

UNIVERSITY OF EDUCATION, WINNEBA

**THE LANGUAGE OF WHATSAPP: A CASE OF STUDENTS OF ST.
MARTIN'S SENIOR HIGH SCHOOL, ADOAGYIRI-NSAWAM**



BOHLI SUZANNE AMA

2017

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**A THESIS IN THE DEPARTMENT OF ENGLISH EDUCATION, FACULTY OF
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IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR AWARD OF THE
MASTER OF PHILOSOPHY (ENGLISH LANGUAGE) DEGREE**

OCTOBER, 2017

DECLARATION

Student's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in the University of Education, Winneba or elsewhere.

Signature: Date.....

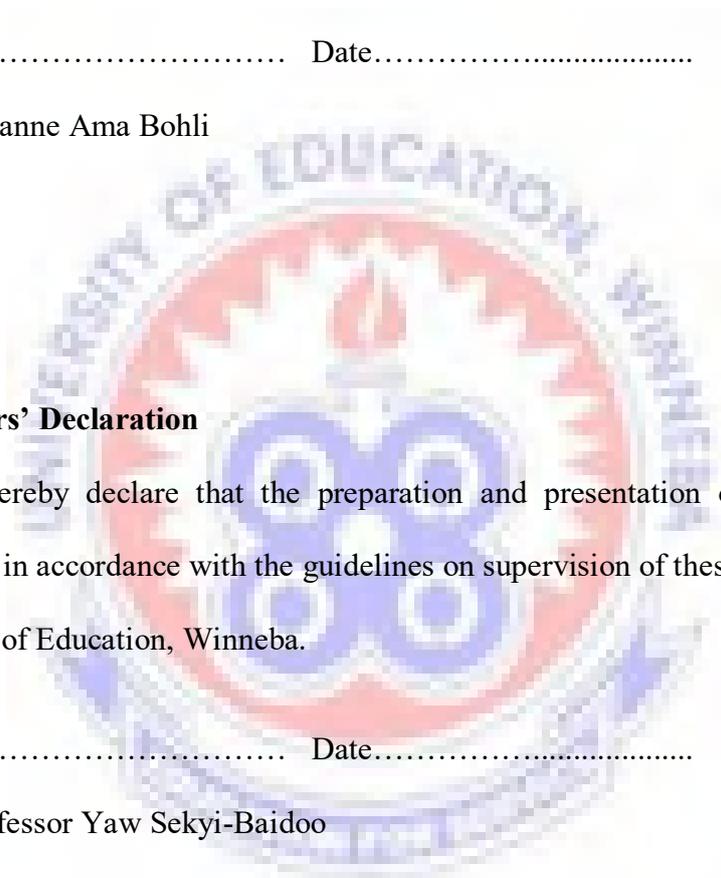
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Supervisors' Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Education, Winneba.

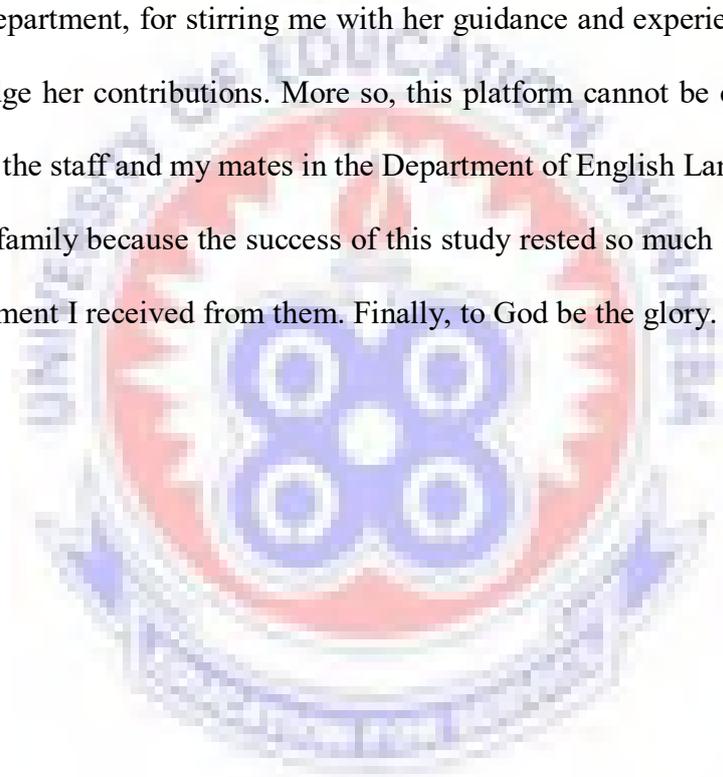
Signature: Date.....

