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**THE USE OF SMS AND WHATSAPP TEXT MESSAGES AS A MODE OF
COMMUNICATION AMONG THE YOUTH- A CASE STUDY OF
ACCRA TECHNICAL UNIVERSITY**

BY

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DEDICATION

This dissertation is dedicated to God Almighty who has made it possible for me to come this far and of course to my family who supported me in diverse ways. Their support has been a source of strength for me in writing this dissertation.

STUDENT'S DECLARATION

STUDENT'S DECLARATION

I hereby declare that this dissertation is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature.....

Date..... 7 / 12 / 2021

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SUPERVISOR'S DECLARATION

SUPERVISOR'S DECLARATION

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with guidelines on supervision of dissertation laid down by Ghana Institute of Journalism (GIJ).

Supervisor's Signature.....*Mavis Essandoh*.....

Date.....*7/12/21*.....

Name: Dr. Mrs. Mavis Essandoh

ABSTRACT

The purpose of this study was to ascertain the motivations of using Short Message Service (SMS) and *WhatsApp* as a mode of communication, identify some of the purposes of using Short Message Service and *WhatsApp* and also assess how the use of Short Message Service and *WhatsApp* influence the mode of communication among students of Accra Technical University. A qualitative method was adopted for the study and a purposive sampling technique was used in selecting respondents with a sample size of 35 youths. The instrument that was used in data collection was an interview guide, and data was analyzed by using a thematic approach. The study found that research participants were motivated to use both Short Message Service (SMS) and *WhatsApp* because it is easier, convenient and faster. They could also get free access to information as well as send and receive information. *WhatsApp* and Short Message Service (SMS) have influenced their mode of communication and social habits both positively and negatively. Respondents stated that some of the negative influence *WhatsApp* has had on them were that they had become anti-social; they had become less productive and lazy. They also used short hand in texting which has led to them misspelling of words in school. Findings also showed that *WhatsApp* and Short Message Service (SMS) had enhanced their academics as respondents have access to relevant information and study materials. It is therefore recommended that Mobile Network Operators (MNOs) will give special internet packages to students in educational institutions to be able to effectively use these platforms as a mode of communication. Lastly, I recommend *WhatsApp* to develop a feature that can support online meetings to help the youth in their communication and learning processes.

TABLE OF CONTENTS

Contents

ACKNOWLEDEMENTS	i
DEDICATION	ii
STUDENT’S DECLARATION	iii
SUPERVISOR’S DECLARATION.....	iv
ABSTRACT.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS	x
CHAPTER ONE	1
INTRODUCTION	1
1.0 Background	1
1.1 Statement of the Problem	5
1.2 Research Questions.....	5
1.3 Research Objectives.....	6
1.4 Scope of the Study	6
1.5 Significance of the Study.....	6
1.6 Theoretical Framework.....	7
1.7 Research Methodology	9
1.8 Data Sources	9
1.8.1 Sampling methods and Sample Size	9
1.8.2 Data Analysis	10
1.9 Ethical Issues	10
1.10 Organization of chapters.....	10
1.11 Chapter Summary.....	11
CHAPTER TWO	12
LITERATURE REVIEW AND THEORETICAL FRAMEWORK	12
2.0 Introduction	12
2.1 WhatsApp Instant Messaging	12

2.2 Theoretical Framework.....	13
2.3 Youth and WhatsApp	17
2.4 Benefits of online discussions in a collaborative learning approach	19
2.5 Effect of WhatsApp as an Application on Learning.....	20
2.6 Expectations for Communication.....	24
2.7 Chapter Summary	28
CHAPTER THREE	29
RESEARCH METHODOLOGY.....	29
3.0 Introduction	29
3.1 Research Design	29
3.2 Research Methods	30
3.3 Research Site.....	31
3.5 Research Instrument.....	33
3.6 Data Collection	34
3.7 Data Analysis	34
3.8 Chapter Summary	35
CHAPTER FOUR.....	36
DATA ANALYSIS AND DISCUSSION.....	36
4.0 Introduction	36
4.1 Bio-Data of the Participants.....	36
4.2 Discussion and Interpretation of Findings	48
CHAPTER FIVE	51
SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION	51
5.0 Introduction	51
5.1 Summary of Findings.....	51
5.3 Recommendations for policy	52
5.4 Recommendations for further research	52
5.5 Limitations of the Study	52
5.6 Conclusion.....	53
BIBLIOGRAPHY	54
APPENDIX.....	63

LIST OF TABLES

Table 1: Gender of Respondents	36
Table 2: The Main and Subthemes of the Motivations of The Use of <i>WhatsApp</i> and SMS as a Mode of Communication Among the Youth	37

LIST OF FIGURES

Figure 1: Conceptual Framework

8

LIST OF ABBREVIATIONS

- ATU - Accra Technical University
- SMS - Short Message Service
- WIFI - Wireless Fidelity
- FM - Frequency Modulation
- MNOs - Mobile Network Operators

CHAPTER ONE

INTRODUCTION

1.0 Background

Humans have found ways to revolutionize communication to make it more equipped to our ever-changing needs. Dating back to the times people used Neanderthal cave painting or only spoken word stories to the development of postal services, smoke signals, and handwritten manuscripts delivered by carrier pigeons, humans have gone through an evolution of communication patterns (Alsaleem, 2013). Humans throughout history have adapted to several modes of communication in relation to their external environment and culture (Thornton et al., 2019).

The study of communications through instant messaging based on modern platforms such as the Internet and cell phones have gained more and more ground in recent years (Ramirez Jr et al., 2008). A theoretical review of communication through modern real-time devices showed that online deliberations via the internet-based messaging services are not necessarily inferior to face-to-face ones (Min, 2007). This is evident in how we transmit messages via SMS and *WhatsApp text* expecting the receiver to respond via the same mode of communication. Young people have therefore embraced this popular culture of instant messaging in their daily interactions.

Empirical studies (such as Min, 2007, Rice, 1993), comparing face-to-face and internet-based instant messaging suggest that both online and face-to-face deliberations can increase participants' knowledge, efficacy, and willingness to participate in politics as well as social activities. There is a trend showing that mobile instant-messaging, usually in the form of short message service (SMS), is becoming very popular among cell phone users, especially young people (Ramirez Jr et al., 2008). This is as a result of the Short Message Service (SMS) accessibility and affordability among young people making it more convenient to send and receive messages.

Short Message Service (SMS) is described as the 'killer application of cell phones, based primarily on the fact that its usage has exceeded expectation (Markett et al., 2006). According to

the second annual AP-AOL Instant Messaging Trends Survey in 2007, 25% of respondents sent Short Message Service (SMS) from their cell phones, including one in three (32%) teens in America (Marketing Chart, 2007). This shows how young people are active when it comes to instant messaging using cell phones. Therefore, as more and more young people patronize these services, there is the likelihood that it would influence habits formed as time goes on in relation to modes of communication.

By using cell phone networks as the platform, Short Message Service (SMS) is characterized as instant (almost real-time in message delivery). It has also been characterized as cost-effective (very cheap in sending SMS locally and overseas), and a ubiquitous communication tool (Markett et al., 2006). It is therefore not surprising that young people have become used to SMS due to its accessibility and affordability in relation to cost of service. Short Message Service (SMS) usage among young people has become a lifestyle which enhances communication among their peers. The instantaneous nature of Short Message Service (SMS) makes it the best mode of communication amongst young people as they are able to send short messages across with feedback assured once the receiver receives the message sent earlier. Thus, allows people to alter plans spontaneously (Ling and Yttri, 1999) and to coordinate other forms of communication, such as., sending an SMS message to propose a subsequent telephone call or e-mail (Eldridge and Grinter, 2001). In using SMS, young people have become very adept at inventing their own, often private languages for more effective and intimate communications (Segerstad, 2005, Häkkinen and Chatfield, 2005). As a result, SMS is used to convey social or emotional content and is becoming more expressive and social in character (Kopomaa, 2000). This is very true; as most young people have developed a shorthand method of texting with few words that seem to convey to some extent the exact interpretation of the text.

We are gradually getting to a point that instant messaging through SMS has become a norm even in formal context as most e-learning platforms encourage students to send in brief comments in relation to educational projects (Coman, et. al, 2020). Texting is cited by most researchers as the most commonly used mode of communication by young people today (Coyne et al., 2011, Pettigrew, 2009, Skierkowski and Wood, 2012). With the advancement in mobile communication technology, platforms have come up and have been adopted by many who find them appealing. One of these platforms is *WhatsApp*, whose adoption rate has enormously grown

from its inception in 2009, with the current number of users surpassing 1 billion in over 180 countries (Ali et al., 2019, p.657).

In this day and age, *WhatsApp* is currently the leading instant messaging application globally after they hit the target of 1 billion people in their user base especially among young adults (Goodwin, 2020). *WhatsApp* is a social media application which involves direct messaging as well as sharing media including voice messages, videos, and photos among others (Steele, 2014). The innovative features of *WhatsApp* overwhelm most young people and its very attractive as one gets addicted to these features and their unique functions. In Ghana, most young people have access to *WhatsApp* as a means of communication for educational purposes, entertainment, social lifestyle and other latent functions (Dadzie, 2019).

A reason behind the continuously increasing popularity among teenagers and young adults is *WhatsApp* features which includes group chats and location sharing (Webwise, 2016). *WhatsApp* is a mobile phone messaging service that operates through the use of smartphones. The service which was began in 2009 by Brian Acton and Jan Koum enables users to send text messages, photos, videos and documents (Sutikno et al., 2016).

As such, one can form groups for particular social, political, economic and religious projects that require virtual mediums where group members are not located at the same place and physical meeting would not be effective. *WhatsApp* has become the “communication portal” for social networking that has quickly changed the way people communicate (Susilo, 2014 p. 75). It is one of the evolutions which have been frequently used on particular mobile phones and computers (Yeboah and Ewur, 2014). The application has completely altered the traditional mode of communication as one can send text messages, audios and videos to individuals, groups and families (Michikyan et al., 2015).

The most popular messenger applications among college students consist of *WhatsApp* (WA), *Skype* and *GO SMS Pro* (Jadhav et al., 2013). Technologies such as the *WhatsApp* application have achieved increasing prevalence in societies. These kinds of messaging technologies are greatly applied among undergraduate learners nowadays (Lenhart et al., 2009). As e-learning methods are gaining popularity within the educational system of Ghana, the use of *WhatsApp* as a medium of learning has sought to complement the traditional mode of face-to-face class meetings (Dore-Natteh, 2017).

Digital dialogues between students and trainers have become common during the past decade through different channels: SMS, Electronic mail, Facebook, Twitter and lately *WhatsApp*. Each of these tools has various attributes that affect the suitability for learning goals (Calvo et al., 2014). Therefore, dialogue through these applications have gained prominence with so many young people using their *WhatsApp* text message application pages almost every time as it has become a part and parcel of their daily life routines. Young people are now fast connecting with applications that have unique inbuilt features. Thus, their lives are revolved around these applications that connect them to various platforms across the world. This has created a virtual world for them as they feel at ease to connect via *WhatsApp* in sharing stories, lifestyle news, entertainment, gossip, and among others.

Technology is growing at a very rapid percentage, and *WhatsApp* is one of the evolutions in technology that is ordinarily operated on particular mobile phones (Yeboah and Ewur, 2014). Unlike the other forms of communication and any other technologies that occasionally do not work and students do not use after school hours, *WhatsApp* enables easy and quick transference of links to study materials. Sending homework through *WhatsApp* makes sure that all students receive the message. The message is received as a video or copy of an answer to an exercise sent outside class hours (Bouhnik et al., 2014). Yalcinalp and Gulbahar (2010) also noted that the advantages of these implementations are as follows: motivate learners to learn by predicting demands, make collaborative learning productive and beneficial, and construct an association that encourages learner-to-learner for constant and ongoing learning.

