence given to the issues in the news (McCombs & Reynolds 2002; McCombs & Shaw, 1972).

This agenda-setting is simply done through the frequency at which the media reports certain news stories or the prominence given to them. Thus, the frequency at which the media reports issues and give them prominence, has the potential to influence the public to consider the issue(s) as important. Such issues given prominence by the media get to the top of national agendas for public discourse (McQuail, 2005). This potential of the media could make both positive and negative impact in children's lives in all areas of their development (Lemish, 2013). Social media therefore has the same potential to impact on children including students positively or negatively.

This study reveals that there are varying degrees of impact of social media on Ghanaian senior high school students due largely to where they live – urban or rural communities. Very typical of most Ghanaian communities, the urban ones have more access to telecommunication networks than the rural ones, just as they have access to more electricity than rural communities. The availability of these amenities determines the frequency at which people use equipment and gadgets and for that matter, social media. This explains why the frequency at which urban-resident senior high school students use social media differs from those in rural areas. Table 4 below shows the ownership of mobile phones and internet in the districts covered by this study.

	Total Population	Population having Mobile Phones	Percentage	Population having Internet	Percentage
Central Region				y	
Agona West	115,358	40,449	35.0	4,952	4.2
Assin South	104,244	20,594	19.7	1,180	1.3
Western Region					
Sekondi-Takoradi	559,548	277,816	49.6	73,102	13.0
Wassa East	81,073	15,197	18.7	757	0.9
Ashanti Region					
Kumasi	1,730,249	918,395	53.0	204,004	11.7
Amansie West	134,331	11,758	8.7	1,571	1.7
Volta Region					
Keta	147,618	44,334	30.0	4,039	2.7
South Tongu	87,950	23,263	26.4	1,571	1.7
Northern Region					
Tamale	223,252	83,221	37.2	11,483	5.1
Saboba	65,706	5,027	7.6	286	0.4

Table 4: Mobile Phone and Internet Ownership Source: Compiled By Author from Ghana Statistical Service 2010 Census

4.3. Negative Impacts

The negative effects of social media on students include attention-distracting, sometimes in class, resulting in poor academic performance. A Pew Research Centre research found out that 90 per cent of people active on social media are aged between 12 and 20 years (Lenhart et al., 2007), that is, mostly students. This study gathered that spending about three-quarters of their out-of-school time on social media platforms takes students from almost all family, social, and other activities. This habit also takes students away from having physical contacts with most people in their households while they glued themselves to their gadgets. They also cut off physical contacts with their friends living in the same community, and exclude themselves from many communal activities which invariably shape people's moral, civic, and social standing and which could prepare them to become effective community leaders when they grow up.

This supports the position of Tariq et al. (2012) that social media consumes much of students' time thereby negatively affecting their academic work. To Tarawneh (2014), networks like Facebook's impact include addiction and time-wasting which make students perform poorly academically because they spend most of their time on social media instead of concentrating on their learning, while Flad (2010) notes that social media distracts students while in school.

Research indicates that there are many students who log on daily to social media sites especially Facebook and Twitter. In the summer 2011 edition of WCER Research Highlights, Mark Connolly was reported expressing worry about the negative impacts of social media use by teenagers. According to Connolly, an average of 250 million log on to Facebook daily while 15 million are on Twitter every day, with over two billion video clips watched on YouTube daily (Baker, 2011). According to Rideout et al. (2010), another study by the Kaiser Family Foundation shows that on the average young people aged between eight and 18 spend over seven-and-a-half hours daily on social media. These corroborate our findings that in urban areas of Ghana most of students' out-of-school time was spent on social media (see Tables 1 and 2).

Two of our female parent-respondents said when students exclude themselves from socialisation, their physical relationships with others are negatively affected including relationships with future marriage partners. The two (college graduates) revealed that their marital lives had been negatively affected by their lack of personal relations with their spouses because most of their early relationships were on social media until the very last stages before they got married. Their situation fits into what Khan (2013) and Mozee (2013) note that the virtual life people create on social media due to their addiction to such platforms make them unable in the real world to have healthy social relationships. According to these scholars, social media addicts tend to have poor social development and exhibit anti-social behaviour, which could lead to depression when they are obligated to deal with real life situations including direct and physical relations with people.

Kuppuswa my and Shankar (2010) argue that "social network websites grab the attention of students and then divert it towards non-educational and inappropriate actions including useless chatting", and that, "social networking sites may badly affect the academic life and learning experiences of the student" (Rithika & Selvaraj, 2013, p.637; Khan, 2012, p.57).

