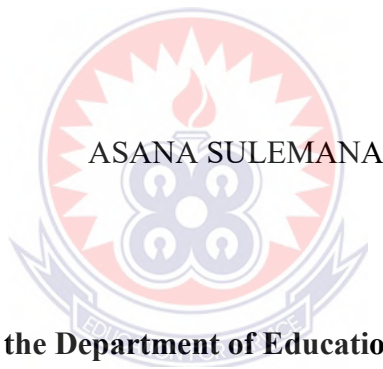


UNIVERSITY OF EDUCATION, WINNEBA

ASSESSING THE USE AND EFFECTS OF WHATSAPP ON THE ACADEMIC
PERFORMANCE OF STUDENTS IN T. I. AHMADIYYA SENIOR HIGH SCHOOL,
KUMASI



**A Project Report in the Department of Educational Leadership, Faculty of
Education and Communication Sciences, submitted to the School of Graduate
Studies, University of Education, Winneba, in partial fulfilment of the requirements
for the award of the Master of Arts (Educational Leadership) degree**

DECEMBER, 2018

DECLARATION

STUDENT'S DECLARATION

I, ASANA SULEMANA, declare that this project report, with the exception of quotation of references contained in published works which have been identified and duly acknowledged, is entirely the result of my own original work, and that no part of it has been presented for another degree at the University or elsewhere.

SIGNATURE:

DATE:



SUPERVISOR'S DECLARATION

I, hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines on supervision of project report as laid down by the University of Education, Winneba.

NAME OF SUPERVISOR: PROFESSOR FREDERICK KWAKU SARFO

SIGNATURE:

DATE:

ACKNOWLEDGEMENTS

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To my group mates; Grace, Martha, Mavis, Muni, Diana, Ofosuhene, Vivian, Elijah, Dillis, I say God Bless you all for your concern, encouragements and support that has brought me this far.

DEDICATION

To my lovingly mother, Mariama Sulemana.

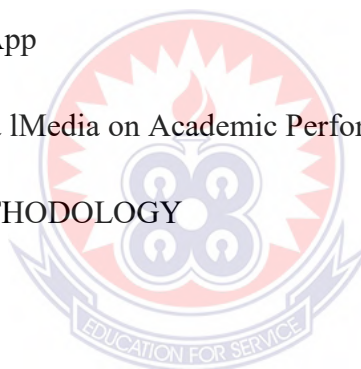


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ABSTRACT

The study was conducted to determine the use and effects of WhatsApp on the academic performance of students in T. I. Ahmadiyya Senior High School, Ghana. Specifically, it was designed to identify the uses of WhatsApp messenger by the students; the challenges that students face when using WhatsApp and their perceived effects on their academic performance. The study adopted descriptive survey design and 60 students were purposively selected for the study. The data were collected from the respondents using questionnaire. Descriptive statistics of frequencies and percentages were used when analyzing the collected data. The study revealed that majority of the respondents agreed to the usefulness of the WhatsApp. Furthermore, most of the respondents were of the view that usage of WhatsApp by students for other social activities than academic work leads to poor performance in school. Again, the study revealed that majority of the respondents had positive feelings and intentions about using WhatsApp in their formal learning if it is introduced. Based on these findings from the study, it was recommended that parents, classroom teachers and counsellors should encourage students to utilise the WhatsApp platform for disseminating only educational information to their colleagues. It was further recommended that teachers and school counsellors should endeavour to give orientation to students on the effective and positive use of WhatsApp as regards to teaching and learning.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter covers the background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, delimitations of the study, limitations of the study and organisation of the study

1.1 Background to the Study

Technology gives an immense impact on human lives where the use of WhatsApp application in education carries positive response to the learning development. WhatsApp is a Smartphone application for instant messaging. It provides faster and easier communication among students and develops their sharing ideas too, for instance, in a WhatsApp group. WhatsApp group is a platform which consists of all members like teachers and students. All students from the class can have their discussion on certain topics via this application as it provides immediate response within the group members to join the conversation, thus making communication effective. Moreover, it is one of the creative teaching techniques which is used to attract students interest, attention and provides fun-based learning. It allows the students to express their thoughts and ideas via various features of the WhatsApp application platform, such as attaching pictures, sharing videos, sharing web-links, recording videos and many more. It also helps the students to get actively involved in learning activities via various features on this application.

Students enhance their technical skills using WhatsApp that is similar to other study-related platforms like the blackboard environment. The WhatsApp supports knowledge sharing among students and between students and teachers. WhatsApp has become a platform for teens to express themselves without any fear in a non-restricted environment. As a result, WhatsApp has helped students in getting rid of low participation, an attribute of classroom lectures.

WhatsApp is relatively inexpensive and students are making use of it for exchanging information by transmitting messages. Wherever the internet is accessible, social media applications, such as WhatsApp is being used with users spending less in terms of cost. WhatsApp is addictive, especially for students in Senior High Schools. They often get distracted and do not focus on the important tasks of their studies, also, the constant memes, jokes, trolls and funny videos make the present-day youth insane and crazy. A lot of unimportant information clouds their minds as an impact of the constant use of WhatsApp.

Senior High School students engrossed with WhatsApp are obsessed with sharing of selfies, videos and audio files among the friends and colleagues. Such students usually do not want to mingle with the outside world (Malecela, 2016); as a result, they become socially unreachable and aloof. No interaction with the people and society makes these teens snobbish which are harmful to their growth. WhatsApp addicted SHS students become lazy due to constant use of the application (Yeboah & Ewur, 2014). They waste their productive time due to their obsession with sharing jokes, selfies, memes, and videos on the platform.

WhatsApp

WhatsApp application has become popular as a learning tool in many educational institutions. Based on a recent survey conducted by Telenor Research (2016), there are many other applications for instant messaging such as WeChat, LINE, Viber, Telegram, and email. However, most social media users in Ghana are using WhatsApp. The „daily“ use of SMS communications services has dramatically declined too. Therefore, WhatsApp is popular compared to other applications. Moreover, most Senior High School (SHS) students are already exposed to this application and use it often for the purpose of communication. Thus, the purpose of this research was to examine the use and effects of WhatsApp application by Senior High school students in Ghana.

1.2 Statement of the Problem

Despite the ban on the use of mobile phones in most Senior High Schools in Ghana, many students are engrossed in spending most of their school hours on social media sites which includes the WhatsApp. WhatsApp has both positive and negative aspects but many students are using this social media application on a regular basis. Over the years, many studies have been conducted on the effects of the regular use of WhatsApp and social media on the academic performance of students.

From the literature, some studies have been conducted on the use and effects of WhatsApp on the academic performance of students (Ijeoma & Tusiima, 2017; Joicy & Sornam, 2018; Ahmed, 2018; Veena & Lokesha, 2016; Gasayme, 2017; Maheswari, 2014). In spite of these studies conducted, few studies have been conducted on the use and effects of WhatsApp on students“ academic performance in Ghanaian context. The

study of Yeboah and Ewur (2014) is example in this regard. With regard to senior high school students in Ghana, relatively little is known. The local available study only assessed the use of WhatsApp messenger and its impact on the academic performance of students in tertiary institutions in Ghana. Therefore, in order to fill this research gap, the current study was designed to assess the use and effects of WhatsApp on the academic performance of students in T. I. Ahmadiyya Senior High School in Kumasi metropolis.

1.3 Purpose of the Study

The study sought to assess the use and effects of WhatsApp on the academic performance of students in T. I. Ahmadiyya Senior High School, Kumasi.

1.4 Objectives of the Study

The study was conducted to achieve the following specific objectives:

1. To identify the uses of WhatsApp messenger by the students at T. I. Ahmadiyya Senior High School, Kumasi.
2. To find out challenges T. I. Ahmadiyya Senior High School students face with the use of WhatsApp messenger.
3. To examine T. I. Ahmadiyya Senior High School students' perception about the use and effects of WhatsApp messenger.

1.5 Research Questions

This study was basically guided by the following research questions.

1. What do T. I. Ahmadiyya Senior High School students use WhatsApp messenger for?
2. What are the challenges T. I. Ahmadiyya Senior High School students face with the use of WhatsApp messenger?
3. What are the T. I. Ahmadiyya Senior High School students' perceptions about the use and effects of the WhatsApp messenger?

1.6 Significance of the Study

The findings from this research will be of interest and good use to educators, policy makers, marketers, parents as well as students. The results can be used to enlighten the Ghana Education Service about the impact of WhatsApp on the everyday lives of students; whether being connected in groups online brings benefits or concerns both socially and academically. The outcomes of this study determine if the use of WhatsApp by Senior High School students has potential gains or ills.

1.7 Delimitations of the Study

The study only focused on "Assessing the use and effects of WhatsApp on students' academic performance in T. I. Ahmadiyya Senior High School, Kumasi".

1.8 Limitations of the Study

A number of problems were encountered in undertaking this study, such as non-availability of needed current data, which would have enriched the study further and enhanced its analysis because of poor data-keeping culture. Firstly, the researcher faced difficulties in obtaining relevant information from the students since some of them were reluctant in forthcoming with relevant information due to privacy and security reasons. Secondly, due to the large population size of the school, only few students were purposively selected for the studies. Thirdly, the sampled students did not answer some of the questionnaire items genuinely for the fear that their right responses would buttress the reasons behind the ban on phone usage at Senior High Schools in Ghana.