This is essential since *WhatsApp* has become a shared platform which promotes accessibility and motivates cooperation to take a lively component in academic assignments (Bere and Chipunza, 2013). Therefore, this study seeks to ascertain the motivations of young peoples for using of Short Message Service (SMS) and *WhatsApp text message* as a mode of communication, the purposes these applications serve for them and how this has influenced their mode of communication.

1.1 Statement of the Problem

With advancements in communication technology, text messaging has become the main form of communication amongst young adults today (Skierkowski and Wood, 2012). Thus, it is important to understand the implications of this now widely available form of communication. As research reveals that young adults who do not participate in texting feel odd or left out because texting is a very important means through which their peers maintain relationships with those they feel close to (Skierkowski and Wood, 2012). Also, based mainly on features, usability, functions, and convenience, instant messaging (IM) sites have become increasingly popular, but they could also encompass issues regarding social intimacy and negative feelings (Si, 2012).

Instant messaging such as *WhatsApp text message* application causes seven negative emotions in users; including anxiety, guilt, pressure, distraction, embarrassment, suspicion, and confusion (Si, 2012, p.30). Symptoms of these emotions include worrying and a decreased self-esteem when faced with long replies, pressure to respond to messages immediately, confusion with regards to what the intended meaning of the message is, and more (Si, 2012). Thus, although there are positive aspects of *WhatsApp text message* application during interpersonal communication; it could also create communication barriers with different interpretations of a message that may result in a wide array of negative emotions (Si, 2012). These negative emotions would likely affect the emotional and psychological growth of young people since they largely depend on these applications for their mode of communication (Wood et al., 2016).

1.2 Research Questions

This research study seeks to find answers to the following questions:

1. What are some of the motivations that influence the use of SMS and *WhatsApp text message* as a mode of communication among the youth?

2. What are some of the purposes for which young people use SMS and *WhatsApp* text message applications?
3. How has the use of SMS and *WhatsApp* influenced the mode of communication among young people?

1.3 Research Objectives

This research study seeks to:

- Ascertain the motivations of young people's, use of SMS and *WhatsApp* text message as a mode of communication among the youth?
- Identify some of the purposes young people use SMS and *WhatsApp* text message applications for.
- Assess how the use of SMS and *WhatsApp* influence the mode of communication among young people.

1.4 Scope of the Study

The scope of a research deals with the parameters under which a research study operates, that is, the problem to be studied within a certain boundary/domain (Simon and Goes, 2011). This study will involve young people studying at the Accra Technical University of the ages of 17 and 18 years in accordance with the definition of youth by the African Union. The unit of analysis refers to a different aspect of a research's content, that is, the element that is counted (Sedgwick, 2014, Sedgwick, 2015). Anani-Bossman (2018) concurs by describing the unit of analysis as the "what or whom is being studied."

In his view, a typical unit of analysis refers to the individuals within a group, especially where the researcher is interested in exploring the behavior of different groups of individuals. Since this researcher is interested in interviewing young people, this will constitute the units of analysis for the research.

1.5 Significance of the Study

This study sought to explore the motivations of young people's use of SMS and *WhatsApp* as modes of communication. Although there have been various studies conducted regarding the use of SMS and *WhatsApp* applications, studies in Africa have yet to find out what drives or

motivates young people to adapt new emerging modes of communication. A study conducted by Montag et al. (2015), broadly investigated the use of smartphones in the 21st century with a view of providing numbers on smartphone usage in general. The said study narrowed down on *WhatsApp* and came to the conclusion that smartphones dominate our daily life. This reveals the high patronage of the *WhatsApp* application on various mobile devices.

Not only are the studies that have been done based on uses and gratification model on *WhatsApp* usage scarce, but have been conducted in the context of Europe and America (Montag et al., 2015, Anderson, 2016, Church and de Oliveira, 2013). Therefore, this study seeks to fill this gap by way of exploring young people's motivations with regards to SMS and *WhatsApp* application. Results obtained by this study could serve as the basis for further extensive research into the gratifications young people derive from the use of SMS and *WhatsApp* applications. The essence of every research is to inform action. The significance of the study makes it worth investigating as it seeks to answer the following questions: Why is the study important? To whom is the study important? And what benefit(s) will the study have on the community? (Thomas, 2006)

The research is important because it contributes to understanding young people's drive or motivations towards the use of SMS and *WhatsApp* as a mode of communication. It further helps to understand the utilitarian functions or purpose underlying the use of these applications and how these applications influence the mode of communication of young people. Therefore, the research would contribute to knowledge building and youth policy making in the country.

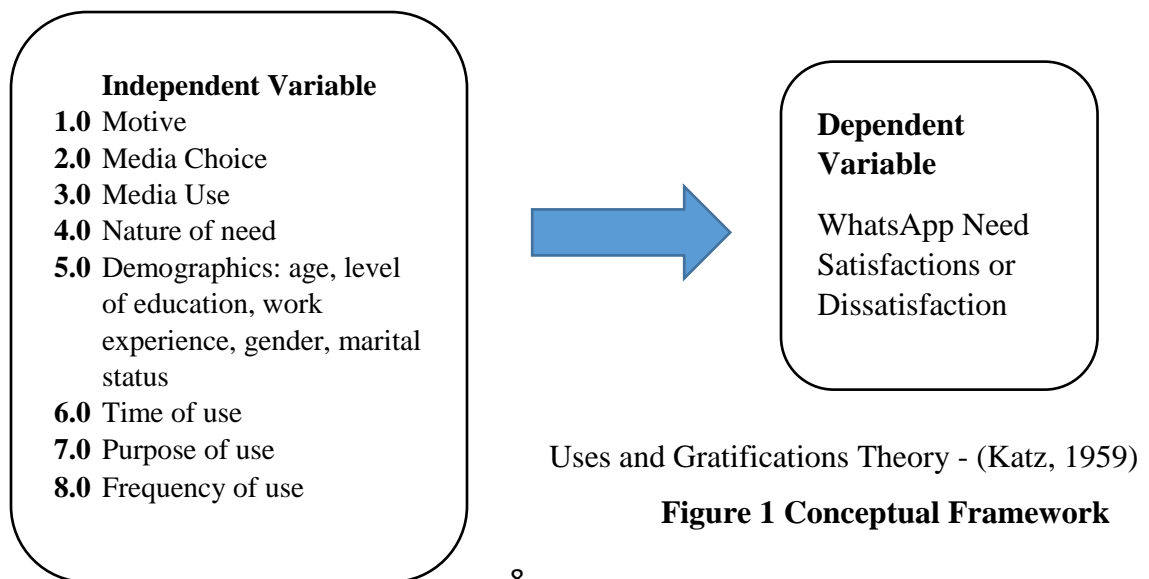
1.6 Theoretical Framework

The study is based on the Katz (1959) uses and gratifications theory which explains why users are motivated to use certain media. Through this theory, the audiences are seen as active and not passive as they interact with the information content that they come across and they are also seen as co-creators of information (Lievrouw and Livingstone, 2006). Straubhaar et al. (2015) argue that interactivity should be seen as situations where real-time feedback is collected from the receivers of the information in a communication channel and is used by the information source to continually modify the message as it is being delivered to the receiver. *WhatsApp* is seen as one source of information that allows interactivity and two-way communication where the audience sends and receive information (Quan-Haase and Young, 2010).

The uses and gratifications theory this study uses also examines usage of *WhatsApp* in gratifying those needs from an organizational perspective, where a different category of media audience exists. This study employed the uses and gratification theory in explaining the use of SMS and *WhatsApp* as a mode of communication among the youth. This theory provides the framework to study the uses and the gratification that users get from using a particular communication medium. The study's dependent variable is SMS and *WhatsApp* need satisfaction. The independent variables are derived from the uses and gratification theory constructs.

This includes motives, media choice, media use and purpose of use. Demographics are seen as influencers of how young people use *WhatsApp* and the gratification that they get from it (Kircaburun et al., 2020). The demographic characteristics that were chosen and examined in this study include age, gender and level of education. These variables have an influence on media use and personal media choices. Secondly, the uses and gratification theory assume that people have social and psychological needs that they seek media content to gratify. This study sought to investigate the needs that the staff have that make them choose to use *WhatsApp* text message application. Thirdly, it is conceptualized that frequency of use has an influence on the users' satisfaction or dissatisfaction, in that the more the usage the more or less satisfied the users get with the medium. Fourthly, how one uses a medium leads to gratification of a need by that medium. Therefore, the purpose of use is seen as an independent variable of gratification of a need. In addition, it is conceptualized that availability of other users whom the user can communicate with and get feedback brings about satisfaction to the user.

Figure 1 below illustrates the conceptual framework.



1.7 Research Methodology

The research methodology that will be used in this study is qualitative research design. A qualitative approach or method is used to explore and understand meanings ascribed to social issues. Creswell (2014, p.4) articulates that the purpose of the qualitative approach is to discover and understand experiences, perspectives, and thoughts of participants. In qualitative research, detailed information on a topic of interest is collected through a number of techniques such as case studies, interviews, and content analysis.

1.8 Data Sources

Sources of data would range from primary data and secondary data gathered from the field. Primary data/source essentially deals with a first hand or main accounts of an issue under investigation and is gathered through data collection methods including surveys, interviews, observations, and experiments, whereas secondary data/sources are supportive data collected to aid the primary data. Secondary sources provide relevant analysis of data found in primary sources including books, journals, dissertations, reports, speeches and so on (Wimmer and Dominick, 2013, du Plooy, 2009). These sources would be used in the data collection process.

1.8.1 Sampling methods and Sample Size

Sampling, especially in qualitative research, allows researchers to have a deeper understanding of a problem under study (Black, 2019, Stack and McDonald, 2014). In qualitative research, purposeful sampling is commonly employed to identify and select information-rich examples linked to the topic of interest. Despite the fact that there are a variety of deliberate sampling procedures, criterion sampling appears to be the most popular in implementation research. Purposive sampling is a non-probability sampling method in which items picked for the sample are chosen based on the researcher's judgment. Researchers frequently feel that by applying sound judgment, they can produce a representative sample and save time and money. (Black, 2010)

Due to the nature of the research design and aims and objectives, the purposive sampling approach may prove to be useful when just a small number of persons can serve as primary data

sources. For example, to select senior-level managers who could participate in in-depth interviews for a study examining the effects of a personal tragedy such as family bereavement on senior-level manager performance, the researcher may utilize his or her judgment.

Participants were selected based on their deep knowledge and experience of the issue under investigation (Merriam, 1998). Purposive sampling allows cases or units to be specifically selected due to their ability to give detailed information about the issues that are important to the research. For the purposes of this research study, a sample size of 35 students from various levels of study was selected for participation in this study.

1.8.2 Data Analysis

Data analysis was undertaken by reporting exactly what respondents said on the study field via a recorder and transcription. The data was analyzed based on the themes found. The primary and secondary data sources such as books, journal articles, internet sources and reports were analyzed contextually. Data analysis ensured that all recorded responses of participants were transcribed verbatim in relation to the data collection process.

1.9 Ethical Issues

“We live in an era, where technology is rapidly advancing and societal values and roles are changing dramatically, ethical issues also are increasingly becoming more complex” (Rogers, 1987). As a result, ethical considerations were taken into account to ensure that no form of deception in data gathering occurred during the study. This was done by ensuring that interviewees were informed about the academic nature of the study while seeking their consent to participate in the exercise.

1.10 Organization of chapters

The study was organized into four main chapters. Chapter one covered the research design. It introduces the subject and gives a brief background to the research area, outlines the research questions and objectives, scope and rationale of the study, the conceptual and theoretical framework which guide the study and sources of data. Chapter two provides an overview of literature review under the topic. Chapter three focuses on methodology of the study while chapter four analyses for the study and provides a discussion on it. Chapter five summarizes

some of the main findings, makes recommendations for policy making and further research and concludes the entire study.