Our respondents agreed that spending relatively more time on social networks like Facebook, Instagram, and YouTube for fun, gossip and others, and spending more time chatting on Whatsapp, negatively affects students' academic work. "Sometimes I was not able to finish my homework because I spent too much time on social media and chatted with friends on Whatsapp", said a student in one urban district. Another student in a rural district said they spent a weekend going round other nearby communities trying to get power to charge their phone batteries to enable them to go on social media platforms. They could therefore not prepare for their then impending examination which caused them to fail in a paper which they could have easily passed if they have had time to revise. Some teachers were of the view that students who rely heavily on social media platforms for information to do class and homework tend to lose their critical thinking abilities and reasoning skills as the pick whatever information available there.

Another student from an urban district said, by joining friends on social media throughout some nights watching musical videos and discussing them usually made him very sleepy in class the next morning making him unable to concentrate on what the teacher teaches. He said he once failed to answer one key examination question because he slept in class because he had stayed on Facebook almost all night, and was not able to concentrate when the teacher was explaining that topic in class a few days before the examination.

Larry D. Rosen argues that "teens who use Facebook more often show more narcissistic tendencies while young adults who have a strong Facebook presence show more signs of other psychological disorders, including anti-social behaviours, mania and aggressive tendencies" (Rosen, 2011). He adds that the daily overuse of technology and media poses a negative effect on the health of children, preteens and teenagers because they become more prone to anxiety, depression, other psychological disorders, and becoming vulnerable to future health problems. He asserts that social media like Facebook can divert students' attention and negatively impact learning, adding that "studies found that middle school, high school and college students who checked Facebook at least once during a 15-minute study period achieved lower grades" (Rosen, 2011).

Another concern expressed by some of our respondents is the potential of social media to expose children and students to pornography and online predators. Most governments in both developed and developing countries are worried that the heavy impact of online pornography on people especially children, due to unrestrained access to pornography through the internet, poses great danger to children who could become vulnerable to depraved online sexual predators. For instance, Smit (2015) notes that the risk of cyber-bullying, which includes cyber-stalking and cyber harassment, was prevalent in South Africa, and that learners were usually subjected to cyber-bullying through internet, email, and other channels including data and voice messages.

On their part, Valcke et al. (2008) worry about lack of safety, privacy and the abuse resulting from students getting unreliable and unregulated information that can cause self-harming. The Australian Psychological Society (2010) also raises concern about the addictive nature of social media networking and lack of privacy which make one's personal information easily accessible to those they would normally not like to share such information with.

Generally, both adult and students using social media have created certain short codes to represent certain words. Respondents for this study confirmed the negative effect this practice has on students' grammar and spelling, and thus negatively affecting their performance in examinations. Almansa et al. (2013) share the same conclusions on the effect of students' use of short codes on their sentence construction and general academic work.

4.4. Positive Impacts

The findings of this study confirm the position of Mehmood and Taswir (2013) and Ahmed and Qazi (2011) that social media has a significant influence on the academic performance of students depending on their usage. As this study has indicated, students benefit from social media use if they positively use information acquired, a position shared by Mehmood and Taswir (2013). Social media also play positive roles as instructional tools which enhance language skills of students because of enhanced retentive memory of new words picked from the interactional environment social media creates (Nikbakht & Boshrabadi, 2015; Qarajeh & Abdolmanafi-Rokni, 2015; Asogwa, Ojih, & Onoja, 2015).

Despite the negative impacts identified by some respondents discussed above, majority of our respondents were of the view that the positive impacts of social media outweigh the negatives. For teachers, those in rural areas though acknowledge some negative impacts of social media, nevertheless hold the view that there are more positive impacts for students. For instance, 74 per cent of teachers in rural areas felt that social media has positive impact on students, while 26 per cent said it was negative. For urban teachers, 59 per cent said it was positive with 41 arguing that it was negative.

This means that in total, majority of the teachers believe social media has positive impact on students (see Figures 4 and 5).

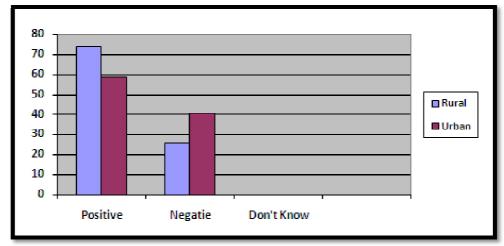


Figure 4: Teachers' Assessment of Social Media Impact on Students (in Percentages)
Source: Author's Own Research, February 2018

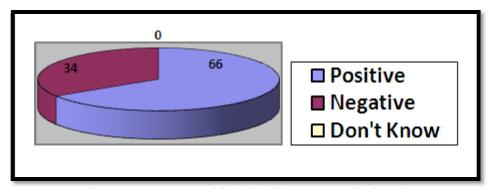


Figure 5: Assessment of Social Media Impact on Students by All Teachers (in Percentages) Source: Author's Own Research, February 2018

For parents, 89 per cent of those in rural districts said social media provides essential service for students, hence it has positive impact on their wards. They argued that with no libraries, social media helps their wards to find information which they need for academic work. Only seven per cent felt social media takes much of students' time and therefore impacts negatively on them. Four per cent of the respondents said they had not observed hence, did not have any idea on the impact of social media on their wards. The views of parents in urban areas are not much different from those in rural areas. While two per cent could not commend its impact, 74 per cent felt social media has positive impact while 24 said it was negative (see Figures 6 and 7).