Besides time and cost constraints, it was highly impossible for a national survey, thus the study relied on sample from students in T.I. Ahmadiyya Senior High School, Kumasi.

1.9 Organisation of the Study

The research was organized into five chapters. Chapter One is the the introduction into the project work. It covered the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, delimitations of the study, limitations of the study and organization of the study. Chapter Two of the Study dealt with review of related literature. It discussed social media, the impacts of social media on personal relationships and education, challenges of social media, categories of people who use WhatsApp messenger, the uses of WhatsApp and effects of WhatsApp on academic performance and empirical review on WhatsApp use and effects on students' academic performance. Chapter Three was methodology employed in the study. It examined the research design, population, sample and sampling

technique, the research instrument, validity and reliability of research instrument, data collection and data analyzing procedure as well as ethical considerations

The methodology and company profile were contained in the third chapter. The chapter Fourth was devoted to the presentation and discussion of findings or results while Chapter Five looked at the summary of study, conclusions, recommendations and suggestions for the future research.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviewed the related literatures by other researchers on this topic. It discusses social media, the impact of social media on personal relationships, impact of social media on education, challenges of social media, categories of people who use WhatsApp messenger, the use of WhatsApp, challenges of WhatsApp, effects of the use of WhatsApp and students' perception on the use and effects of WhatsApp as well as empirical review.

2.1 Social Media

Literature review for this research work was covered on Social Media and students performance. Social media has become a growing phenomenon with many and varied definitions in public and academic use.

2.1.1 What is Social Media?

Technology surrounds students in the early 21st century. Ipods, video games, and cell phones are practically inescapable for students. Along with this is social media, which for many students is a daily part of their routine. Any activity where humans share stories and influence others can be considered as social media (Nicholson, 2011). Social media or media is a great forum for discussing mutual topics of interest, and perhaps even meeting or renewing acquaintances with other humans virtually. According to Greenwald

(2009) and Deloitte (2009), 55% of employees visit a social media site at least once a week.

Social Media can be defined as forms of electronic communication through which users interact among people in which they create, freely share, exchange and discuss information, ideas, personal messages, and other content about each other and their lives using a multimedia mix of personal words, pictures, videos and audio, utilizing online platforms while they are connected to the Internet (Cox & Rethman, 2011). Social media are also defined 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” (Kaplan & Heanlein, (2010, p.61).

2.1.2 The Impact of Social Media on Personal Relationships

Indeed, social network sites, such as WhatsApp, Facebook, MySpace, and Twitter, to name a few, are a part of everyday life for students around the globe. Social media is certainly here to stay, as it shows no sign of either being a fad or slowing down. To be sure, for many students, it is the main way of keeping in contact with their peers. Not only can students communicate with friends living nearby, social media allows them to communicate with those friends living great distances away, friends made at summer camps, sporting events, and other gatherings. These sites permit the user to communicate instantly and without delay, allowing students to develop stronger social skills.

One of the effects of social media is encouraging people to form and cherish artificial bonds over actual friendships. The term „friend“ as used on social media lacks the intimacy identified with conventional friendships, where people actually know each

other, want to talk to each other, have an intimate bond and frequently interact face to face.

It's been said that information is power. Without a means of distributing information, people cannot harness the power. One positive impact of social media is in the distribution of information in today's world. Platforms such as Facebook, LinkedIn, Twitter and others have made it possible to access information at the click of a button.

Research conducted by parse.ly shows that the life expectancy of a story posted on the web is 2.6 days, compared to 3.2 days when a story is shared on social media. That's a difference of 23%, which is significant when you consider that billions of people use the internet daily. Sites such as WhatsApp, Facebook, Twitter, Imo, Instagram and others also allows students to express themselves on their own "homepage", giving them an outlet to discuss ideas that interest them, as well as be introduced to other interests from friends.



2.1.3 Impact of Social Media on Education

There are educational benefits, as well, for those students using social network sites. Facebook, and other sites, allow students to discuss school work together, after school hours. Students' social media also develop stronger digital skills and competence, as they learn how to post pictures and comments on the site, as well as navigate through the internet. As schools become more and more digitally reliant, these skills are necessary for a student's classroom's success.

Furthermore, as the jobs of the future become more technologically based, these skills are essential for students when they face the job market.

Since their appearance, social media have changed different aspects of people's lives. Social media that emerged by the rise of Web 2.0 technologies are characterized by several significant features such as user generated content, online identity creation and relational networking (Margo, 2012).

To consider some context of the ubiquitous nature of Social Media, Nielsen (2010) argues that social media accounts for nearly one-quarter of all internet activity, and LinkedIn has over 80 million professionals in over 200 countries. Other platforms such as WhatsApp, Facebook, Twitter, MySpace and YouTube are available for everyone; it was traditionally created to connect with individuals from all over the world to include employees, friends and families. However, as the number of users increase to millions, organizations are also trying to connect with employees more so than ever. Social Media has changed the way people around the globe communicate with one another. However social media has existed right from the onset of humanity. Social media opens up the world to students, as they are able to stay connected to friends and family members from all over.

2.2 History of WhatsApp

WhatsApp was established by Brian Anton and Ian Koom in 2009. It is a text messaging mobile application for smart phones. Users can exchange text-based chats, images, videos and audio media messages through Internet. It mostly depends on the active Wi-Fi network system to provide online users the ability to send and receive

different social applications. WhatsApp is a unified messaging app which is connected directly to one's phone number without any password or login. Statistics have shown that there were 1.2 billion active monthly users of WhatsApp in 2017 (Statista, 2017). WhatsApp facilitates online collaboration and communication and promotes students' school performance (Barhoumi, 2015) For instance, between January 2015 and February 2016, the number of active users had grown sharply from six hundred million to one billion (Statt & Nick, 2016)

Since WhatsApp application has been extremely popular, do we really understand what WhatsApp is and how it works? WhatsApp is a popular messaging app with end-to-end encrypted instant messaging that can be used on various platforms, including Android, iPhone and Windows Smartphones, and Mac or Windows PCs. End-to-end encryption is a security system in which only the sender and the recipient can read their own messages. In fact, even WhatsApp can't access user messages.

Again, WhatsApp can be described as a popular Smartphone application that functions on various devices and gadgets. Jan Koum and Brian Acton were the inventors of the WhatsApp application in 2009 (Albergotti, MacMillan & Rusli, Evelyn, 2014) who formerly had invented Yahoo (Eric, 2012). It was created in 2009 and later acquired by Facebook in 2014, the app uses your phone's internet connection to send messages so you can avoid texting fees. More than one billion people in over 180 countries use WhatsApp, created in 2009 as an alternative to text messaging. According to a May 2016 report from research firm Similar Web, WhatsApp is the top chat app in 109 countries, including Brazil, India, and the United Kingdom. Facebook acquired WhatsApp in 2014 to make a bigger play in the rapidly-growing messaging market, along with its own Messenger

platform. At the time the deal was announced, WhatsApp had 450 million users worldwide.

2.2.1 Categories of People Who Use WhatsApp Messenger

According to Facebook's earnings call on Feb 2, 2017, WhatsApp had 1.2 billion monthly active users, Statista reported. The popular messaging app is used by people in more than 180 countries around the world. It has been available on the market since 2010 and is developed mainly for the purpose of replacing the existing SMS platform by giving a free of charge service. As for the purpose of sending and receiving messages either between groups or individuals, WhatsApp provide various functions, for instance text messages, audio files, attached images, link to any websites and video files which can be shared.

This new phenomenon is parallel with Vygotsky Constructivist Learning Theory which suits the use of WhatsApp. This theory aims to develop the students' social interaction as well as to raise and share information (Vygotsky, 1978). This is where the learning resources can be accessed anytime, anywhere and in any features. It could help in developing the student's learning performance though. Therefore, this application has become very popular in the last two years where it had gained over 350 million users (Cohavi, 2013).

Precisely, WhatsApp is rated as a great societal connection that connects individuals to get and share the humongous worldwide information rapidly. It is also as part of the social media growth. Whenever humans are sharing stories and influencing others, it is viewed as social media (Nicholson, 2011). Besides, the production of knowledge among students is based on online social interactions (Vygotsky, 1978). He

explained that “learning can also be influenced by numerous variables, including the cognitive and psychological state of the learner, teacher professionalism and nature and complexity of the pedagogical approach”, (Vygotsky, 1978). Overall, the effectiveness of learning and teaching can be improved through social interaction and this benefits the students in sharing information which parallels with the social development literature (Vygotsky, 1978).

Moreover, the simple operation of WhatsApp service makes it available to all ages and backgrounds. By having a Smartphone, subscribing to the internet data plan and installing the application, it allows communication with everyone. It allows the user to create WhatsApp groups among the teacher and students by separating each group according to certain practicum to communicate among each other.

2.3 The Uses of WhatsApp

WhatsApp is one of the changes in technology that is commonly used on specific mobile phones and computers. According to Beebe and Masterson (2003) human communication comprises what people say, how they say it and to whom they say it. This means that what people say depends on the environment in which they are. Thus people are bound to change the way they communicate in relation with the environment at any given time. Statistics have shown that there were 1.2 billion active monthly users of WhatsApp in 2017. WhatsApp Messenger is a smart phone- and web-based instant message application that allows users to exchange information using a variety of media including text, image, video, and audio messages (Church & de Oliveira, 2013; Sahu, 2014). WhatsApp is a free, easy to use, fast, convenient, personal mode of

communication. It is found that WhatsApp was one of the most popular SNSs among university students. The use of WhatsApp to facilitate blended learning had a positive and significant impact on students' learning performance and their attitudes toward blended learning. WhatsApp is part of a Smartphone's application and it is the most popular communication platform in the 21st century learning as it sends real-time messages and faster knowledge resources.