1.11 Chapter Summary

This chapter covered the research design. It introduces the subject and gives a brief background to the research area, outlines the research questions and objectives, scope and rationale of the study, the conceptual and theoretical frame work which guide the study and sources of the data. The next chapter reviews literature for the study and discusses the underpinning theories.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.0 Introduction

This chapter discusses the literature that is related to the current study. It looks at prior studies that have been done relating to the research problem and also literature that is relevant to the research questions. The aim here is to bring understanding on how communication takes place between young people in tertiary institutions. The theoretical foundations of this study are also extensively discussed as well as previous research findings on the use of Short Message Services (SMS) and *WhatsApp* text message among young people. Additionally, the chapter discusses the uses and gratification theoretical model, which the study is based on. This chapter, therefore, looks at the conceptual review which explains the major concepts in this study further, followed by theoretical review and finally the empirical review.

2.1 WhatsApp Instant Messaging

WhatsApp Inc. was created in 2009 (Rahaded et al., 2020) by Jan Koum and Brian Acton, both formerly of Yahoo (Eric, 2012). *WhatsApp* instant messaging is a cross-platform smartphone messenger that employs users' existing Internet data plan to help them network socially in real time (Sutikno et al., 2016). *WhatsApp* provides online users with the ability to send and receive a variety of media, such as images, videos and audio media messages. Client software is available for Apple iOS, Google Android, Blackberry OS, Microsoft windows phone, among others.

WhatsApp instant messaging handled ten billion messages per day in August 2012 (Olanof, 2012). During the month of June 2013, *WhatsApp* Inc. announced that they handled 27 billion messages every 24 hours (Sushma, 2012). *WhatsApp* had over 450 million monthly active users. Additionally, 700 million photos are shared daily, and 10 billion messages are also shared daily (Parmy, 2013). The *WhatsApp* platform has the following collaborative features (Sutikno et al., 2016). These features include providing online students with the ability to exchange text messages, images, videos, and voice notes to their social network or group and contacts.

Also, it provides students or instructors with the ability to create a group (social network group) that supports the social interactions. Members can engage in discussion forums. *WhatsApp* Messenger provides opportunities for students to send messages without limits. The application uses a 3G/EDGE Internet data plan or Wi-Fi to ensure continuous data transmissions across the *WhatsApp* mobile system. Students using the *WhatsApp* application through a variety of mobile devices, such as smartphones, Galaxy tablets, and so on can message one another through texts, images, videos, among others.

Students of universities and major institutions of higher education use mobile communication-based text messaging and instant messaging. Texting is based on short messages service (SMS) between students through mobile devices (Kasesniemi and Rautiainen, 2002). Instant messaging is based on sending brief, typed messages over the Internet. Students use both texting and instant messaging in higher education (Johnson 2007; Kennedy et al. 2008; Salaway, and Caruso 2009).

Furthermore, the majority of the institutions of higher learning are willing to use both text and instant messaging for educational purposes (Jeong 2007; Kennedy et al. 2008). Motiwalla (2007), in his research found that the use of instant messaging for educational purposes, suggests that popularity and support for mobile devices within the student population is great and that the majority of students at universities benefit from texting through mobile learning devices.

Other research in this field found that students in universities are oriented and positive about using mobile learning in educational fields, which argues for why researchers in this domain should investigate how mobile learning technology can be best utilized in education Litchfield et al. (2007). Other studies in the field of principal factor influencing students' motivations to engage in social interactions. Cheung et al (2008) confirmed the principal role of online social presence in determining students' engagement through mobile technologies.

2.2 Theoretical Framework

This study is founded on Katz's uses and gratification theory that stipulates that the audience will turn to the media with needs that they can gratify. A significant number of studies (such as Chou and Liu, 2016, Gan and Wang, 2015, Whiting and Williams, 2013) have adopted the uses and gratification theory to explain why people consume information in the media and the motivation behind their media consumption. There is a growing interest in the use of the model to explain

the motives of users in social media such as social networking service (Alhabash et al., 2014) (Alhabash, Chiang, & Huang, 2014), Twitter (Han et al., 2015), instant messaging (Lo and Leung, 2009) and Facebook (Zhang et al., 2011, Alhabash et al., 2014). Scholars over time have tried to understand how the audiences use the media to satisfy their psychological and social needs. In this pursuit, the uses and gratification theory, which seeks to explain the motive behind the use of media to gratify the needs that are within the society was formulated by Katz et al. (1974).

The theory posits that users of different media have certain goals that they seek to accomplish, hence these goals lead them to the media with an aim of having the goals gratified (Ruggiero, 2000). This theory confirms the use of various social media handles by young people in their daily interactions and lifestyles. This particular trend of using different media to satisfy their needs can be attributed to their need for self-gratification. As young people are engaged through various mediums or modes of communication that are tailored towards their daily needs such as entertainment, games, fashion, gossips and other aesthetic activities (Wei, 2008).

Palmgreen et al. (1980), explain the relationship between gratification sought and gratification obtained. They define gratification sought as the expectations that individuals have before they use a medium, while gratification obtained is the gratification an individual attains out of the use of a medium. The gratification sought mostly explains the motive behind a person's use of the medium since the more a person perceives a medium capable of satisfying his or her need, the more he or she will use that medium (Palmgreen et al., 1980). In the case of young people, the gratification sought could be the need to satisfy one's consumption of entertainment news and so once these needs are met, gratification is obtained.

According to Al-Jabri et al. (2015), "the uses and gratification framework assumes that mass media users are goal-directed in their behavior, and are aware of their needs" (p.665). It also assumes that media users have the awareness of media choices, interests and motives. Additionally, this theory assumes that media competes with other sources of need satisfaction. According to the uses and gratification theory, the media audiences are active and have the capability of determining whether to use a particular medium to meet their needs since they have motives that drive them towards media use. This is reflective of the experiences of young people, as they are psychologically driven towards the use of emerging new media platforms.

As such young people can be perceived as media consumers, who are deliberate in the pursuit of their gratification needs. Palmgreen (1984), came up with a multivariate approach in the use of the theory for various studies. This could be one of the reasons that the theory has become appealing to many researchers. He came up with six main areas of research that relate to the scope of uses and gratification theory. These include social and psychological origins of gratifications, gratification and media consumption, gratification sought and gratification obtained, expectancy-value approaches to uses and gratifications, gratification and media effects and audience activity (Ruggiero, 2000).

Through the uses and gratifications model, it is seen that people turn to the mass media to assist them in fulfilling certain needs. These needs have been broadly categorized by Katz (1973) as cognitive, affective, personal integrative, social integrative, as well as tension-free needs. All of these needs are related to an individual's value system. Cognitive needs pertain to knowledge gathering and the need to understand the world around us. These needs lead individuals to seek information in pursuit of creating understanding and are expressed by the desire to learn, discover and explore the world around them (Zolkepli and Kamarulzaman, 2011).

In this regard, people turn to the media seeking updated information on current issues and to educate themselves on particular topics (Katz et al., 1974). Affective needs, which are needs that are related to emotions, lead people to the media to get an emotional response. These needs could be the desire to get entertained and get one uplifted through achieving feelings and aesthetic experience (Katz et al., 1974). In a study conducted in India (Jisha and Jebakumar, 2014), the researchers noted that many studies in India have proven that the youth use social media to keep in touch with their friends which ultimately meets their emotional needs. This confirms the theory of uses and gratifications which places emphasis on media consumption.

The study also found out that the youth in Chennai region consider *WhatsApp* as a perfect tool for intimate social relationships. Personal integrative needs are related to the desires that humans have of gaining credibility, maintaining a particular status in society and having high self-esteem. In this regard, people turn to the media to reassure themselves of their status in society. For instance, through watching adverts that depict a certain societal class, individuals are able to seek for and maintain the credibility of that class, by ensuring that they have the products. Thus,

social media becomes an avenue where people can get this reassurance out of the information that is shared (Sangwan, 2005).

Social integrative needs pertain to needs that individuals have towards relating with one another in society. They entail the need to socialize with friends and family. Unlike in past decades where people would meet face-to-face, modern-day socialization is done online and individuals can chat and deliberate on many social issues through online platforms such as *WhatsApp*. A study conducted by Jisha and Jebakumar (2014) on how Twitter gratifies the users' needs found a correlation between user engagement and the success of the platform in gratifying users' needs. Young people are glued to these new emerging media spaces due to the nature of gratification obtained as they consume these media. Their visiting of the various platforms and subsequent subscription of these new emerging media is an indication of their gratification obtained.

Young people tend to create these spaces in order to escape the reality of this world due to the anonymity these new emerging media offer and how they help them to relieve tension and provide a form of bonding to their emotional needs. For instance, in a study conducted by Katz, et al (1973), it was found out that watching movies serves the need of releasing tension amongst the audience. These new emerging media therefore act as a gratification tool for young people who seek gratification of their emotional, psychological, social and economic needs.

Jisha and Jebakumar (2014) found in their study on "*WhatsApp: A Trend Setter in Mobile Communication among Chennai Youth* that their respondents consider *WhatsApp* usage as a means of relaxation and stress relief. Satisfaction with the needs discussed above determines how people use the media. *WhatsApp* has therefore become an instrumental tool used to satisfy the needs of various young people who feel bored and seek some form of relief so they join various groups for aesthetic and academic purposes. This has led to an appreciation of the role of technological advancement in satisfying the needs of the human population. Technology through its virtual platforms creates spaces where human interactions can take place via internet connectivity.

A study conducted by Whiting and Williams (2013), the study sought to demonstrate the importance of uses and gratifications theory to social media. By applying uses and gratifications theory, exploring and discussing the uses and gratifications that consumer receive from using social media and to provide a better and more comprehensive understanding of why consumers

use social media. This study identified ten uses and gratifications for using social media. The ten uses and gratifications are: social interactions, information seeking, pass time, entertainment, relaxation, communicatory utility, convenience utility, expression of opinion, information sharing, and surveillance/knowledge about others.

This study therefore employs the uses and gratification theory in explaining SMS and *WhatsApp* text messages usage as a mode of communication among young people within the Accra Technical University. The theory provides the framework to study the uses and gratification that users, particularly, young people get from using a particular communication medium. The study's dependent variable is *WhatsApp* need satisfaction. The independent variables are derived from the uses and gratification theory constructs which include motives, media choice, media use and purpose of use. Demographics are seen as influencers of how the staff uses *WhatsApp* text messages and the gratification that they get from it. The demographic characteristics that were chosen and examined in this study include age, marital status, work experience, gender and level of education. These variables have an influence on media use and personal media choices (Whiting and William, 2013).

Secondly, the uses and gratification theory assumes that people have social and psychological needs that they seek media content to gratify (Whiting and William, 2013). Thus, this study sought to ascertain the motivations that drive young people's use of SMS and *WhatsApp* applications. Thirdly, the frequency of use of social media has an influence on the users' satisfaction or dissatisfaction, in that the more the usage, the more or less satisfied the users get with the medium. Fourthly, how one uses a medium lead to gratification of a need by that medium (Whiting and William, 2013). Therefore, the purpose of use is seen as an independent variable of gratification of a need. In addition, it is conceptualized that availability of other users whom the user can communicate with and get feedback brings about satisfaction to the user.

2.3 Youth and WhatsApp

Young people are gradually gravitating towards a virtual world that offers them the luxury of enjoying several features unique to their world. Young people in their quest to use these new applications such as '*WhatsApp*' engage in several gratification-oriented actions tailored to satisfying their numerous needs. For instance, a descriptive study by Chiridza, Yorodani, Sigauke, and Katsaruware (2016) investigated what Zimbabweans youth do with *WhatsApp*. The

study found that though *WhatsApp* has brought an affordable communication platform, it has become subject to abuse by those who take advantage of its distinct features. Its ability to offer one on one chats and one too many chats in real time has made it become a platform of choice in communicating all sorts of information that range from being useful, insulting, abusive; to outright jokes and absolute trivia, hoaxes and porn.