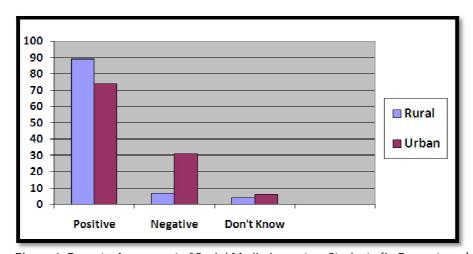


Figure 6: Parents' Assessment of Social Media Impact on Students (In Percentages) Source: Author's Own Research, February 2018

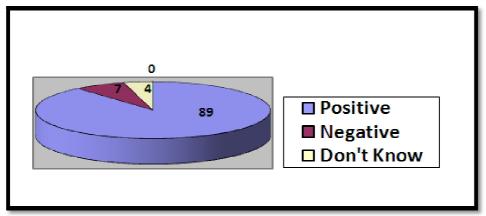


Figure 7: Parents' Assessment of Social Media Impact on Students (In Percentages)
Source: Author's Own Research, February 2018

Many of the student-respondents (90% rural and 85% urban) said social media has massive positive impact on both their academic and social life. The positive impact, according to them, included making friends both within proximity and those in other parts of the world and staying in touch with them, sharing information for academic work and entertainment. "When I have assignments and the teacher had not well explained the issues to us in class, I go to social media either on my phone or on the laptop to discuss with my friends and in most cases I get more information. This helps me to understand the subjects and the assignments", said one female respondent from an urban district. This supports Liccardi et al.'s (2007) position that social media connects students with each other for sharing daily learning experiences and holding conversation on several topics.

One male student-respondent in a rural district claimed that "living in a rural area where we don't have a single public library in the whole district, apart from the not-well-stocked school library, social media (internet) has always been my main source of information for homework, class work and exams". Another student from the same district said, "I was able to have ones in all my exams in my second year because I relied heavily on social media in the absence of public libraries in the district for learning materials".

From another rural district, one student recounts his experience: "I didn't know of social media or internet in my first year; I struggled to get reading materials for my assignments and exams because we did not have a reliable library in school. I didn't do well in my exams. However, after one of my classmates showed me the usefulness of social media in finding reading materials, I have improved upon my studies and performance in exams." One female student said, "I discuss topics I don't understand with my friends on social media, and sometimes some Facebook and Instagram friends are able to help explain such topics to me. Social networking has indeed helped me a lot with my studies" (see Table 5 and Figure 8). This confirms Mozee's (2012) study findings on the benefit of social media which include superior social interaction, access to information and information sources; inspiring creativity among and between users; generating a sense of belonging among users, and growing the technological capability levels of users of.

Area	Positive	Negative	Don't Know
Rural Districts	91	9	0
Urban Districts	87	13	0
Total	178	22	0

Table 5: Students' Assessment of Social Media Impact (In Percentages) Source: Author's Own Research, April 2018

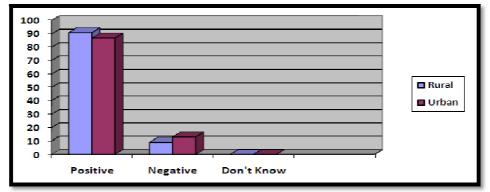


Figure 8: Students' Assessment of Social Media Impact (In Percentages) Source: Author's Own Research, April 2018

Many of the parents said with strict supervision of their children, and regulating their time on the internet, social media, has been a great source of information for students. Even in the rural districts where many communities have no reliable electricity supply and therefore cannot have regular access to social media, many parents said their children's use of social media has been very useful for their school lessons. "I have two children in senior high school. At the beginning of their first year, I was supposed to buy them some textbooks, but I didn't have the money to get them all the books", said one female single parent. She added that, "I only bought a few but later the children told me they have had several sources of information on the internet after their friends had introduced them to social media and they were able to read and get the information they required and regularly held discussions with their friends on platforms."

Though Connolly (2011) expresses concern about the negative impact of social media when students spend unnecessarily much time on it, he nevertheless believes that social media has the potential of yielding more positive benefits if used more prudently. He holds the view that social media can offer the perfect podium for students to link with their school and class mates and friends and share their ingenuity. Additionally, he believes that introvert students worried about being isolated and contemplating quitting school, could link up easily and freely with others through social media and thus change their introvert and isolated situation as they make friends. He emphasises that social media enables students to create and maintain long-lasting relationships.