In addition to making calls, sending messages, photos, videos, files and voice messages to individuals or groups, WhatsApp rolled out some new features in 2017. Now, the app includes a Snapchat story-like feature, which allows users to update their "status" using pictures, GIFs and videos. You can also swipe up to reply to your friends' statuses. This application can be only accessible with the existence of the Internet connection. As the Internet has been widely used, students were exposed to various communication tools like social network sites and application for a Smartphone (Fogg, 2010). In other words, knowledge can be found everywhere, anytime and in various formats. It is easy to get and share within communities. Besides, it could also create the possibility of learning at any time and any place.

One study claimed that by using the mobile tools in learning, it is also known as an informal kind of learning (Trentin & Repetto, 2013). It provides a relaxing and handy online activity to the students. Thus, the usage of the Smartphone and WhatsApp has widely spread. There is a rising request for Smartphone among the youngsters (Han, 2009). Overall, many studies have demonstrated that WhatsApp has been widely used by individuals due to its accessibility and ease of use in communication purposes.

Moreover, many studies concluded the positive impacts of the WhatsApp application in education such as it included effective information-sharing and ease of communications. Facebook and WhatsApp were also found as common application used for information sharing and academic communication among the university students (Devi & Tevera, 2014). Same finding was encountered by Lenhart (2007) where he stated that WhatsApp and emails are creating the ease of information sharing among students where every thought and feeling is translated into words. They tend to write more and it is supported by other educators where they could see the impact of this new phenomenon and teach the students about language evolution. Overall, responding through WhatsApp was viewed as thriving because it helped to develop the students' voice. The use of technologies like Smartphones has gradually changed the traditional way of communication like handwriting (Ardilla, 2004).

With the fact that WhatsApp has many benefits to the students, it also allows enhancement to the students' learning performance in the way of promoting an active learning involvement in WhatsApp conversation or discussion. Through this application, the learning process will be student-centered.

Moreover, Solomon and Schrum (2007) claimed that WhatsApp provides a conversation platform to everyone which allows the existence of a relationship among them. It promotes information and knowledge sharing unconsciously. It is supported by Patient (2013) who stated that the conversations between and among students using WhatsApp (Smartphone application) demonstrates the sharing of academic information. Mar (2013) also emphasized that via WhatsApp, the majority of the students were highly satisfied and agreed with this application, not only could it increase their willingness to

read in English but also it gave positive impacts on their reading habits, thus resulting in more regularity and confidence. These studies showed that WhatsApp could help a lot in enhancing students' learning performance especially in English subject.

Other studies found out that many universities and higher institutions have recently used WhatsApp via their Smartphones in order to develop their communication through forums, discussions and information sharing, for instance, text messaging, mobile social network and web based learning (Echheverria, Calderon, Nussbaum, Infante & Bravo, 2011). This is where the integration of online discussion with Smartphone application (WhatsApp) gives opportunities in creating an online interaction for the students to interact with their teachers and friends in facilitating the learning and solving their learning difficulties. Overall, students' learning performance and motivation have risen due to the implementation of this WhatsApp application in their academic matters.

Various studies and analysis have been done on the usage and impact of WhatsApp. Some of these studies are for finding the impact of WhatsApp on the students and some are based on for the general public in a local region. However, any widespread survey analysis for general public is not found during our literature review. Some of these papers details are discussed below.

According to Financial Times, "WhatsApp Messenger, an app which allows unlimited free text-messaging between users, has done to SMS on mobile phones what Skype did to international calling on landlines. It has become a top-selling iPhone, Android and BlackBerry app in dozens of markets, without a penny spent on promotion or advertising." In a paper entitled.

“What Makes Smartphone Users Satisfied with the Mobile Instant Messenger? Social Presence, Flow, and Self-disclosure” Author has studied and analyzed factors affecting user satisfaction by conducting a survey on 220 users of mobile instant messengers in Smartphones. The survey results showed that self-disclosure, flow, and social presence significantly affected user satisfaction. Authors of “Privacy Implications of Presence Sharing in Mobile Messaging Applications”⁷ conducted a user study with two independent groups (19 participants in total), in which we collected and analyzed their presence information over four weeks of regular WhatsApp use and conducted follow-up interviews. Their results show that presence information alone is sufficient to accurately identify, for example, daily routines, deviations, times of inappropriate mobile messaging, or conversation partners.

Another study is done on the WhatsApp Usage on the Students Performance in Ghana. the results of this study showed the following: WhatsApp takes much of students study time, results in procrastination related problems, destroys students’ spellings and grammatical construction of sentences, leads to lack of concentration during lectures, results in difficulty in balancing online activities (WhatsApp) and academic preparation and distracts students from completing their assignments and adhering to their private studies time table.

A study of southern part of India (Chennai region) was conducted on the age group of between 18 to 23 years to investigate the importance of WhatsApp among youth. Through this study, it was found that students spent 8 hours per day on using WhatsApp and remain online almost 16 hours a day. All the respondents agreed that they are using WhatsApp for communicating with their friends. They also exchange images,

audio and video files with their friends using WhatsApp. It was also proved that the only application that the youth uses when they are spending time on their smart phone is WhatsApp.

In a paper “Smartphone application usage amongst students at a South African University”, a study is performed to evaluate the usage of social media applications in South African University. According to this study, it is proved that students spend an average of five hours per day on their Smartphones communicating with others through social media applications¹⁰. An article of Times of India Online newspaper dated June 16, 2013, covered a survey, which was conducted by Tata Consultancy Services in the years 2012-2013. The target group of this survey was 17,500 high school students of age around 14-15 years across 14 Indian cities. the result shows that almost 70% of the students possess smart phones and have started utilizing the full potential of smart phones⁹. According to Business Standard in its news on March 3, 2014, the combined usage of WhatsApp and Facebook contributes to over half an hour per day to the overall time spent on Smartphones.

2.4 Challenges of Social Media on Academic Performance

Tuurosong and Faisal (2014) conducted a related study in a public university in Ghana and concluded that social media moderately affect students and that the frequency of use was averagely one per a day. Moreover they admitted in their study that social media negatively affected students’ performance. It was also found in their study that students use the social media for non-academic related purposes which do not have any positive trickling down effects on them aside from entertainment. They concluded that

social deviant behavior, such as, crime, drugs, kidnapping were never priority of the students, hence, authority should not be over concerned about students' social media usage. This study relates to the present study in that they are both addressing student concerns from different angles.

Tawia et al. (2014) have conducted a relating study in Ghana. However, they focused on student's preference on voice calls versus WhatsApp calls. The authors postulated that those students who have enjoyed the two services (voice call and WhatsApp) will definitely prefer to be on WhatsApp since it cost less, convenience, for meeting purposes, establishing network among related others. On the contrary those who have not tried WhatsApp were skeptical about the unknown which were given as privacy, technical literacy among others. They concluded that education through familiarity is imperative.

Langat (2015) studied a group of students in Kenya and reported his interesting findings as follows. The respondents admitted that they are addicted to social media to the extent that extrication would be very difficult. Moreover, it was further concluded that most of the students were engaging in social media during midnight this notwithstanding gender. They further attributed their abysmal academic performance to their engagement with social media. This study confirms the previous review presentation above which suggested that social media has detrimental effects on performance. But differ in focus from the current study.

Sosilu (2014) focused her study on WhatsApp as a learning tool to facilitate distance education. The author further posited that students were having issues on the smart phone availability and reliable access to information and network this

notwithstanding the cost. The author suggested that an effective Whatsapping among distance learners required improved telecommunication networks, portable mobile as well as affordable devices. Furthermore the author lamented that educating adults of net-generation education will continue to pose challenge for teachers. These challenges according to the author must be seen as opportunity in the long run. Educators need to be empowered themselves in the areas of technological education, providing active learning change, development and new method for learning. Finally the author conclude by saying Facebook can be improved for use why standardizing WhatsApp.

2.5 Empirical Review

As indicated earlier in this study, a number of studies have been conducted on the use and effect of WhatsApp on students' academic performance. For instance, Veena and Lokesha (2016) investigated the effect of WhatsApp messenger usage among students in Mangalore University. To achieve the objective of the study, survey method was employed and as such, 200 questionnaires were distributed to respondents. Out of which, 188 of the questionnaires were properly filled and retrieved. The results indicated that majority of respondents were familiar with WhatsApp messenger and use WhatsApp for academic purposes. Similarly, Maheswari (2014) examined the usage of WhatsApp messenger among college students in Salem District, Tamil Nadu. The findings from the study revealed that the majority of students used WhatsApp messenger usually sending images, videos and group chatting.

Yeboah and Ewur (2014) analysed the use of WhatsApp messenger and its impact on the academic performance of students in tertiary institutions. The study specifically

sought to examine WhatsApp messenger on the academic performance of tertiary students in Ghana. Results from the study revealed that WhatsApp messenger makes communication easier and faster thereby enhancing effective flow of information and idea sharing among students.