In addition, Yeboah and Ewur, (2014) conducted a study on the impact of instant messenger *WhatsApp* on students' performance in tertiary institutions in Ghana. The study revealed that, *WhatsApp* instead of making communication easier and faster thereby enhancing effective flow of information and idea sharing among students, rather has impacted negatively on the performance of tertiary students in Ghana. The study among other things unveiled 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. In a study dubbed "*WhatsApp* goes to school", Bouhnik and Deshen (2014) carried out exploratory research to find out how *WhatsApp* is used between teachers and students. Findings from the study indicated that *WhatsApp* groups are used for four main purposes: communicating with students; nurturing the social atmosphere; creating dialogue and encouraging sharing among students; and as a learning platform. The participants mentioned the technical advantages of *WhatsApp*, such as simple operation, low cost, availability, and immediacy. They also referred to educational advantages, such as the creation of a pleasant environment and an in-depth acquaintance with fellow students, which had a positive influence upon the manner of conversation. The participants also indicated academic advantages such as the accessibility of learning materials, teacher availability, and the continuation of learning beyond class hours. Nevertheless, there are also challenges and problems. Firstly, there is the technical difficulty that not all high school students possess a Smartphone. Secondly, teachers are apt to be annoyed by the flood of irrelevant and nonsensical messages. Also, educational difficulties may arise, such as incompatibility of language between students and the students' assumptions that their teachers should be available on a 24/7 basis. This study is therefore based on the Katz (1959) uses and gratifications theory which explains why users are motivated to use certain media.

Through this theory, the audience is seen as active and not passive as they interact with the information content that they come across and they are also seen as co-creators of information (Lievrouw and Livingstone, 2006). Straubhaar and LaRose (2013) argue that interactivity should be seen as situations where real-time feedback is collected from the receivers of the information in a communication channel and is used by the information source to continually modify the message as it is being delivered to the receiver. *WhatsApp* text message application is seen as one source of information that allows interactivity and two-way communication where the audience sends and receives information (Quan-Hasse and Young, 2010).

The uses and gratification theory recognizes five needs that people have and categorizes them as cognitive needs, affective needs, personal integrative needs, social integrative needs and tension free needs (Bae, Jun and Hough, 2016). Through application of the uses and gratifications theory this study also examines usage of SMS and *WhatsApp* in gratifying those needs from an institutional perspective, where a different category of media audience exists specifically young people within the Accra Technical University.

2.4 Benefits of online discussions in a collaborative learning approach

WhatsApp is a social media application that involves direct messaging as well as sharing media including voice messages, videos, and photos among others (Steele, 2014). It uses both data and Wireless Fidelity (WIFI), so it is not included in your monthly text-message subscription. *WhatsApp* text messaging application is available on relatively any device (initially free on smartphones) and is considered relatively safe and secure. A reason behind the continuously increasing popularity among teenagers and young adults is *WhatsApp* features which include group chats and location sharing (Webwise, 2016).

The use of *WhatsApp* as a communication platform has proliferated globally and in Kenya in the last 3 years. Forty-nine percent of mobile users in Kenya were using the application by 2014 (Adika, 2014). For example, Church and de Oliveira (2013) observe that contacts are able to see if messages are delivered and read as well as time of last access. Although users have the option of privacy settings, the voluminous incoming messages and the extent of interruption they cause often force them to put the phone on silent mode (Church & de Oliveira, 2013), which may hinder effective communication within the network.

In addition, the platform requires one to have internet so as to use it one can therefore only chat with friends who have smartphones and *WhatsApp* installed (Dekhne, 2016). It is plausible to note that in as much as *WhatsApp* is widely used in the present age as a digital communication medium, A study conducted by Breuer, (2012) was to cover digital or social media in general, without narrowing down on *WhatsApp* in particular and the goal of the study was to examine the role of social media in mobilizing political protest expert interviews with Tunisian bloggers, and a web survey conducted among Tunisian Facebook users, this paper argued that social media allowed a “digital elite” to form personal networks and circumvent the national media blackout by brokering information for outside mainstream media; helped to overcome the “free rider” problem of collective action by reporting the magnitude of protest events; and facilitated the formation of a national collective identity which was supportive of protest action and transcended geographical and socio-economic disparities by providing a shared, mobilizing element of emotional grievance.

2.5 Effect of WhatsApp as an Application on Learning

In modern times, mobile phones have become a crucial part of our daily lives with every individual have a personal cell phone of their own. Mobile phone use has been expanding rapidly since 1995 (Chowdhury, 2012). They are employed not only for sending text messages and making calls, but also for the other varieties of applications such as watching movies, playing music and accessing the internet. Many operating systems such as Windows, Mobile, IOS and Android are developed to give more functionality in mobiles (Susilo, 2014). The most popular messenger applications among the college students consisted of *WhatsApp (WA)*, *Skype* and *GO SMS Pro* (Jadhaw & Mehta, 2013).

These kinds of messaging technologies are greatly applied among undergraduate learners nowadays (Lenhart, 2007). Digital dialogues between members of students and trainers have become common during the past decade through different channels: *SMS*, *Email*, *Facebook groups*, *Twitter* and lately *WhatsApp*. Every one of these tools has various attributes that affect suitability for learning goals (Calvo, Arbiol & Iglesias, 2014). One of the most exciting issues about *WhatsApp* messaging and other general technologies (text messaging, video games, etc.) is

that they are prospective acquisition tools (Dearstyne, 2011; Brown-Owens, Eason, & Lader, 2003).

According to Yeboah & Ewur (2014) technology is growing at a very rapid percentage, and *WhatsApp* is one of the evolutions in technology that is ordinarily operated on particular mobile phones.

Unlike the other forms of communication and other technologies that occasionally do not work and students do not use after school hours, *WhatsApp* enables easy and quick transference of links to study materials. Sending homework materials through *WhatsApp* ensures that all students receive the message, whether it is a video specified for class or a copy of an answer to an exercise sent outside classroom hours (Bouhnik & Deshen, 2014).

The essentials of the *WhatsApp* application can be seen in its adaptation to the teaching environment. As more and more innovative measures are introduced to make learning easier and remotely accessible, the application provides some form of gratification for numerous educational users around the world. This enables a whole classroom to be gathered at a virtual point with the participants from various locations initiating interactions. This interaction is based on a common need. Therefore, the gratification theory would suggest that the need for teaching and learning would lead to the use of the *WhatsApp* application which gratifies the academic needs of both learners and tutors.

Yalcinalp and Gulbahar (2010) stated that the advantages of these implementations are as follows: motivate learners to learn by predicting demands, make collaborative learning productive and beneficial. It helps to construct an association that encourages learner-to-learner for constant and ongoing learning. While the majority of educationalists acknowledge that *WhatsApp* messages are vastly used by undergraduate learners, there seem to be one separate idea of its impact on student academy (Alsalem, 2014; Atta M. S. Salem, 2013).

According to Helderma (2003) and Linhart (2007), instant messaging and e-mail are a new generation of writers, accustomed to translating their views and feeling into words. They write more than any individual has since the days when telephone calls were limited (Alsalem, 2014). Overall Bere and Chipunza (2013) noted that *WhatsApp* has turned into a shared platform which

promotes accessibility, motivates cooperation and strengthens motivation to take a lively component in academic assignments.

The ability to have instantaneous and direct access to an individual via cell phone (as opposed to landlines which, by design, limit you to a specific location), gives us the ability to constantly be in contact with one another (Lanigan 2009). This demonstrates the needs for constant communication among humans, as more and more young people derive satisfaction from interactions initiated via this medium.

Cell phones can be sent with an individual to almost any location, without the need of being connected to an outlet or a landline. In addition, because cell phone technology gives individuals the ability to directly contact one another at nearly any time or place, it is often expected that they will utilize this capability and communicate more frequently (Hertlein 2012). Recent research has repeatedly concluded that text messaging is the most prevalent form of communication for young adults (Coyne et al. 2011, Pettigrew 2009, Skierkowski & Wood 2012).

Due to the mobility provided by cell phones, young people generally are glued to their phones as it keeps them active with the virtual world and the perception of reality. Texting therefore becomes a popular culture that young people gradually acquire through usage. Skierkowski and Wood's study (2012) acknowledged that young adults use Facebook as a form of communication, but did not comment specifically on the messenger function of the site, despite the fact that it has over 200 million users (Isaac 2014). Although the young adult population commonly uses this mode of communication – it was one of the most popular applications for cell phones in 2013 and is most popular with people under the age of 25 (Poltash 2013) – very little research has considered the use of Snapchat as a form of communication.

Previous literature that compares frequency of use of different communication modes is outdated; this research is from a time period before texting, Snapchat or FM were available and only includes modes such as phone calls or letter writing (Canary 1993). This therefore makes this research suitable for its contribution towards knowledge building on the usage of SMS and *WhatsApp* application. Texting is cited by most researchers as the most commonly used mode of communication by young people today (Coyne, Stockdale, Busby, Iverson & Grant 2011, Pettigrew 2009, Skierkowski & Wood 2012).

According to Lenhart (2010) on a study conducted in America findings showed that American teens using text messaging send about 3,000 texts per month, averaging 100 per day. Skierkowski and Wood (2012) found text messages to be frequent, but also very important to young adult culture. Their study examined the consequences of a lack of texting measured by the behavioral responses of anxiety in 18-23-year olds. For five days, these researchers conducted three surveys per day, asking participants about their usage of Facebook, instant messaging, email, texting, phone calls and in-person interaction. They assessed whom the participants communicated with, and via what mode. Students were then placed in groups of high or low texting and then restricted from texting during a designated period of time, to measure the anxiety associated with not being able to use their cell phones.

Skierkowski and Wood (2012) conducted a study on the importance of text messaging among college-aged youth and concluded that the broad acceptance of the use of cell phones creates both a pressure and desire to communicate through text messages. As young people negotiate interactions, they always ensure that close contact is maintained through active engagement through these platforms that is easily accessible and cheap to operate. Mandel and Muncer's (2007) study explored why young adults choose text messaging for social communication. They concluded young adults choose to communicate via texting because it gives them more power in their interactions with their peers. This control exists because they have the ability to take time to think of a response before having to reply. Along with this, one has the ability to keep record of conversation through stored text messages. This power serves as an additional potential factor as to why texting is particularly prevalent in romantic relationships.

As more and more messages become personalized, young people are driven to pursue conversations independently without being coerced and they tend to have equal ownership of the mobile device and its operating system. The symbolism of power thereby signifies the control that these young people have in texting back a response to a message sent earlier and keeping a record of conversations in the form of a stored text.

According to Pettigrew, (2009) romantic couples feel a unique connectedness through texting in ways nonromantic pairs do not. The attachment to cell phones, and particularly the frequent use of texting, is described as a ritual by Richard Ling (2008). Ling (2008) discusses how "ritual interaction" increases cohesion between individuals and facilitates bonding within a relationship.

Ling (2008) explains how further enhancement of social cohesion, through collective effervescence, can be experienced by physically separated members of a group due to the ritual of texting.

Merriam-Webster (2021) defines a ritual as at least two people experiencing the same effervescence through sharing an action or focusing on a particular object. In this case, the shared experience is the action of texting while focusing on their cell phones. Simply, the “ritual” of texting and the special language style developed between couples over texting (Pettigrew, 2009, p.12) can strengthen their connection and improve partners’ relationship. This may also explain texting’s importance and frequent use in romantic relationships.