Tariq et al. (2012) also argue that social media supports shy and withdrawn youths to make more friends, exhibit their interests and ingenuity without any physical interface with others. They add that neglected or isolated youths are supported to assert themselves through this regulated medium, leading to the effective development of their latent talents and potentials. Rosen (2011) also notes that new research has discovered that social networking has positive influences as young adults who spend more time on Facebook better show 'virtual empathy' to their online friends, while introverted adolescents are aided to learn to socialise. Social networking, he notes, "can provide tools for teaching in compelling ways that engage young students".

Since social technologies have now become part of everyday life, one cannot but agree with Connolly (2011) that students needed to be helped to learn how to use social media in a more contributory way, and learn how to think purposely about its use. He notes that students can achieve this by using their best judgement, a practical knowledge that cannot be taught, but learnt through practice, guidance and support to know when, where and with whom to use social media.

5. Conclusions

The findings of this study show that social media has positive impact on the academic and social life of Ghanaian senior high school students. It has shown that many Ghanaian these students have access to social media. Again, it has also shown that some parents and educationists believe social media has some negative impacts on students, as they argued that it makes students incapable of making independent and critical analysis of issues and events because they simply pick and rely on whatever information they find on social media and use it. Notwithstanding some negative impacts, majority of our respondents (parents, educationists and students) applaud the positive impact of social media on learning and social cohesion, concluding that it has very positive impact on the academic performance of students.

Findings from this study make it very clear that social media has gradually become pervasive among senior high school students in Ghana as all the 300 student-respondents claimed to use social media. The study also confirms the research hypothesis that, student spend a lot of time on social media for varied reasons. Despite our findings indicating that Ghanaian students do not spend an average of six hours daily on social media as studies elsewhere have shown (Lenhart & Madden, 2007; Tariq et al., 2012), it is most likely Ghanaian students would soon be spending same or even more hours than have been reported elsewhere due to several reasons. With more rural communities being connected to electricity and with more people especially students, acquiring more mobile phones and other devices with internet connectivity because prices of these equipment are becoming more affordable, social media use among Ghanaian senior high and other students would soon increase.

This research has revealed some of the negative impacts of social media. Major among them are students' spending most of their out-of-school time on social media and neglecting their academic work. This made some of them perform poorly in their examinations. Another negative impact is that, students spending relatively long hours on social media cut themselves off from family members, friends, entire communities and social activities. Without learning from community practices and activities, students who are cut off from their communities by social media would find it difficult to fit into their society and hold leading positions when the mantle falls on them. As indicated by two respondents, marriage lives could be adversely affected when couples, prior to their marriage, build their lives on social media without much physical interaction with friends and family.

Another growing concern about social media is students' creation of unconventional short codes which they use on social media, especially with instant messaging. Some of the short codes are 'lol' (laugh out loud or lots of love) 'omg' (oh my God), 'fon' (phone), and 'msg' (message) among others. This style of writing is gradually affecting students' spelling and writing skills. These short codes usually appear in some students' school assignments and examinations thus causing some to lose marks or completely fail examinations.

Despite these negative impacts, results of this study, particularly the sentiments of students, parents, and teachers show that social media has positive impact on students' academic and social life. In Ghana, due to the differences in the availability of certain education-related infrastructure like public libraries, well-stocked school libraries, and reliable and regular supply of electricity in some communities, the degree of impact of social media on students has always been varied depending on where they live – rural or urban. However, both urban and rural respondents acknowledged that social

media is useful for students' academic and social life. Particularly with rural areas, many students and parents have found social media as a useful source of literature and information which students in urban schools with well-stocked libraries take for granted. For parents who are unable to buy recommended textbooks for her children, social media becomes the source of great help as their children get most of the literature and information from it.

Equally, students and parents in urban areas who have regular use of their social media gadgets and therefore visit social media sites regular also attested to the fact that those sites have always been useful for their academic work as well as social interaction and cohesion. By being able to freely and regularly communicate with their school and class mates, friends and relatives, some of whom are sometimes in overseas countries, these students feel social media has been a great platform for building and maintaining relationships and staying in constant touch with relatives by voice and video. They also claimed that through social media they can have discussions on class assignments and do group discussions in preparation for examinations.

6. Recommendations

Based on the responses from the respondents for this research, it is recommended that:

- Parents must supervise their children and regulate their time on social media use;
- School authorities must introduce a sustained education of students on social media use and the negative impacts on students who spend long hours on it;
- In rural communities where due to poverty, many parents cannot afford computers, laptops, mobile phones and other communication gadgets, community leaders must consider the creation of community ITC centres where students would access social media sites for academic work under supervision; and
- The Ghana Education Service and the Ministry of Education must incorporate the teaching of effective social media use into the school curriculum.

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