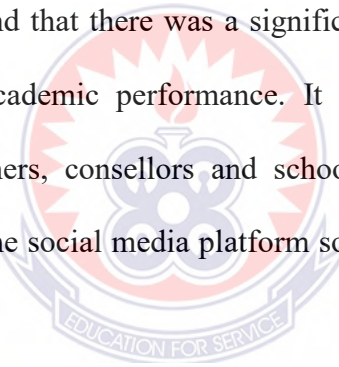
Gasayme (2017) also assessed university students' WhatsApp usage for educational and personal reasons, and perceptions towards WhatsApp integration into teaching and learning. The study adopted descriptive survey design. The study observed that university students' WhatsApp usage for social and personal purpose was high whereas that of educational purpose was low. Again, the study found that students perceived WhatsApp to be useful and fun if WhatsApp is integrated into their teaching and learning activities.

Joicy and Sornam (2018) investigated the perception of WhatsApp usage among students of a College of Excellence in India. The study utilized the descriptive survey design and data were collected from the respondents through questionnaire. In all, 100 questionnaires were administered to respondents. The result showed that students use WhatsApp for personal and social purposes on a daily basis. Also, the study indicated that students' perceived the integration of WhatsApp into their education to be easy, fun and useful; and also had positive feelings and intentions about using WhatsApp in their formal learning if it is introduced.

Ahmed (2018) conducted sociological study that looked at WhatsApp messenger usage patterns among students in Karachi. The study employed descriptive survey design and the data were collected using questionnaire. The study found that majority of students used WhatsApp for various purposes such as voice messages, academics and family

contacts. Also, it was found that high level of usage of WhatsApp amongst students. It was therefore concluded that WhatsApp is one of the essential social media activities of students.

Ijeoma and Tusiima (2017) ascertained WhatsApp and facebook social media usage on academic performance of secondary school students in Port Harcourt City Local Government Area of Rivers State, Nigeria. The study adopted correlational design and the data were collected from 300 senior secondary school two students. The data collected through the use of questionnaire tagged “Social Media Questionnaire” and the “English Achievement Test”. The data were analysed using simple and multiple regressions. The study found that there was a significant relationship of students’ usage of WhatsApp and their academic performance. It was therefore, recommended that government, parents, teachers, consellers and school administrators should moderate students’ participation on the social media platform so as to use it positively and harness its gain extensively.



CHAPTER THREE

METHODOLOGY

3.0 Introduction

The purpose of this research was to undertake an assessment of the use and effects of WhatsApp on the academic performance of students at T. I. Ahmadiyya Senior High School in Kumasi. This chapter therefore discussed the research methodology, the research design of the study, the population and the population sampling. It also looked at other methodological tools such as the data collection instruments used in the study, as well as the analysis of the research's data.

3.1 Research Design

A descriptive survey design was used in this study. A survey is used to collect original data for describing a population too large to observe directly (Mouton, 1996). A survey obtains information from a sample of people by means of self-report, that is, the people respond to a series of questions posed by the researcher (Polit & Hungler, 1993). In this study, the descriptive survey was selected because it provided an accurate portrayal or account of the characteristics, such as behaviour, opinions, abilities, beliefs and knowledge of a particular individual, situation or group. The design was chosen to meet the purpose of the study.

3.2 Population of the Study

According to Burns and Grove (1993), a population is defined as all elements (individuals, objects and events) that meet the sample criteria for inclusion in a study.

The research was carried out in the Kumasi Metropolis and the study population consisted of all students of T. I. Ahmadiyya Senior High School, Kumasi. In this study, the target population was all the students of T. I. Ahmadiyya Senior High School. However, the accessible population was all form three science students; totaling about 350 students.

3.3 Sample and Sampling Techniques

Mouton (1996) defines sample as elements selected with the intentions of finding out something about the total population from which they are taken. A sample is thus a subset of a population. The respondents included in the sample were selected to meet a specific criterion. The respondent must:

- be a student of T. I. Ahmadiyya Senior High School, Kumasi
- be mentally sound in order to consent to participation and answer questions fairly and reasonably.

The reason why samples are important is that within many models of scientific research, it is impossible (from both a strategic and a resource perspective) to study all the members of a population for a research project. It just costs too much and takes too much time. Instead, a selected few participants (who make up the sample) are chosen to ensure that the sample is representative of the population. In this study, the sample size for this study was 60. The sample consisted of 60 respondents, thus 17.1% of the subjects were selected for the study. This is consistent with the suggestion of Asamoah-Gyimah and Duodo (2007) that for quantitative studies, a sample size of 10% to 30% of the population size is sufficient for generalization purpose.

In selecting the sample for the study, the purposive sampling technique was adopted. This sampling technique enabled the researcher to select the individuals who had phone with WhatsApp messenger and also had adequate indepth knowledge about the use of WhatsApp. Based on this, the researcher was able to collect the relevant data to answer the formulated research questions.

3.4 Research Instruments

The researcher developed the questionnaire based n the literature review. In this study, a questionnaire was administered to collect relevant and appropriate data on the use and effects of WhatsApp on the academic performance of students in T. I. Ahmadiyya Senior High School in Kumasi metropolis. The questionnaire was divided into three sections: A, B, C and D. Section A was designed to elicit information on respondents' background attributes like gender, age, form and residual status. Section B had five items on students' use of WhatsApp (E.g. chat on social issues, making new friends etc). Section C had five items that dealt with challenges students face when using WhatsApp (E.g. unsolicited messages, spending more money etc.). Section D had seven items that sought to find out the students' perception about the use and effects of WhatsApp on their academic activities (e.g. academic performance has decline since started using WhatsApp, spend more time on WhatsApp than reading my books) (See Appendix A). Sections B, C and D of the questionnaire items were measured on five-point Likert –scale ranging from strongly disagree =1, disagree =2, neutral =3, agree =4 and strongly agree =5.

3.5 Validity and Reliability of Research Instrument

The validity of an instrument is the degree to which an instrument measures what it is intended to measure (Polit & Hungler, 2001). According to Bernard (2005), validity is the accuracy and meaningfulness of inference, which are based on the research results. The data collection instrument went through stages of scrutiny by my supervisor with the help of other experts to determine how best it could measure all the areas under study, ensure its accuracy, completeness and competency.

Polit and Hungler (2001) refer to reliability as the degree of consistency with which an instrument measures the attribute it is designed to measure. Reliability can be ensured by minimising errors like data collection bias.

Because the items in the research instrument were self-developed, their validity and reliability have to be re-established. As a result, the face and content validities of the instrument were determined by experts in instructional design and educational measurement and evaluation. In determining the face validity of the instrument, the structure, layout, alignment and configuration of the questionnaire examined. After the approval was given to the administration the questionnaire, the researcher conducted a pilot-testing of the instrument before the actual data collection took place. The instrument was pilot-tested to a sample of 20 students from Anglican Senior High School who was purposively selected. Anglican Senior High School students were selected because those students had similar characteristics with students of T. I. Ahmadiyya Senior High School students. The 20 students selected from Anglican Senior High School for the pilot-test were asked to complete the questionnaire items and to provide comments or suggestions for revising any ambiguous items.

The final questionnaire for the study (See Appendix A) was produced after analysis of the pilot-test data and subsequent revisions in the wording of a few items. From the pilot-test, the reliability coefficients of the instrument yielded high reliability of 0.81. According to Fraenkel and Wallen (2000), a reliability coefficient of 0.78 is acceptable for most instruments. Based on this, the researcher accepted the instrument as reliable and appropriate for the study and continued with its administration after few revisions to the some of the items in the questionnaire.

3.6 Data Collection Procedure

Before the questionnaire was distributed to the sampled students, the researcher visited the T. I. Ahmadiyya Senior High School with introductory letter which was obtained from the Department of Educational Leadership, University of Education, Winneba introducing the researcher as MA degree candidate who is undertaking this research. With this permission, the researcher delivered the questionnaires personally to the respondents in their classroom. This offered opportunity to the researcher to establish rapport with respondents to explain the purpose of the study and the items that may not be clear. The researcher informed the respondents that the study was for academic purposes only and that their confidentiality would be assured which to some extent motivated them to give their responses without reservation. Consequently, the researcher administered the questionnaires to the respondents to which took them about 25 minutes to complete. In all, a total of 60 questionnaires administered and were retrieved from them; making the return rate of 100%.

3.7 Data Analysis Procedure

Data collected was processed by editing, coding and tabulation. Editing was carried out to detect and eliminate errors in the data. The data were entered into SPSS. Data was also analyzed in line with the research questions stated in chapter one. The analysis of the data employed quantitative techniques. Descriptive statistics such as frequency, tables and charts were used to describe the variables in the study.

3.8 Ethical Considerations

In studies involving human respondents or participants, ethical issues are bound to arise and this research was not an exception. The ultimate aim of the ethical process is to protect the human dignity of the participants in the study. An application for the approval of this research was submitted to the Headmaster (school's administration) and approval was given for the study to be conducted. To protect the identity of the students, names were not required in answering the questionnaires. All individuals/respondents were assured of strict confidentiality and they were asked to fill the questionnaire. Each question on the questionnaire was explained to each respondent.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF RESULTS

4.0 Introduction

The chapter covers the presentation and discussions of the data used in this research work. The objectives of the research were to identify the uses of WhatsApp messenger by the students, identify the challenges students face with the use of WhatsApp and identify the students' perception on the use of WhatsApp.