A study conducted by (Lucido, 2015) in Midwestern University with men, concluded that text messages were sent between most couples more than once a week. In a similar research by Lenhart et al. (2010, p. 65) that teens using text messaging send about 3,000 texts per month, averaging 100 per day. In Pettigrew’s study, (2009) interviewees discussed how texting allowed for regular “perpetual contact” throughout the day between partners. All of these studies provide different totals for how frequently young adults or romantic partners use texting, but the overarching conclusion is that this communication mode is used very frequently.

2.6 Expectations for Communication

Regarding text messages, Pettigrew (2009) in a study in Midwestern city, found that his interviewees discussed how texting allowed for “perpetual contact” because individuals generally always have their cell phones with them and can continue a private conversation from anywhere. Additionally, he found that there is a particularly salient expectation to reply to text messages. In 2005, Laursen studied the normative behaviors and interactional patterns in mobile texting messages among Danish adolescents and evaluated the relationship consequences for different replying norms and found a similar expectation about text message replies. Not only is there an expectation to respond to text messages, but Laursen also found that there is a social norm within adolescent culture to respond to text messages and as it is actually seen as rude to not reply to text message one receives.

Often, when text messages are not responded to, adolescents assume there was a technical problem and send the message again, send content clarification or send a follow up message in

anticipation of a response (Laursen 2005). Mobile phones allow us to connect with anyone at any time (Campbell & Park 2008, Hertlein 2012). Because of this constant access to one another, Hertlein (2012) argued that this creates an expectation to regularly communicate. In other words, having more ways of communicating changes the way people expect to keep in touch with family members.

Newly formed expectations for how to communicate with family and friends can prompt emotional responses within individuals when these expectations are not met. Aoki and Downes (2003) produced an important finding about what might be included in individuals' expectations. These researchers concluded that teenagers have become attached to their cell phones and keep them readily available to connect with others.

Moreover, most individuals check their phones regularly because of this attachment. Aoki and Downes (2003) discuss a newfound difficulty for individuals to avoid their partners because there is a widespread expectation that everyone regularly checks their cell phones. Therefore, seeing someone's attempts at communication is unavoidable when checking one's phone. One cannot just avoid their partner's attempt at contact because the partner knows that the cell phone number is a direct route of contact to a particular individual as opposed to a landline, which connects you to a specific location (Campbell & Park 2008).

Technology connects us at all hours of the day in multiple ways and with all of this availability, boundaries have changed and partners have reported feeling "smothered" (Hertlein, 2012, p.15). Coordination in informal communication is done through an organismic communication network (Fish et al., 1990), and in this case *WhatsApp* is seen as one of these networks. *WhatsApp* as a Communication Platform Mobile application provides a platform for dialogic communication (Campbell & Park, 2008), amongst which is the *WhatsApp* platform, which offers a wide array of opportunities for its users.

Just like many social media platforms, *WhatsApp* provides a platform for entertainment, education, collaboration, instantaneous sharing of information as well as maintenance of a community (Jebakumar & Jisha, 2014). Unlike the network operator's short message service (SMS) where the message sent is delivered to the recipient with or without their consent, *WhatsApp* gives the message recipient the opportunity to accept or reject messages from different recipients. In addition, *WhatsApp* has the capability of group-formation where a

message can reach different recipients. The maximum number of group members that *WhatsApp* can accommodate currently stands at 256 (*WhatsApp*, 2016).

WhatsApp appeal amongst its users is attributed to its capability and features. Sultan (2014), in an investigation related to mobile text messaging in Singapore, suggested that users of *WhatsApp* turn to it as a medium that enables them to keep contact with family members and friends, as well as for entertainment and acquiring information. As part of its uses, *WhatsApp* has the capability of sending location information to the recipients (Church & de Oliveira, 2013). In the same study, it was found out that one of the benefits of using *WhatsApp* includes its affordability. Cost is seen as a factor that influences people's choice of medium in sending messages.

Secondly, *WhatsApp* was seen to give them a sense of connection among men and women between the ages of 18 and 22 years at Midwestern University. It was seen that *WhatsApp* was used more between partners than with other communities (Lucido, 2015). Just as Ledbetter, Mazer, Degroot, Meyer, Mao, and Swafford (2011) concluded that social networking sites remain an important medium for maintaining social connections. *WhatsApp* remains a key platform for creating and maintaining social connections amongst staff in an organization, so long as its use is permitted.

Church and de Oliveira (2013); QuanHaase and Young (2010) studied the factors that influence the acceptance, usage and the increasing popularity of *WhatsApp* in Pakistan. They found social influence to be one of the major reasons for adoption of *WhatsApp* and concluded that the nature and the intent of *WhatsApp* supports social, informal and conversational communication that lead to high frequency in its use. Yeboah and Ewur (2014, p.158) note that “with *WhatsApp* messenger, communication through mobile phones has become easier, faster and cheaper. It is less expensive compared to the normal phone messaging. “*An individual can chat with friends and family overseas through WhatsApp without having to incur global SMS charges*” (p. 158).

Past studies have concluded that *WhatsApp* satisfies a wide range of needs including intimacy, growing relationships among friends, heightening a sense of presence in communication and providing a private channel where members can interact freely with each other (Karapanos, et al, 2016). Several studies have been conducted to investigate the usage attributed to the *WhatsApp* platform (Chiridza, et. al, 2016; Deepthi et. al, 2015; Ibrahim, et. al, 2014). It can therefore be

suggested that most young people are users of “*WhatsApp*” as a tool for communication (Costa-Sánchez & Guerrero-Pico, 2020).

Jebakumar and Jisha (2014) in their investigation on *WhatsApp* usage amongst the Chennai Youth in India concluded that “*WhatsApp* has created a sense of belongingness, nearness and intimacy with friends and relatives. It has created a psychological experience of being close and caring” (p. 5). Despite the positive aspects attributed to *WhatsApp*, other studies have revealed some negative impacts of the medium. In Ghana, a study conducted by Yeboah and Ewur (2014) concluded that *WhatsApp* impacted the performance of tertiary institutions in Ghana students negatively.

The study concluded that *WhatsApp* usage leads to lack of concentration in lectures, time wastage, causes the students not to complete their assignments and negatively affects their spellings and grammatical sentence construction. However, the said study did not focus on *WhatsApp* as a communication medium but it was instead focused on students’ learning outcomes. Conversely to the Yeboah and Ewur (2014) study, Salem and Soliman (2014) conducted a research on *WhatsApp* use amongst college students in Ghana with the objective of finding out the factors that influence one’s intention to use mobile instant messenger such as *WhatsApp*.

They used a sample of 450 students in their research and concluded that,

In addition to perceived usefulness and perceived ease of use of mobile instant messenger, sociability, perceived self-expressiveness, and enjoyment established by using mobile instant messenger can be considered as predictors of use of mobile instant messenger (p. 292).

Additionally, a study conducted in a similar context by Ahad and Lim (2014) revealed that *WhatsApp* benefited the undergraduate students in Malaysia by enabling them to discuss and share information pertaining to their studies, as well as facilitate their everyday communication with friends and family. Another observation in relation to SMS by Rafi (2010) found that the observed data demonstrates that SMS language ignores orthographic and syntactic regulations of a language with enormous stress on written sounds and compressions.

An example is 8 for 'ate', 4 for 'four and for', bcz for 'because', and short sentences as 'how r u? hopu'll b busy in urstdy.Ma 2. When r v gona meet 4 datwork?' (Rafi, 2015).

Crystal (2008) therefore suggests that texters are prone to ignore spellings, either intentionally or reflexively. *WhatsApp* has therefore become a household name and "communication portal" for social networking that has quickly changed the way people communicate (Susilo, 2014).

2.7 Chapter Summary

This chapter discussed the literature that is related to the current study. It looked at prior studies that have been done relating to the research problem and also literature that is relevant to the research questions. The theoretical foundations of this study were also extensively discussed as well as previous research findings on the use of Short Message Services (SMS) and *WhatsApp* text message among young people. Additionally, the chapter discussed the uses and gratification theoretical model, which the study is based on as well as the conceptual review which explained the major concepts in this study further, followed by theoretical review and finally the empirical review.

In the next chapter which is the research methodology, it describes the methods employed in the study, research design, population, sampling and sampling technique, data collection as well as the mode of data analysis.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The main purpose of this chapter is to explain the research methodology and procedures for data collection. Every empirical research utilizes a certain methodology for the purposes of data collection (Babbie, 2009). According to Babbie and Mouton (2001), research methodology entails the research process and the kind of tools and procedures to be used. Therefore, the chapter describes the methods employed in the study, research design, population, sampling and sampling technique, data collection as well as the mode of data analysis and summary of the chapter.

3.1 Research Design

Research design according to Vogt (2005, p. 87), is the plan that a researcher will follow when conducting the study. According to Kumar (2011), a research design is a plan, structure and strategy of investigation so conceived as to obtain answers to research questions or problems. A good research design has a clearly defined purpose, and has consistency between the research questions and the proposed research method (O. Mugenda & Mugenda, 2003).

A qualitative research paradigm would be employed in this research to gather and analyze data. Qualitative research attempts to understand a phenomenon from the viewpoint of the population involved. Lindlof (1995, p.5) makes the point that qualitative research allows a researcher to interview people as a means of understanding their views “on a scene, to retrieve experiences from the past, to gain expert insight or information, to obtain descriptions of events or scenes that are normally unavailable for observation.

This approach helps to foster trust, to understand a sensitive or intimate relationship, or to analyze certain kinds of discourse.” The researcher therefore employed a qualitative research design due to the exploratory and open-ended nature of the research questions. The qualitative research paradigm is in-depth research using a range of techniques with the aim to understand the reason, opinion and motivations (Silverman, 2020). This is to enable the researchers to elicit

responses in relation to the usage and motivations of young people use of SMS and *WhatsApp* as a mode of communication.

Samples tend to be small since it does not focus mainly on “how many” (Vasileiou et al., 2018). The benefit of qualitative approaches is that it is an open-ended approach that adapts and evolves as the study progresses which enhances the quality of the data and insights generated. It also allows the researcher to understand the issues from different perspectives. Some common qualitative techniques include interviews, focus group discussions and participant observation (Watkins, 2012). Methodology pertains to the decisions we make about the areas we are researching, data gathering techniques and data interpretation forms when preparing and executing a research study (Silverman, 2005).

It shows how a research is carried out and provides a foundation for the research. The design also places great importance on what is to be studied in order to generate comprehension rather than vague results (Kitchin & Tate, 2000). The qualitative research method has been criticized as being subjective. However, it best suits this study because it offers ample information and fundamentals for better understanding of the research problem of this study (Zikmund & Carr, 2000).

This approach gives the researcher the opportunity to obtain in-depth data from participants through their personal narratives and statements about the knowledge they have about child rights (Gray, 2009). As suggested by Duncan et al (2009), it is safe to adopt a qualitative research approach when the researcher is not sure of the nature of responses that would be given and also when the researcher wants to adopt an open realm of response.

The researcher employed the qualitative approach in the data analysis, interpretation and presentation of findings. The qualitative research paradigm was used in presenting and analyzing the data. This approach enabled the researcher to describe and make inferences based on the uses and gratification of SMS and *WhatsApp* as a mode of communication among young people at the Accra Technical University.

3.2 Research Methods

The researchers made use of both primary and secondary data, which were gathered from diverse sources, including, archival sources, text books, journals/articles (both published and unpublished),

and internet sites. The primary research is tailored to suit the needs of the research. This research involves the collection of raw data, which forms the main basis for achieving the research objectives. The sources of which includes, unpublished documents, research institutes and other agencies. An attempt was made at collecting and analyzing primary data which has gone a long way to validate the findings and conclusions drawn from the research.