4.1 Demographic Distribution of Respondents

The demographic analysis of the respondents looked at the gender of the respondents, age distribution, residential status and class level and Table 4.1 highlights this

Table 4.1 : Demographic Data on Respondents (N=60)

Variables	Frequency	Percentage (%)
Sex		
Male	26	43.33
Female	34	56.66
Age (in years)		
Below 15	3	5.00
15 – 18	53	88.33
Above 18	4	6.66
Residential Status		
Day	3	5.00
Boarding	57	95.00
Class Level		
Science A	14	23.33
Science B	23	38.33
Science C	23	38.33

From Table 4.1, the male participants were about 43.33% whereas the female participants were about 56.66%. This indicated that majority of the respondents was

female. With regard to the age distribution of the respondents, the dominant age group of the respondents ranged between 15-18 years representing 53 (88%), followed by 18 years and above representing 4 (6.66%) while below 15 years recorded the smallest group, representing 3 (5%) of the respondents.

On the students' residential status, about 95 % of the respondents are in the boarding house while 5 % of the respondents are day students. This implies that minority of the respondents can have access to smart phones after classes. Regarding the level of the respondents, about 23.33% of participants were from Science A, 38.33% of them were from Science B and 38.33% of the students were from Science C. This means that majority of the respondents representing 76.66% was from Science B and C.

4.2 Presentation and Discussion of Research Question One: What do Senior High School (SHS) students use WhatsApp messenger for?

The purpose of this research question was to find out what students' use WhatsApp messenger for. In all, five items were generated in which students were asked to indicate their agreement or disagreement with the statements relating to the purpose of using WhatsApp messenger. Table 4.2 highlights the responses of the respondents.

Table 4.2: Respondents' Uses of WhatsApp Messenger

Statement	Responses									
	SD		D		N		A		SA	
	F	%	F	%	F	%	F	%	F	%
Chat on social issues	10	17	11	18	5	8	18	30	16	27
To discuss your assignment	6	10	9	15	2	3	20	33	23	38
To ask teachers about topics you don't understand	12	20	8	13	2	3	20	33	18	30
Chat for no specific issue	14	23	18	30	6	10	18	30	4	7
For making new friends	5	8	7	12	3	5	26	43	19	32
Total	9	15	11	18	4	7	20	33	16	27

Source: Fieldwork 2018

The Table 4.2 showed the respondents' responses on the uses of WhatsApp application. Seventeen percent (17 %) of the respondents strongly disagreed that they use WhatsApp to chat on social issues. Eighteen percent (18 %) disagreed that they use WhatsApp to chat on social issues. Eight percent (8 %) stayed neutral on the use of WhatsApp to chat on social issues. Thirty percent (30 %) of the respondents agreed that they use WhatsApp to chat on social issues. Twenty-seven percent (27 %) strongly agreed that they use WhatsApp to chat on social issues.

Again, 10 % of the respondents strongly disagreed that they use WhatsApp to discuss their academic assignments. Fifteen percent (15 %) disagreed that they use what to discuss their academic assignments. Three percent (3 %) stayed neutral on the use of WhatsApp to discuss academic assignments. Thirty-three percent (33 %) of the respondents agreed that they use WhatsApp to discuss their academic assignments.

Thirty-eight (38 %) of the respondents strongly agree that they use WhatsApp to discuss their academic assignments.

Twenty percent (20 %) of the respondents strongly disagree that they use WhatsApp to ask teachers about topics they don't understand. Thirteen percent (13 %) disagreed that they use WhatsApp to ask teachers about topics they don't understand. Three (3 %) stayed neutral on the use of WhatsApp to ask teachers about topics they don't understand. Thirty-three percent (33 %) of the respondents agreed that they use WhatsApp to ask teachers about topics they don't understand. Thirty percent (30 %) of the respondents strongly agreed that they use WhatsApp to ask teachers about topics you don't understand.

Twenty-three percent (23 %) of the respondents strongly disagreed that they use WhatsApp to chat for no specific issue. Thirty percent (30 %) disagreed that they use WhatsApp to chat for no specific issue. Ten percent (10 %) stayed neutral on the use of WhatsApp to chat for no specific issue. Thirty percent (30 %) of the respondents agreed that they use WhatsApp to chat for no specific issue. Seven percent (7 %) of the respondents strongly agreed that they use WhatsApp to chat for no specific issue.

Eight percent (8 %) of the respondents strongly disagreed that they use WhatsApp to make new friends. Twelve percent (12 %) disagreed that they use WhatsApp to make new friends. Five percent (5 %) stayed neutral on the use of WhatsApp to make new friends. Forty-three percent (43 %) of the respondents agreed that they use WhatsApp to make new friends. Thirty two percent (32 %) of the respondents strongly agreed that they use WhatsApp to make new friends.

In summary, 33% of the respondents either strongly disagreed or disagreed with the uses of the WhatsApp messenger, while 7% of them were indifferent with the uses of WhatsApp. On the other hand, 60% of the respondents either agreed or strongly agreed with the uses of the WhatsApp messenger. This indicates that majority of the respondents were in agreement that WhatsApp messenger is very useful. Figure 1 shows this.

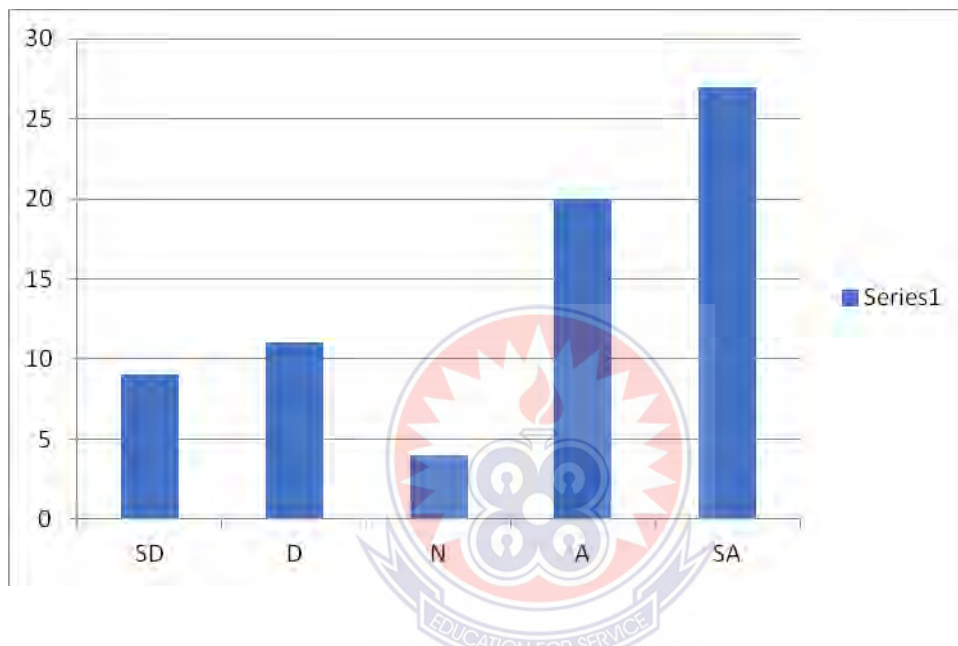


Figure 1: Overall Responses of the Respondents on the use of WhatsApp Messenger

The current finding that WhatsApp messenger is useful with respect to discussions of assignments, making (new) friends and for chatting on social issues is consistent with the previous research findings of Lenhart (2007), Devi and Tevera (2014), Echheverria, Calderon, Nussbaum, Infante and Bravo (2011), Patient (2013), Yeboah and Ewur (2014) and Solomon and Schrum (2007). For instance, in a study on the students' uses of WhatsApp messenger, Echheverria et al. (2011) indicated that students use WhatsApp to develop their communication through forums, discussions and information sharing during their studies. Similarly, the present finding affirmed the claim made by

Solomon and Schrum (2007) that WhatsApp messenger provides a strong conversation platform to everyone and also promotes information and knowledge unconsciously.

Malecela (2016) carried out a study entitled “Usage of WhatsApp among Postgraduate Students of Kulliyah of Education, International Islamic University Malaysia”. The study explored the impact of using of WhatsApp among postgraduate students’ learning at the Kulliyah of Education (KOED), at International Islamic University Malaysia (IIUM). The study resulted into that using WhatsApp as learning tool is useful to both students and instructors. The study suggested that electronic etiquette should be applied in teacher student learning process through WhatsApp. Patil (2015)¹⁰ in the paper, “Usage of WhatsApp messenger amongst post-graduate students in a university environment: A study of Karnataka State Women’s University” based on a survey of post-graduate students of Karnataka State Women’s University, Vijayapura identifies PG students’ conceptualization and usage of WhatsApp Messenger. He explored that WhatsApp messenger is used by a greater majority of post-graduate students quite regularly for educational purposes.

The study discussed the role of library in mobile learning. He suggested that university must integrate the mobile technology into learning process so that a platform can be created to share the digital information. One of the possible reasons why most of the respondents agreed to the usefulness of the WhatsApp messenger is that WhatsApp messenger is very common and accessible to most of the respondents and also, it is very simple to use. As noted by Yeboah and Ewur (2014) that WhatsApp messenger can be used to communicate anywhere and at any time, hence it is commonly used by students in both developed and developing countries around the globe.

4.3 Presentation and Discussion of Research Question Two : What are the challenges students face with the Use of WhatsApp Messenger?

The purpose of this research question was to identify the challenges students face with the use of WhatsApp. In all, five items were generated in which students were asked to indicate their agreement or disagreement with the statements relating to the challenges they face with the use of WhatsApp messenger. Table 4.3 shows the results.

Table 4.3: Challenges students face with the Use of WhatsApp Messenger

Statement	Responses									
	SD		D		N		A		SA	
	F	%	F	%	F	%	F	%	F	%
Spends more money	4	7	6	10	2	3	25	42	23	38
Disturbances from other friends	4	7	7	12	4	7	22	37	23	38.33
Unsolicited messages	3	5	5	8	7	12	21	35	25	23
Time	4	7	8	13	2	3	23	38	23	38
Distraction	3	5	9	15	5	8	23	38	20	33
Total	4	7	7	12	4	7	23	38	23	38

Source: Fieldwork 2018

The Table 4.4 shows that 7 % of the respondents strongly disagree that they spend more money on WhatsApp. Ten percent (10 %) of the respondents disagreed that they spend more money on WhatsApp. Three percent (3 %) of the respondents stayed neutral. Forty-two percent (42 %) of the respondents agreed that they spend more money on WhatsApp. Thirty-eight percent (38 %) of the respondents strongly agreed that they spend more money on WhatsApp.

Seven percent (7 %) of the respondents strongly disagreed that the use of WhatsApp results in disturbances from their friends. Twelve percent (12 %) of the

respondents disagreed that the use of WhatsApp results in disturbances from their friends. Seven percent (8 %) of the respondents stayed neutral. Thirty-seven percent (37 %) of the respondents agreed that the use of WhatsApp results in disturbances from their friends. Thirty eight percent (38.%) of the respondents strongly agreed that the use of WhatsApp results in disturbances from their friends. Five percent (5 %) of the respondents strongly disagreed that the use of WhatsApp results in unsolicited messages. Eight percent (8 %) of the respondents disagreed that the use of WhatsApp results in unsolicited messages. Twelve percent (12 %) of the respondents stayed neutral. Thirty-five percent (35 %) of respondents agreed that the use of WhatsApp results in unsolicited messages. 23 % of the respondents strongly agree that the use of WhatsApp results in unsolicited messages.

Seven percent (7 %) of the respondents strongly disagreed that the use of WhatsApp eats into the time for other things.

Thirteen percent (13 %) of the respondents disagreed that the use of WhatsApp eats into the time for other things. Three percent (3 %) of the respondents stayed neutral. Thirty-eight percent (38 %) of the respondents agreed that the use of WhatsApp eats into the time for other things. Thirty-eight percent (38 %) of the respondents strongly agreed that the use of WhatsApp eats into the time for other things.

Five percent (5 %) of the respondents strongly disagreed that the use of WhatsApp is a distraction. Fifteen percent (15 %) of the respondents disagreed that the use of WhatsApp is a distraction. Eight percent (8 %) of the respondents stayed neutral. Thirty-eight percent (38 %) of the respondents agreed that the use of WhatsApp is a distraction. Thirty-three percent (33 %) of the respondents strongly agreed that the use of WhatsApp is a distraction.

In summary, 17% of the respondents either strongly disagreed or disagreed with the challenges students face with the use of WhatsApp messenger, while 7% of them were indifferent with the challenges students face with the use of WhatsApp messenger. On the other hand, 76% of the either agreed or strongly agreed with the challenges students face with the use of WhatsApp messenger. Figure 2 shows this.

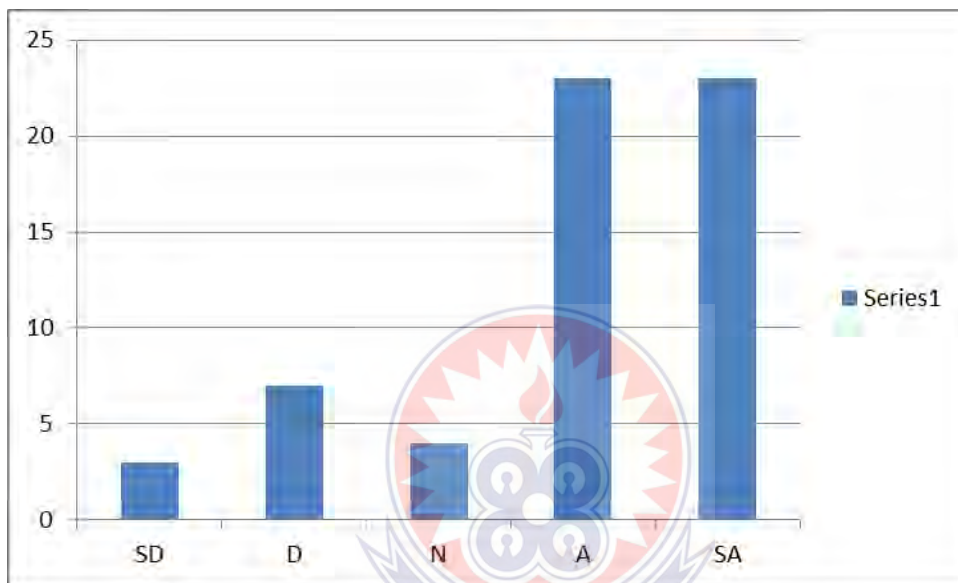


Figure 2: Overall Responses of the Respondents on the Challenges Students face with the use of WhatsApp Messenger

The current findings of with respect to the challenges students face with the use of WhatsApp messenger in connection with spend more money on WhatsApp, disturbance from other friends, unsolicited messages, waste of time and distraction is consistent with the previous research findings of Yeboah and Dominic (2014), Joicy and Sornam (2018). For instance, in a study on “The Impact of WhatsApp Messenger Usage on Students Performance in Tertiary Institutions in Ghana”, Yeboah and Domonic (2014), showed the negative impact upon students such as destruction of students’ spellings and grammatical construction of sentences, lack of concentration during

lectures results in unbalancing WhatsApp activities and academic preparation and distraction of students from assignment work et. Similarly, the present finding affirms the claim made by Johnson Yeboah and Ewur (2014), that WhatsApp takes much of students study time, results in procrastination related problems, destroys students spellings and grammatical construction of sentences, leads to lack of concentration during lectures, results in difficulty in balancing online activities (WhatsApp) and academic preparation and distracts students from completing their assignments and adhering to their private studies time table. Similarly, in a study conducted by Englander et al., (2010), he observed that students spend more time using SNSs for other purposes apart from educational use, thus affecting their academic performance. In another study, Nalwa and Anand (2003), shows that students like to use internet for their own responsibilities and this affects their academic performance. This study is further elaborated by Karpinski (2009), where they stated that SNSs users had lower grade rankings than students who never engage in social interactions.

4.4: Presentation and Discussion of Research Question Three: What are the students' perceptions about the use and effects of WhatsApp Messenger on their academic performance?

The purpose of this research question was to identify the students' perception about the use and effects of WhatsApp messenger on their academic performance. In all, six items were generated in which students were asked to indicate their agreement or disagreement with the statements relating to their perception about the use and effects of

WhatsApp messenger on their academic performance. Table 4.4 highlights the responses of the students.

Table 4.4: Students' Perception about the Use and Effects of WhatsApp Messenger on their Academic Performance?

Statement	Responses									
	SD		D		N		A		SA	
	F	%	F	%	F	%	F	%	F	%
Spend more time on WhatsApp than reading your books	22	37	15	25	1	2	6	10	16	27
Spend more hours on WhatsApp than lessons	25	42	16	27	1	2	8	13	10	17
Use WhatsApp to discuss social issues than academic	17	28	13	22	1	2	19	32	10	17
Academic performance has declined since you started using WhatsApp	11	18	23	38	3	5	11	18	12	20
Study better using WhatsApp to any other means	15	25	15	25	6	10	16	27	9	15
WhatsApp has improved you academically	18	30	14	23	5	8	16	27	7	12
Total	18	30	16	27	2	3.3	13	22	11	18.33

Source: Fieldwork 2018

The Table 4.4 depicts that 37 % of the respondents strongly disagree that they spend more time on WhatsApp than reading their books and this influence their academic performance. Twenty-five percent (25 %) of the respondents disagree that they spend more time on WhatsApp than reading their books and this influence their academic performance. Two percent (2 %) of the respondents are not sure that they spend more

time on WhatsApp than reading their books. Ten percent (10 %) of the respondents agree that they spend more time on WhatsApp than reading their books. Twenty-seven percent (27 %) of the respondents strongly agree that they spend more time on WhatsApp than their books.