Secondary sources provide relevant analysis of data found in primary sources including books, journals, dissertations, reports, speeches and so on (Wimmer & Dominick, 2011, p.186; du Plooy, 2009, p.62). These sources would be used in the data collection process. The qualitative research approach was deemed to be appropriate by the researchers hence its adoption. Saunders et al. (2007) opined that the method for collecting research data is linked to research approaches adopted. Babbie (1990, p. 133) describes validity as “the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration”. He also defines reliability as “a matter of whether a particular technique, applied repeatedly to the same object, would yield the same result each time.” Consequently, the good sampling technique used in this research makes it very credible Kvale, (1995).

The study used an interview guide to elicit responses from young people at the Accra Technical University. About 35 young people were interviewed and their responses recorded via recorder. This was to ascertain the motivations and purposes of young people’s use of SMS and *WhatsApp* as a mode of communication. This study sought to find out how this has influenced their mode of communication over the years. Although there have been various studies conducted regarding the use of SMS and *WhatsApp* applications, studies in Africa have yet to find out what drives or motivates young people adaptation to new emerging modes of communication. (Pang and Woo, 2020).

3.3 Research Site

The research is situated in an educational institution, Accra Technical University which is one of the premier technical universities in Ghana. Ghana currently has a number of public universities mainly, the University of Ghana, Legon – Accra; University of Science and Technology, Kumasi; University of Cape Coast, University of Education, Winneba; University for Development studies, Tamale; and University of Energy and Renewable Resources; Sunyani. Ghana has a number of Technical Universities which include the Accra Technical University,

Sunyani Technical University, Ho Technical University, Takoradi Technical University, Kumasi Technical University, Cape Coast Technical University, Koforidua Technical Universities, Sunyani Technical University, Bolgatanga Technical University and Wa Technical University.

There are other private Universities which include the Central University, Kaneshie – Accra; Methodist University College, Dansoman – Accra and others. However, the researcher found it convenient to choose the Accra Technical University. The choice was informed by factors such as proximity, accessibility, cost, and the researcher’s rapport with her respondents. The Accra Technical University was established in 1949 as a Technical School and commissioned in 1957 as Accra Technical Institute.

In 1963, the Institute was renamed Accra Polytechnic under the directions of President Dr. Kwame Nkrumah to be a key driver of the country’s industrialization process. Following the operationalization of the PNDC Law of 1992 (PNDC 321) in 1993/1994, the Polytechnic gained tertiary status. With the coming into force of the Polytechnic Act (Act 745) in 2007, the PNDC Law 321 of 1992 was repealed to allow polytechnics the autonomy to award Higher National Diplomas (HND), Diplomas, Certificates and other degrees that they deemed appropriate and were accredited by the National Accreditation Board (NAB).

The Technical University Act, 2016, (Act 922) converted together with 8 other Polytechnics, Accra Polytechnic to Accra Technical University, given its Technical University status. Currently, the University has five (5) faculties which includes Faculty of Engineering, Faculty of Built Environment, Faculty of Applied Sciences, Faculty of Applied Arts and Faculty of Business and other sixteen (16) departments. Its location in the Central Business District of the capital of Ghana, Greater Accra region makes it a unique and an ideal place to interact with young people undertaking their studies. Currently, the institution has a student population of twelve thousand, six hundred and eighty-five (12, 685) students (Field data, 2021).

3.4 Sampling Technique and Sample Size

Sampling, especially in qualitative research, allows researchers to obtain a deeper understanding of a problem under study (Black, 2012; Stacks, 2011). A purposive sampling technique was used in selecting respondents that are knowledgeable with a phenomenon of interest (Cresswell & Plano Clark, 2011). Participants were selected based on their deep knowledge and experience of

the issues under investigation (Merriam, 2009). Purposive sampling allows cases or units to be specifically selected due to their ability to give detailed information about the issues that are important to the research. For the purposes of this research study, sample sizes of 35 young students from various levels of study were selected for participation in the study.

Given that all the respondents were university students, the researcher could not have possibly investigated all students at the Accra Technical University; hence, she employed purposive sampling procedure. The purposive sampling is a sampling technique that qualitative researchers use to recruit participants who can provide in-depth and detailed information about the phenomenon under investigation. It is highly subjective and determined by the qualitative researcher generating the qualifying criteria each participant must meet to be considered for the research study.

This is because it was convenient for her to get young people from the institution to respond to her questionnaire because of the proximity and accessibility of respondents.

3.5 Research Instrument

Interviews are widely used as a data collection tool in qualitative research. They are typically used as a research strategy to gather information about participant's experiences, views and beliefs concerning a specific research question or phenomenon of interest (Lambert and Loiselle, 2007). Sandelowski (2002) purports that one-to-one interviews are the most commonly used data collection tools in qualitative research.

The research instrument used here was an interview guide. The qualitative research interview seeks to describe and give meanings to the central themes in the life of the subjects (Kvale, 1996). The main task in interviewing is to understand the meaning of what the interviewees say (Kvale, 1996). A qualitative research interview seeks to cover both a factual and a meaning level, though it is usually more difficult to interview on a meaning level (Kvale, 1996).

Interviews are particularly useful for getting the story behind a participant's experiences. The interviewer can pursue in-depth information around the topic. Interviews may be useful as follow-up to certain respondents to questionnaires such as to further investigate their responses (McNamara, 1999). The general interview guide approach adopted in this research study was to

ensure that the same general areas of information are collected from each interviewee. This helps to provide more focus.

The interview guide consisted of an outline of categories that are relevant to the research and on which interview questions are ultimately based (Polit & Hungler (1995). The sequencing of questions enabled the interviewee to be aware of what specific areas he or she is being asked about. The researcher ensured that prompts were administered intermittently when the need arises since the interviewee might sometimes not stay within the scope of discussion. This is very helpful in permitting the interviewee to expand on a particular issue or in getting them to re-engage with the interview process if they lose their train of thought (Robson, 2002). Tod (2006) suggests that the flexibility of the interview structure is one of its greatest strengths. The use of the interview guide served its purpose of flexibility as it enabled the interviewer to elicit responses in a manner that sought to engage the interviewee and to probe further where necessary.

3.6 Data Collection

Data collection was undertaken using a recorder that helped to collect the responses of the participants. The participants were asked questions using the interview guide as a way of ensuring that both interviewer and interviewee remained within the scope the study. The data collected centered mainly on the use of SMS and *WhatsApp* as a mode of communication among young people. The interview structure was a one-on-one or face-to-face interaction between the researcher and young people who were given a brief of the study. Prior to meeting up with the students, initial contacts were made between the researcher and departments so as to ensure that students are adequately informed of the research study. Students were informed that their participation and responses are solely meant for academic purposes.

3.7 Data Analysis

Data analysis is the process of coding, categorizing, editing and tabulation of accumulated data to a manageable size, developing summaries, along with searching for patterns of relationship that exist among data-groups (Kothari, 2004). Data collected was assorted and assigned codes to ensure that each participant's responses were captured. In the current study, data were analyzed by using a thematic approach that was derived based on the interview guide.

Data analysis was therefore undertaken devoid of bias in this study by reporting exactly what respondents said on the study field via a recorder and transcription done using thematic analysis. The primary and secondary data sources such as books, journal articles, internet sources and reports were analyzed contextually.

3.8 Chapter Summary

This chapter analyzed the methods adopted in gathering data necessary to achieve the research objectives of the study. The research methodology applied in this study was the qualitative research approach which enables the research to gain insights on the experiences of young people in relation to the use of SMS and *WhatsApp* as a mode of communication. It explored how primary and secondary data was adopted in collecting data via a recorder with participants. It also touched on the data analysis process that involved assorting the data, coding process of the various participants and their responses based on the themes so as to generate meaningful data for interpretation.

The next chapter which is chapter four consists of the findings and the analysis of the data collected. The data presented were gathered using interview guide.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

4.0 Introduction

The chapter consists of the findings and the analysis of the data collected. The data presented were gathered using interview guide.

4.1 Bio-Data of the Participants

Table 1: Gender of Respondents

Gender	Frequency	Percentage (%)
Male	15	42.86
Female	20	57.14
Total	35	100

Source: Researcher's Field Survey, 2021

From Table 1, majority of respondents were females and which represented just over half of the population (57.14%) with a frequency of 20 while two fifth (42.86%) were males with a frequency of 15. This shows that there was a fair distribution of data collection among both males and females.

Question 1: What are some of the motivations that influence the use of SMS and *WhatsApp* as a mode of communication?

As indicated in Table 2, the study identified several motivations of the use of *WhatsApp* and Short Message Service (SMS) as a mode of communication by the youth with subthemes under the predetermined four main themes namely Accessibility, Effectiveness, Privacy and Records Keeping).

Table 2: The Main and Subthemes of the Motivations of The Use of *WhatsApp* and SMS as a Mode of Communication Among the Youth

Main Theme	Subthemes
Accessibility	easier and faster
	convenient, cost and time effective
	easy access to information
Effectiveness	ability to better express oneself
	Effective communication
Privacy	Privacy
Records Keeping	Records Keeping

Source: Researcher’s Field Survey, 2021

Theme One: Accessibility

Majority of respondents indicated that some their motivations for using *WhatsApp* and SMS is because *WhatsApp* and SMS is very easy to use and fast to send information to multiple at the same time making it time effective as well. Lastly, respondents said they were able to get access to information easily. The dimension of accessibility as a motivation for the use of *WhatsApp* and SMS was categorized into subthemes that is, convenience, cost effective and time effective, easy and fast and easy access to information.

Subtheme: Easy to use and faster

According to respondents, some of their motivations to use *WhatsApp* and SMS is because it is very easy to use and also very fast to operate.

Respondent 1: “It is easier and faster.”

Respondent 3: “It is fast, convenient and easy to use”

I think *WhatsApp* is better than the other applications because it is faster and when you use it is easy to familiarize yourself with it since it is not complicated. Thus, its uncomplicated nature motivates me to use it. (Respondent 13)

Respondent 15: “It is easy to send and receive messages.”

Other respondents also looked at the ease of *WhatsApp* and SMS usage because they wouldn't have to travel long distance before they communicate with friends and family.

Respondent 34: “The distance between me and the person that I am texting, maybe I can't directly go to the person so it will be easier texting the person and also faster”.

A probable explanation from these respondents indicated that individuals are motivated to use applications that are user friendly, convenient and inexpensive. Both *WhatsApp* and SMS are very easy to use and fast to send information to multiple people at the same time, making it time effective as well.

According to Min, (2007) and Rice, (1993) comparing face-to-face and internet-based instant messaging suggested that both online and face-to-face deliberations can increase participants' knowledge, efficacy, and willingness to participate in politics as well as social activities. There is a trend showing that mobile instant-messaging, usually in the form of short message service (SMS), is becoming very popular among cell phone users, especially young people (Ramirez Jr et al., 2008). This is as a result of the Short Message Service (SMS) accessibility and affordability among young people making it more convenient to send and receive messages. Again, Katz (1959) uses the gratifications theory which explains why users are motivated to use certain media. Through this theory, the audience is seen as active and not passive as they interact

with the information content that they come across and they are also seen as co-creators of information (Lievrouw and Livingstone, 2006). Straubhaar and LaRose (2013) argue that interactivity should be seen as situations where real-time feedback is collected from the receivers of the information in a communication channel and is used by the information source to continually modify the message as it is being delivered to the receiver. *WhatsApp* text message application is seen as one source of information that allows interactivity and two-way communication where the audience sends and receives information (Quan-Hasse and Young, 2010).

Subtheme: Convenience, cost effective and time effective

Respondents also indicated that *WhatsApp* and SMS is very convenient and they do not spend a lot of time and money in sending information through these mediums. Due to this they are motivated to use both *WhatsApp* and SMS.