Forty-two percent (42 %) of the respondents strongly disagree that they spend more hours on WhatsApp than their lessons and this influence their academic performance. Twenty-seven percent (27 %) of the respondents disagree that they spend more hours on WhatsApp than their lessons and this influence their academic performance. Two percent (2 %) of the respondents stayed neutral that they spend more hours on WhatsApp than their lessons. Thirteen percent (13 %) of the respondents agree that they spend more hours on WhatsApp than their lessons. Seventeen percent (17 %) of the respondents strongly agree that they spend more hours on WhatsApp than their lessons. Twenty-eight percent (28 %) of the respondents strongly disagree that they use WhatsApp to discuss social issues than their academic work and this influence their academic performance. Twenty-two (22 %) of the respondents disagree that they use WhatsApp to discuss social issues than their academic work and this influence their academic performance. Two percent (2 %) of the respondents stayed neutral that they use WhatsApp to discuss social issues than their academic work. Thirty-two (32 %) of the respondents agree that they use WhatsApp to discuss social issues than their academic work. Seventeen percent (17 %) of the respondents strongly agree that they use WhatsApp to discuss social issues than their academic work.

Eighteen percent (18 %) of the respondents strongly disagree that their academic performance has declined since they started using WhatsApp and this influence their

academic performance. Thirty-eight percent (38 %) of the respondents disagree that their academic performance has declined since they started using WhatsApp and this influence their academic performance. Five percent (5 %) of the respondents stayed neutral that their academic performance has declined since they started using WhatsApp. Eighteen percent (18 %) of the respondents agree that their academic performance has declined since they started using WhatsApp. Twenty percent (20 %) of the respondents strongly agree that their academic performance has declined since they started using WhatsApp.

Twenty five percent (25 %) of the respondents strongly disagreed that they study better using WhatsApp to any other means and this influence their academic performance. Twenty five percent (25 %) of the respondents disagreed that they study better using WhatsApp to any other means and this influence their academic performance. Ten percent (10 %) of the respondents stayed neutral that they study better using WhatsApp to any other means. Twenty-seven percent (27 %) of the respondents agreed that they study better using WhatsApp to any other means. Fifteen percent (15 %) of the respondents strongly agreed that they study better using WhatsApp to any other means.

Thirty percent (30 %) of the respondents strongly disagreed that the use of WhatsApp has improved their academic work and this has influenced their academic performance. Twenty-three percent (23 %) of the respondents disagreed that the use of WhatsApp has improved their academic work and this has influenced their academic performance. Eight percent (8 %) of the respondents stayed neutral that the use of WhatsApp has improved their academic work. Twenty-seven (27 %) of the respondents agreed that the use of WhatsApp has improved their academic work. Twelve percent (12

%) of the respondents strongly agreed that the use of WhatsApp has improved their academic work.

In summary, about 57% of the respondents either strongly disagreed or disagreed with the students' perception about the use and effects of WhatsApp messenger, while 3% of them were indifferent with the students' perception about the use and effects of WhatsApp messenger. On the other hand, 40% of the respondents either agreed or strongly agreed with the students' perception about the use and effects of WhatsApp messenger. This implies that most of the respondents were in agreement that integration of WhatsApp messenger in education helped them to study better to any other means and has also improved them academically. Figure 3 shows this.

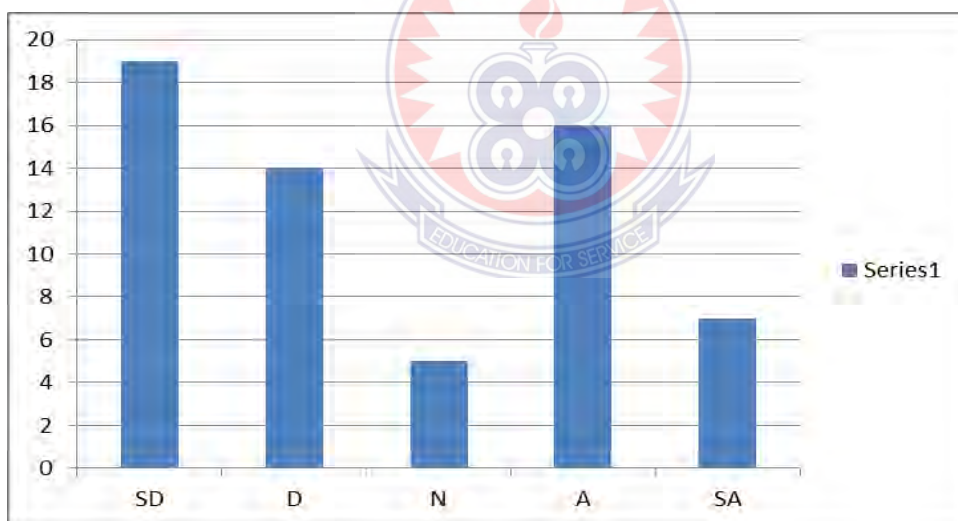


Figure 2: Overall Responses of the Respondents on the Students' Perception about the Use and Effects of WhatsApp messenger.

The current findings of the students' perception about the use and effects of WhatsApp with respect to spend more time on WhatsApp than reading books, spend

more hours on WhatsApp than lessons, use WhatsApp to discuss social issues, study better using WhatsApp to any other means and for academic improvement is in line with the previous research findings of Joicy and Sornam (2018). Their study affirmed that participants had access to smart phones for WhatsApp. The use of WhatsApp was common among participants. The participants perceived the integration of WhatsApp into their education to be easy, fun and useful. They had positive feelings and intentions about using WhatsApp in their formal learning if it is introduced.



CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

This study was conducted for the purpose of determining the effects of the use of WhatsApp on the academic performance of students in Senior High Schools in Ghana. It was also to identify the uses of WhatsApp messenger by the students, assess the influence of the use of WhatsApp on the academic performance of students and identify the students' perception on the use of WhatsApp. The quantitative method of research was utilized. The data were collected from the designed questionnaire. Sixty students were randomly selected from T. I. Ahmadiyya Senior High School, Kumasi. The data collected were coded and presented using tables and charts. Percentages were used in analyzing the data. The data presentation and the analyses were grouped into sections; the demographic distribution of respondents, students' uses of WhatsApp, influence of use of WhatsApp on academic performance, students' perception of the uses of WhatsApp, and the frequency of the uses WhatsApp.

The study revealed the following key findings:

1. That majority of the respondents were in agreement that WhatsApp messenger is very useful
2. Some of them are of the view that indiscriminate usage of WhatsApp leads to poor academic performance.
3. Majority of the respondents had positive feelings and intentions about using WhatsApp in their formal learning if it is introduced.

5.2 Conclusion

Based on the key findings from the study, the following conclusions have been drawn. Firstly the finding that respondents“ agreed to the usefulness of the WhatsApp messenger suggests that the students are more likely to use it during teaching and learning process. Secondly, the finding that students use WhatsApp for other social activities Indicates that their academic performance would be affected negatively.

5.3 Recommendations

Based on the key findings and conclusions drawn, the following recommendations are made:

Firstly, parents, classroom teachers, counselors and other significant educational stakeholders should encourage WhatsApp subscribers who are students to make sure that they utilize the platform for disseminating only educational information to their colleagues.

Secondly, students should be encouraged to utilize WhatsApp in a manner that will promote their academic performance positively. They should be encouraged to create educational groups and see how to use that to enhance their academic growth and worth.

Thirdly, School counselors should endeavor to give orientation to students on the effective or positive use of WhatsApp.

5.4 Suggestions for Further Studies

The generalization of the findings in this current study to the larger population is generally limited due to the small sample and its single case nature. Hence, it is suggested that future research studies in this academic area should include other senior high schools across the length and breadth of Ghana. Moreover, further studies should also consider the influence of demographic information such as gender, class level etc on the students' use and effects of WhatsApp on their academic performance.



REFERENCES

- Ahmed, S. (2018). WhatsApp messenger usage patterns among students in Karachi: A sociological study. *Journal of Information and Communication Technology*, 12(1), 28 -36.
- Asamoah-Gyimah, K., & Duodo, F. (2005). *Introduction to research methods in education*. Winneba: The Institute for Educational Development and Extension.
- Awada, G. (2016). Effect of WhatsApp on critique writing proficiency and perceptions toward learning. *Cogent Education*, 3(1), 2-18. Retrieved November 10, 2018 from <http://research.becta.org.uk/uploaddir/downloads/page-documents/research/web2-technologies-learning.pdf> (last accessed 7th January 2010). Available at: <http://www.utdallas.edu/mrankin/twitterconclusions.htm> (last accessed 7th January 2010).
- Barhoumi, C. (2015). The effectiveness of WhatsApp mobile learning activities guided by activity theory on students' knowledge management. *Contemporary Educational Technology*, 6(4), 221-238.
- Beebe, S. A., & Masterson, J. T. (2003). *Communication in small groups* (7th ed.). Boston: Pearson Education.
- Church, K., & de Oliveira, R. (2013). *What's up with whatsApp? Comparing mobile instant messaging behaviours with traditional SMS*. Proceeding of the 15th Int. Conf. on Human-Computer Interaction with Mobile Devices and Services, ACM, 352-361.

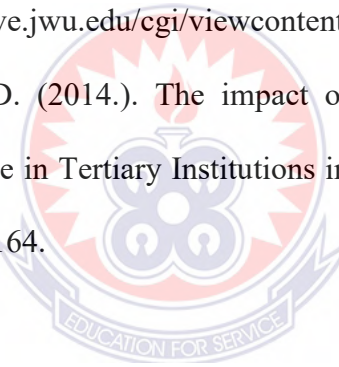
- Colley, A., & Maltby, J. (2008). Impact of the internet on our lives: Male and female personal perspectives. *Computers in Human Behaviour*, 24, 23-34.
- Crook, C. (2008). *Web 2.0 technologies for learning: The current landscape-opportunities, challenges, and tensions*. Becta Research Report, Becta, Coventry.
- Deloitte (2009). *The effects of gender, ethnicity, and income on College students' use of communication*. South Africa: University Press.
- Devine, (2003). *Qualitative research in education: Forms, methods and strategies*. Lewes: Falmer Press.
- Eyadat, Y. (2016). *Status of Whatsapp applications usage by the information technology and computer science students at Yarmouk University in Jordan*. INTED2016 Proceedings, doi:10.21125/inted.2016.1862.
- Fraenkel, J. R., & Wallen, N. E. (2000). *How to design and evaluate research in education* (4th ed.). USA: McGraw-Hill Companies Inc.
- Gasaymeh, A. M. (2017). University students' use of WhatsApp and their perceptions regarding its possible integration into their education. *Global Journal of Computer Science and Technology*, 17(1), 1-9.
- Greenhow, C., Robelia, B., & Hughes, J. (2009). *Learning, teaching, and scholarship in a digital age: Web 2.0 and classroom research: What path should we take now?* *Educational Researcher*, 38(4), 246.
- Greenwald (2009). *The effect of whatsapp messenger usage among students in Mangalore university: A case study*. London: Prentice-Hall.
- Gross, R., & Acquisti, A. (2005). *Information revelation and privacy online social networks*. Paper presented at the WPES'05, Alexandria, Virginia.

- Haryana, K. (2017). A study. *International Journal of Information movement*, 1(10), 23-30.
- Hay, L. (2011). *Social media sites affecting students and their study habits*. London: Prentice-Hall.
- Helen, N. E., Charles, O. O., & Jennifer, N. O. (2014). *The use of social networking sites among the undergraduate students of University of Nigeria, Nsukka*, "Library Philosophy and Practice (e-journal).
- Horrigan, J. (2009). The mobile difference: *Wireless connectivity has drawn many users more deeply into digital life*. Washington, DC: Pew Internet & American Life Project. Retrieved on 3/5/18 from <http://www.jisc.ac.uk/media/documents/publications/heweb20rptv1.pdf> (last accessed 7 January 2010).
- Hughes, A. (2009). *Higher education in a Web 2.0 world*. JISC Report. Retrieved on 8/9/18 from <http://www.pewinternet.org/~media/Files/REports/200The-Mobile-Difference.pdf>.
- Ijeoma, E. E., & Tusiima, V. S. (2017). Influence of whatsapp and facebook social media usage on academic performance of secondary school students in Port Harcourt local government area, Rivers State, Nigeria. *IOSR Journal of Humanities and Social Science*, 22(12), 7 -13.
- Joicy, J., & Sornam, A. (2018). *Perception of whatsapp usage among students of college of excellence: A case study*. London: Prentice-Hall.

- Junco, R., Merson, D., & Salter, D. W. (2010). The effects of gender, ethnicity, and income on College students' use of communication. *Cyber psychology, Behavior and Social Media*, 13(6), 34-56.
- Koontz, & Wehrich, (1988). *People management in small and medium-sized enterprises- Issues in people management*. London: Institute of Personnel and Development.
- Krishnan, & Hunt, D. S. (2015). Influence of a multidimensional measure of attitudes on motives to use social networking sites. *Cyber psychology, Behavior, and Social Networking*, 18(3), 165-172.
- Lee, C. Y. (2016). *Adoption of WhatsApp instant messaging among students in Ipoh Higher education institutions*. Unpublished project report, Wawasan Open University Penang, Malaysia, pp. 1-102.
- Livingstone, S. (2008). *Taking risky opportunities in youthful content creation: teenagers' use of social media sites for intimacy, privacy and self-expression*. London: Prentice-Hall.
- Madden, M. (2011). *State of social media*. Presented at the National Programmer's Workshop, U.S. State Department's Bureau of Educational and Cultural Affairs, Washington, DC. *New Media & Society*, 10(3), 393 Retrieved on 13/8/18 from [one%e2%80%99s-academic performance- adversely](#).
- Maheswari, P. V. (2014). Frequency of using whatsapp messenger among college students in Salam District, Tamil Nadu. *International Journal of Computer Science and Mobile Applications*, 2(7), 12 -22.
- Malecela, I. O. (2016). *Usage of WhatsApp among postgraduate students of Kulliyah of Education, International Islamic University Malaysia*: University Press.

- Malecela, I. O. (2016). Usage of WhatsApp among Postgraduate Students of Kulliyah of Education, International Islamic University Malaysia. *International Journal of Advanced Engineering Research and Science*, 3(10), 126-137.
- Minhas, S. Ahmed, M., & Ullah, Q. F. (2016). Usage of WhatsApp: A study of University Of Peshawar, Pakistan. *International Journal of Humanities and Social Science Invention*, 5(7), 71-73.
- Nitza, D., & Roman, Y. (2016). WhatsApp messaging: Achievements and success in academia. *International Journal of Higher Education*, 5(4), 255-261.
- Patil, S. (2015). *Usage of WhatsApp messenger amongst postgraduate students in a University environment. A case study of Karnataka State Women's University.*
- Rankin, M. (2009). *Some general comments on the 'twitter experiment'*. South Africa: Monica Rankin.
- Sahu, S. (2014). An analysis of WhatsApp forensics in android smartphones." *International Journal of Engineering Research*, 3(5), 349-350.
- Statista, R. (2017). *Number of monthly active WhatsApp users worldwide from April 2013 to January, 2018 (in millions),*" [Online]. Available: <https://www.statista.com/statistics/260819/number-of-monthly-active-whatsapp-users/> 43, Retrieved: June 8.
- Stefko, R., & Mudrik, M. (2016). *Using social networks to create and share experiences in creative tourism.* Iran: Rahim Press
- Tuckman, P. (1975). Teacher effectiveness and student performance. *Journal of Economic of Educate*, 7(1), 34-39.

- Veena, G. & Loksha, M. (2016). The effect of whatsapp messenger usage among students in Mangalore university: A case study. *International Journal of Library and Information Studies*, 6(2), 121 -129.
- Vijayapura, T. (2015). Usage of whatsapp messenger amongst post-graduate students in a university environment: A study of Karnataka State Women's university. *International Journal of Multidisciplinary Research and Development*, 2(11), 591-594.
- Wang, Q., Chen, W., & Liang, Y. (2011). *The effects of social media on college students*. London: Johnson & Wales University. Retrieved on 6/9/18 from <http://scholarsarchive.jwu.edu/cgi/viewcontent.cgi?artic>
- Yeboah, J. E., & Ewur, D. (2014.). The impact of WhatsApp messenger usage on students performance in Tertiary Institutions in Ghana. *Journal of Education and Practice*, 5(6), 157-164.



APPENDIX A

UNIVERSITY OF EDUCATION, WINNEBA – KUMASI CAMPUS QUESTIONNAIRE TO SENIOR HIGH SCHOOL STUDENTS IN KUMASI

Thesis Topic: Assessing the Student Use and Effects of WhatsApp on the Academic Performance of SHS students in T. I. Ahmadiyya SHS, Kumasi

This questionnaire is designed to solicit information on the above topic for the purpose of producing a master's dissertation. Please be assured that respondent's confidentiality is of paramount concern to the researcher. In view of this please answer the questions in your candid and objective opinion as possible.

SECTION A

Demographic Data of Respondents

(tick appropriate box)

1. Form SHS 1 SHS 2 SHS 3

2. Status at school: Boarder Day

3. Sex of respondent:

i. Male ii. Female

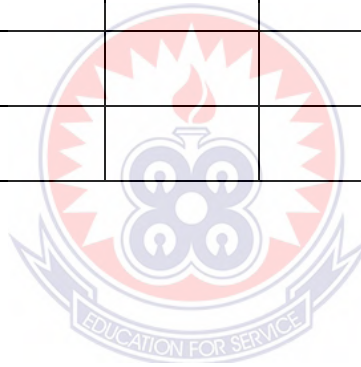
4. Age of respondent:

i. Below 15 15 – 18 Above 18

SECTION B

What are the uses of WhatsApp by students in SHS?

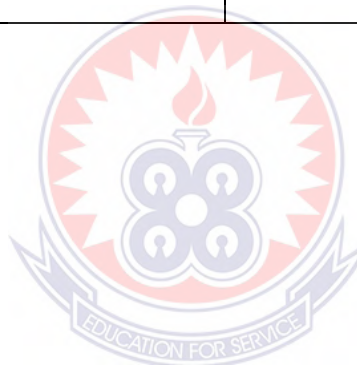
Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Chat on social issues?					
To discuss your assignment?					
To ask teachers about topics you do not understand?					
Chat for no specific issue?					
For making new friends					
Grand Mean					



SECTION C

Challenges Students Face With the Use of WhatsApp

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Spends more money					
Disturbances from other friends					
Unsolicited messages					
Time					
Distraction					



SECTION D

Student's perception about the use and effects of WhatsApp on their academic activities.

How much do you agree to the following statements?	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Spend more time on WhatsApp than reading your books					
Spend more hours on WhatsApp than lessons					
Use WhatsApp to discuss social issues than academic					
Your academic performance has declined since you started using WhatsApp					
Study better using WhatsApp than any other means					
WhatsApp has improved my academic performance					