My reasons for using SMS and *WhatsApp* is that if I don't have data a little small amount of data that I have, it will help me get access to it and it's very easy (Respondent 5)

Respondent 13: "It is very cost effective for SMS and for *WhatsApp* it's very reliable once the person has internet the person can use it anytime, anywhere"

Respondent 20: "Some reasons that motivates me to use *WhatsApp* and SMS is that they are both cheaper and faster"

Respondent 21: "Because it is reliable and efficient"

Respondent 24: "In my opinion it is very fast so when it comes to dissemination of information, I could say all you need it data and it's not very costly"

Respondent 6: "It is convenient and time effective. Sometimes instead of calling and interfering with somebody's work you can just text and the person will reply at the comfortable time"

Sometimes you are too busy and don't want to engage in a long verbal communication so you just want to send text, especially on *WhatsApp* once the person sees it you would know that the person has seen it, the person will reply and you would have your conversation whiles doing something else. You can have a conversation at the same time without engaging all your attention on a phone call. It is easy to use (Respondent 35)

A probable explanation from these respondents indicated that individuals are motivated to use applications that are not time wasting, convenient and inexpensive when sending information through these applications. Sultan (2014), in an investigation related to mobile text messaging in Singapore, suggested that users of *WhatsApp* turn to it as a medium that enables them to keep contact with family members and friends, as well as for entertainment and acquiring information. As part of its uses, *WhatsApp* has the capability of sending location information to the recipients (Church & de Oliveira, 2013). In the same study, it was found out that one of the benefits of using *WhatsApp* includes its affordability. Cost is seen as a factor that influences people's choice of medium in sending messages.

Subtheme: Easy access to information

Respondents stated that they were able to access information easily without any form of stress or difficulties. This was further explained by respondents that,

Respondent 2: "Sometimes it helps me to have access to what I want to learn"

Respondent 4: "Some of the reasons that motivates me is that it makes me get free access of information"

Respondent 7: "I will say SMS and *WhatsApp* are the simple ways that we can use to send information"

A probable explanation from these respondents indicated that individuals are motivated to use applications that are stress-free or are not difficult when sending information through those applications.

Theme Two: Effectiveness

According to findings from the study, respondents indicated they were motivated to use *WhatsApp* and SMS as a result of its effectiveness and this was categorized into two subthemes namely; ability to better express themselves and effective communication.

Respondent 9: “There are certain things I can say while typing that I cannot say face to face so it motivates me to use SMS and *WhatsApp*”

Respondent 10: “I feel more relaxed typing than speaking because I can escape a lot of things when I type than speaking”

Respondent 15: “Am actually not able to express myself well one on one so texting is much easier for me”

It was further explained by respondents on its communication effectiveness that,

Respondent 18: “It helps communication easily”

You can SMS message to reply messages as and when you receive them and the *WhatsApp* too when someone sends a *WhatsApp* message you use the *WhatsApp* to reply the person (Respondent 32)

A probable explanation from these respondents indicated that individuals are motivated to use applications that are very effective, convenient and easy when sending information through them. Skierkowski and Wood (2012) conducted a study on the importance of text messaging among college-aged youth and concluded that the broad acceptance of the use of cell phones creates both a pressure and desire to communicate through text messages. As young people negotiate interactions, they always ensure that close contact is maintained through active engagement through these platforms that is easily accessible and cheap to operate.

Mandel and Muncer’s (2007) study explored why young adults choose text messaging for social communication. They concluded young adults choose to communicate via texting because it gives them more power in their interactions with their peers. This control exists because they have the ability to take time to think of a response before having to reply. This power serves as an additional potential factor as to why texting is particularly prevalent in romantic relationships.

As more and more messages become personalized, young people are driven to pursue conversations independently without being coerced and they tend to have equal ownership of the mobile device and its operating system. The symbolism of power thereby signifies the control

that these young people have in texting back a response to a message sent earlier and keeping a record of conversations in the form of a stored text.

Theme Three: Privacy

Respondents indicated that *WhatsApp* privacy is one of the motivations that influence them to use it as they explained that messages are encrypted and third parties do not have access to their personal information. Other respondents further explained that,

With SMS and *WhatsApp*, I just feel like it's just you and the person you are talking to but telegram and Facebook and Instagram are more crowded and messages sent there is like to a large group of people but for *WhatsApp* and SMS you decide who you text (Respondent 6)

Because it is more convenient for me. I actually don't like crowded places, the other social media platforms like Facebook are crowded whatever you post there a lot of people are going to see it but *WhatsApp* is more personal (Respondent 14)

A probable explanation from these respondents indicated that individuals are motivated to use applications that ensure the privacy of its users. For instance, Applications like *whatsApp*, messages are encrypted and third parties do not have access others personal information. *WhatsApp* is a social media application that involves direct messaging as well as sharing media including voice messages, videos, and photos among others (Steele, 2014). It uses both data and Wireless Fidelity (WIFI), so it is not included in your monthly text-message subscription. *WhatsApp* text messaging application is available on relatively any device (initially free on smartphones) and is considered relatively safe and secure. A reason behind the continuously increasing popularity among teenagers and young adults is *WhatsApp* features which include group chats and location sharing (Webwise, 2016).

Theme Four: Record Keeping

Other respondents also explained that with *WhatsApp* and SMS they are able to store a lot of information and documents for future references and the backup feature on *WhatsApp* helps to store and keep information without losing them.

Both applications keep records because with *WhatsApp* and SMS if someone says he or she didn't get information you can easily resend it to the person so it makes it very effective for information dissemination (Respondent 12)

For records sake you can go back and retrieve information in case someone is trying to outsmart you or deny something, you can just go back and retrieve the truth as a proof (Respondent 23)

I think it's very effective because sometimes when you talk to people, once you talk to them, they can easily forget or you can forget because of a lot of things going through your mind but then for the *WhatsApp* message and SMS ones you take the phone or anytime you go through the phone and open the chat you can always refer back to the chat and see the conversations you had earlier. Sometimes if it's prompting you on doing something you can remember and go back to get it done. Messages always serve as a reminder. (Respondent 29)

A probable explanation from these respondents indicated that individuals are motivated to use applications that are able to store a lot of information and documents for future references without not losing them. Mandel and Muncer's (2007) study explored why young adults choose text messaging for social communication. They concluded young adults choose to communicate via texting because it gives them more power in their interactions with their peers. This control exists because they have the ability to take time to think of a response before having to reply. Along with this, one has the ability to keep record of conversation through stored text messages.

Question 2: What are some of the purposes young people use SMS and *WhatsApp* applications for?

Respondents revealed some of their purposes of using *WhatsApp* and SMS are because of the features these applications come with. This explained elaborately by respondents that,

Respondent 2: "Voice recording for instance when you are tired and you can't type you can just voice record"

To compare to other applications *WhatsApp* is the most unique because sometimes even if I want to send a message to someone maybe the person might not understand the language, I want to speak so I will use the voice note to send the person a message (Respondent 7)

Respondent 17: "Videos, sending stickers is some of the features that influences me"

Respondent 19: “They have some features that actually makes using the application easy, you can record the voice, make videos and then the messages are encrypted.”

The video call aspect of it, someone in UK can be communicated with by seeing the environment of the person and see how the person is doing and that’s a good thing (Respondent 22)

I think the backup aspect of *WhatsApp* is good because when you change your phone or even lose it you are able to retrieve your information but I don’t know of the other applications if they have the backup (Respondent 33)

Other respondents further explained the purpose for their use of *WhatsApp* and SMS as a mode of communication is share and have access to information, academic purposes and effectively communicate with others.

Respondent 14: “Sometimes it helps me to have access to what I want to learn”

Respondent 16: “You get to share slides and also share things as groups on *WhatsApp*”

You can SMS message to reply messages as and when you receive them and the *WhatsApp* too when someone sends a *WhatsApp* message you use the *WhatsApp* to reply the person (Respondent 19)

Respondent 26: “I get connected with my family and loved ones across the world”

Respondent 29: “The purpose we use *WhatsApp* and SMS is so we can get in touch with friends, family and other people”

Respondent 33: “To text, not to feel bored because people post a lot of interesting things on their status which can entertainment and personal interactions with people”

Lastly, respondents stated due to the popularity of these applications are one of the purposes for using it.

I found out that using *WhatsApp* is always easy and 95.5% of the world populations are using *WhatsApp*, so *WhatsApp* is very easy to reach out to someone. SMS also if the person is having mobile data or not it can easily be accessible and can reach the person easily (Respondent 5)

I will say it so popular because I don't even know much about the other applications like Zoom, telegram and even though I have Facebook I don't usually use it like I use *WhatsApp* and SMS (Respondent 35)

A probable explanation from these respondents indicated that individuals' purposes for using some applications are because of the features these applications come with. It can also be further explained that the purpose for the use of these applications as a mode of communication is to share and have access to information, academic purposes and effectively communicate with others.

WhatsApp provides online users with the ability to send and receive a variety of media, such as images, videos and audio media messages. Client software is available for Apple iOS, Google Android, Blackberry OS, Microsoft windows phone, among others.

WhatsApp instant messaging handled ten billion messages per day in August 2012 (Olanof, 2012). During the month of June 2013, *WhatsApp* Inc. announced that they handled 27 billion messages every 24 hours (Sushma, 2012). *WhatsApp* had over 450 million monthly active users. Additionally, 700 million photos are shared daily, and 10 billion messages are also shared daily (Parmy, 2013). The *WhatsApp* platform has the following collaborative features (Sutikno et al., 2016). These features include providing online students with the ability to exchange text messages, images, videos, and voice notes to their social network or group and contacts.

Also, it provides students or instructors with the ability to create a group (social network group) that supports the social interactions. Members can engage in discussion forums. *WhatsApp* Messenger provides opportunities for students to send messages without limits. The application uses a 3G/EDGE Internet data plan or Wi-Fi to ensure continuous data transmissions across the *WhatsApp* mobile system. Students using the *WhatsApp* application through a variety of mobile devices, such as smartphones, Galaxy tablets, and so on can message one another through texts, images, videos, among others.

Students of universities and major institutions of higher education use mobile communication-based text messaging and instant messaging. Texting is based on short messages service (SMS) between students through mobile devices (Kasesniemi and Rautiainen, 2002). Instant messaging is based on sending brief, typed messages over the Internet. Students use both texting and instant messaging in higher education (Johnson 2007; Kennedy et al. 2008; Salaway, and Caruso 2009).

Furthermore, the majority of the institutions of higher learning are willing to use both text and instant messaging for educational purposes (Jeong 2007; Kennedy et al. 2008). Motiwalla (2007), in his research found that the use of instant messaging for educational purposes, suggests that popularity and support for mobile devices within the student population is great and that the majority of students at universities benefit from texting through mobile learning devices.

Question 3: How has the use of SMS and *WhatsApp* influenced the mode of communication among young people?

Respondents stated that *WhatsApp* and SMS have had an influence on them both positively and negatively. Some of the negative influence *WhatsApp* has had on them were anti-social, addiction, hindering productivity, making them lazy, time wasting, short hand and misspelling of words.

Respondent 2: “It can be very addictive”

Respondent 5: “SMS and *WhatsApp* has made me a bit more cowardly instead of speaking my mind face to face I would rather just send a voice note”

It has made me drift away from the personal human interaction as I am more addicted to texting instead of talking to the person. It has made me stay away from people and be on my own (Respondent 7)

Respondent 16: “What I will say is that *WhatsApp* has made the youth much lazy because most people will spend their time *WhatsApping* instead of studying”

It has made me very lazy in the sense that I don't even bother myself to meet people to mingle with them I just have to take my phone and send one message and a conversation just begins overtime. (Respondent 19)

WhatsApp has negatively and positively influenced me because sometimes we use shorthand in typing and then when you come out to communicate in writing you find yourself using that short forms of writing sometimes you get to mix up the spelling of simple words. (Respondent 22)

It has influenced me in a negative way it hinders my time. It doesn't give me time to learn because me having more access on social media it prevents me from learning because of the access I have.
(Respondent 25)

Other respondents also further explained that *WhatsApp* and SMS as a mode of communication has influenced them positively. They stated it has improved their spelling and also enhanced the academics in terms of having access to relevant information and materials, helps them release stress and participating in online group discussions and lectures as they belong to groups like class, study, church groups and entertainment groups.

Respondent 4: "I belong to church groups, class groups, other fan groups that will helps make the application very interesting"

It has made me learn more even if I want to receive an information from a friend it's easy to get access and help me get the information, I want. (Respondent 5)

Respondent 9: "It has made communication more effective and convenient and I also get to chat more"

Respondent 13: "Let's say in a positive way it helps me when am in need of information and transferring of information to my colleague and my friends"

Respondent 15: "It makes me text, and not feels bored because people post a lot of interesting things on their status which can be entertaining and personal interactions with people".

It has helped in so many ways but then you are able to learn the spellings of some words because of the auto correction you can be corrected when you type a word wrongly. (Respondent 18)

Due to class groups I have on *WhatsApp* sometimes if I miss class I can just go back to these class groups and refer to whatever the lecturer had to say and if I should miss church or a hangout with friends I am able to get the information of what ensued on the *WhatsApp* platforms. (Respondent 21)

It has made people really relaxed because now you don't have to stress yourself over communication or having to meet someone to converse even if the person is outside you can just send the person a message and that's it. (Respondent 29)

A probable explanation from these respondents indicated that some applications influence individuals both positively and negatively. Some of the negative influences are anti-social, addiction, hindering productivity, laziness, time wasting, short hand and misspelling of words and some of the positive influence are that some applications improves spelling and also enhances academics in terms of having access to relevant information and materials, helps to release stress and participating in online group discussions and lectures.

A study by Si (2012) shows that instant messaging such as *WhatsApp* text message application causes seven negative emotions in users; including anxiety, guilt, pressure, distraction, embarrassment, suspicion, and confusion. Symptoms of these emotions include worrying and a decreased self-esteem when faced with long replies, pressure to respond to messages immediately, confusion with regards to what the intended meaning of the message is, and more (Si, 2012).

4.2 Discussion and Interpretation of Findings

According to Min, (2007) and Rice, (1993) comparing face-to-face and internet-based instant messaging suggested that both online and face-to-face deliberations can increase participants' knowledge, efficacy, and willingness to participate in politics as well as social activities. There is a trend showing that mobile instant-messaging, usually in the form of short message service (SMS), is becoming very popular among cell phone users, especially young people (Ramirez Jr et al., 2008). This is as a result of the Short Message Service (SMS) accessibility and affordability among young people making it more convenient to send and receive messages.

Again, Katz (1959) uses the gratifications theory which explains why users are motivated to use certain media. Through this theory, the audience is seen as active and not passive as they interact with the information content that they come across and they are also seen as co-creators of information (Lievrouw and Livingstone, 2006). Straubhaar and LaRose (2013) argue that interactivity should be seen as situations where real-time feedback is collected from the receivers of the information in a communication channel and is used by the information source to continually modify the message as it is being delivered to the receiver. *WhatsApp* text message application is seen as one source of information that allows interactivity and two-way communication where the audience sends and receives information (Quan-Hasse and Young, 2010). Findings from the study indicated that the youth were motivated to use both SMS and *WhatsApp* because it is easier, convenient and faster. Others also indicated are able to get free access to information as well as send and receive information using these applications. *WhatsApp* is a social media application that involves direct messaging as well as sharing media including voice messages, videos, and photos among others (Steele, 2014). It uses both data and **Wireless Fidelity** (WIFI), so it is not included in your monthly text-message subscription. *WhatsApp* text messaging application is available on relatively any device (initially free on smartphones) and is considered relatively safe and secure. A reason behind the continuously increasing popularity among teenagers and young adults is *WhatsApp* features which include group chats and location sharing (Webwise, 2016). The study also shows that the purposes to which the youth uses SMS and *WhatsApp* as a mode of communication are for receiving and sending information, others also stated that a little small amount of internet data helps them get access to information. Again, respondents used *WhatsApp* and SMS because of the privacy it comes with and they are able to interact with their friends and family as well as for academic purposes. Some of the groups chat the respondents were in are family groups, church groups, class groups, study groups, motivational groups, and entertainment and old school groups.

A study by Si (2012) shows that instant messaging such as *WhatsApp* text message application causes seven negative emotions in users; including anxiety, guilt, pressure, distraction, embarrassment, suspicion, and confusion. Symptoms of these emotions include worrying and a decreased self-esteem when faced with long replies, pressure to respond to messages immediately, confusion with regards to what the intended meaning of the message is, and more (Si, 2012). Thus, although there are positive aspects of *WhatsApp* text messaging application

during interpersonal communication; it could also create communication barriers with different interpretations of a message that may result in a wide array of negative emotions (Si, 2012). These negative emotions would likely affect the emotional and psychological growth of young people since they largely depend on these applications for their mode of communication (Wood et al., 2016). Their findings also affirm the results from this study as respondent also indicated how the use of *WhatsApp* and SMS has influenced their mode of communication and social habits both positively and negatively. Respondents stated some of the negative influence *WhatsApp* has had on them were anti-social, addiction, hindering productivity, making them lazy, time wasting, short hand and misspelling of words. Positively, it has improved their spelling and also enhanced the academics in terms of having access to relevant information and materials, helps them release stress and participating in online group discussions and lectures as they belong to groups like class, study, church groups and entertainment groups.

4.3 Chapter Summary

This chapter consists of the findings and the analysis of the data collected. The data presented were gathered using interview guide.

The next chapter summarizes the research findings. It further provides a conclusion for the study and offers recommendations based on the objectives of the study.

CHAPTER FIVE

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.0 Introduction

This is the concluding chapter of the study. It summarizes some of the major findings of the study, makes recommendations for policy and further research and concludes the study.

5.1 Summary of Findings

The objectives of the study were to determine the motivations that influence the use of SMS and *WhatsApp* text message application as a mode of communication among the youth, the purposes for which young people use Short Message Service (SMS) and *WhatsApp* text message applications, how the use of SMS and *WhatsApp* has influenced the mode of communication among young people. Findings from the study indicated that the youth were motivated to use both SMS and *WhatsApp* because it is easier, convenient and faster. Others also indicated they are able to get free access to information as well as send and receive information using these applications.

The purposes to which the youth uses SMS and *WhatsApp* as a mode of communication are for receiving and sending information. Others also stated that a little amount of internet data help them get access to information. Again, respondents used *WhatsApp* and SMS because of the privacy it comes with and they are able to interact with their friends and family as well as use them for academic purposes. Some of the group the respondents were in are; family groups, church groups, class groups, study groups, motivational groups, entertainment and old school groups.

Lastly, findings from this study indicated how the uses of *WhatsApp* and SMS have influenced the mode of communication and social habits among the youth. Some of them that have become very lazy and waste a lot of time chatting instead of studying, they also stated it has made them drift away from personal human interaction. Also, they misspelled words during academic work as a result of using shorthand in chatting on these platforms and it is also very addictive using them.

5.3 Recommendations for policy

Nonetheless, the analysis highlights a number of important findings as *WhatsApp* and SMS are effective mode of communication among the youth. These platforms help them to communicate effectively and are very convenient. Also, they are able to use these platforms for academic purposes like online lectures and sharing of slides and other relevant study materials. Thus, I recommend that Mobile Network Operators (MNO's) should give special internet packages to students in educational institutions to be able to effectively use these platforms as a mode of communication. Also, we recommend *WhatsApp* to develop a feature that can support online meetings to help the youth in the communication and learning processes.

5.4 Recommendations for further research

From the research findings, there are a couple of factors to be considered when studying SMS and *WhatsApp* as a mode of communication. Thus, there is evidently a need for further research to be done on the effects of *WhatsApp* on academic performances and how social media has altered human interactions both locally and globally. Also, further research on the topic of effectiveness of online communication medium, especially considering the advancing communication technology that alters the way one interacts with another, on a global level. Lastly, I recommend that a study be conducted in other tertiary institutions in Ghana as well as the sub-region so that the findings can be generalized as this study has not been able to do so.

5.5 Limitations of the Study

Limitations of the study are as follows:

- This study was conducted in only one tertiary institution that is Accra Technical University (ATO) which might not reflect the entire opinion of respondents in other institutions.
- The study was limited to the youth at Accra Technical University (ATO) because the researcher had limited time and resources.
- A qualitative method was adopted for the study and an interview was the instrument of data gathering as a result small sample sizes of 35 respondents were used out of the entire population of Accra Technical University.

5.6 Conclusion

The purpose of this study was to ascertain the motivations of young people's use of SMS and *WhatsApp* text message as a mode of communication. This study also sought to identify some of the purposes for which young people use SMS and *WhatsApp* text message applications for, as well as assess how the use of SMS and *WhatsApp* influence the mode of communication among young people at Accra Technical University. From the results, it was found that the youth were motivated to use both SMS and *WhatsApp* because it is easier, convenient and faster. They are also able to get free access to information as well as send and receive information. *WhatsApp* and SMS have influenced their mode of communication and social habits both positively and negatively. Respondents stated some of the negative influence *WhatsApp* has had on them were anti-social, addiction, hindering productivity, making them lazy, time wasting, short hand and misspelling of words. Positively, it has improved their spelling and also enhanced the academics in terms of having access to relevant information and materials, helps them release stress and participating in online group discussions and lectures.

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APPENDIX
INTERVIEW GUIDE
GHANA INSTITUTE OF JOURNALISM

SCHOOL OF GRADUATE STUDIES AND RESEARCH (SoGSAR)

My Name is TERCIA VICTORIA OSUMANU, an MA student at the Ghana Institute of Journalism. As part of the requirements for the award of the MA Degree, I am conducting a study titled **“THE USE OF SMS AND *WHATSAPP* TEXT MESSAGES AS A MODE OF COMMUNICATION AMONG THE YOUTH- A CASE STUDY OF ACCRA TECHNICAL UNIVERSITY”**.

The aim of the study is to ascertain the motivations behind the usage of the SMS and *WhatsApp* as a mode communication among young people in order to make recommendations that will aid young people to make useful choices in their social life patterns and learning processes.

This is only for academic purposes and confidentiality of the information provided is fully assured.

This study seeks to address the following research questions in relation to the use of SMS and *WhatsApp* as a mode of communication among the young people at the Accra Technical University.

1.0 What are some of the motivations that influence the use of SMS and *WhatsApp* as a mode of communication among young people?

- What are some reasons that motivate you to use SMS and *WhatsApp*?
- How does this influence your social habits in relation to the usage of the various apps?
- What are some of the features that influence your choice of these apps? (e.g. app icon, colour, design, voice recording options, video options, online chat, instant messaging options etc).
- What makes these apps distinct from other new applications? (e.g. telegram, zoom, twitter, facebook etc.)

2.0 What are some of the purposes young people use SMS and *WhatsApp* applications for?

- What are some of the purposes you use the SMS and *WhatsApp* as a mode of communication?
- What accounts for your choice in using of SMS and *WhatsApp* applications as a mode of communication?
- What are some of the social groups you belong to on these apps?
- What are some of the features of the apps that make communication most effective and convenient?

- In your opinion, how does SMS and *WhatsApp* contribute to the effective dissemination of information?

3.0 How has the use of SMS and *WhatsApp* influenced the mode of communication among young people?

- How has the usage of SMS and *WhatsApp* influenced your mode of communication over time?
- How has this influenced your social habits and communication patterns?
- What are some of the positive ways the usage of SMS and *WhatsApp* has impacted your social life and learning process?
- How has the usage of the SMS and *WhatsApp* facilitated communication among young people?
- Why would you prefer the usage of SMS and *WhatsApp* as modes of communication?
- Do you have anything else to say?

Thanks for your views and your time!