Name: Professor Yaw Sekyi-Baidoo



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DEDICATION

This thesis is dedicated to my lovely father, Rev. Prince Bohli, the head pastor of The Lord's Chosen Ministry, Ashiaman.

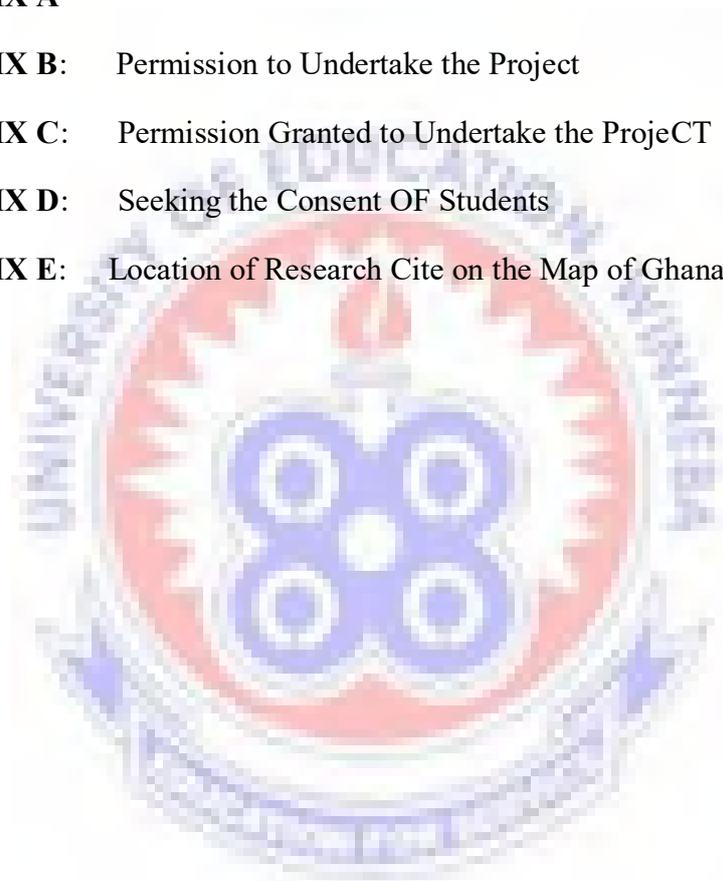


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ABSTRACT

The present research adapted Crystal's (2008) analytical model to investigate the language of WhatsApp used among students of St. Martin's Senior High School, Adoagyri-Nsawam. Through documentation and semi-structured interviews, the informants who comprised of 35 students with 10 males and 25 females, helped collect 115 chats out of which 100 were sampled for the analysis. The results revealed hybridized language permeated into the linguistic continuum of the students' mode of WhatsApp chatting, meaning students' WhatsApp language choice is characterized by informal linguistic features; thus, reactive tokens, paralinguistic and prosodic features, acronyms/initialisms, contractions, clippings, letter/number homophone, punctuations and capitalizations, emoticons/similey, phonetic/misspellings, syntactic reduction, pidgin and code-mixing. Among the features, contractions, clippings and letter/number homophone were the most preferred choice of the students whilst the least popular features were acronyms/initialisms and paralinguistic/prosodic features. The present study is, therefore, significant as it may attract lexicographers and other researchers who wish to undertake related study. Also, the findings may help individuals pursuing courses in English language studies. Finally, it offers both teachers and students a premise of awareness of WhatsApp language and its repercussions when used in a formal setting.

Keywords: WhatsApp, Chats, Computer Mediated Communication and Language features

CHAPTER ONE

INTRODUCTION

This chapter provides the background and general concept of the study, the problem that informed the study, the research questions, significance of the study, limitations, delimitations, organization of the study, and a summary of the entire chapter.

1.1 The Background and the General Concepts of the Study

Human beings necessarily communicate in order to co-exist with others in the society. Indeed, we give and receive information via speech and writing to enhance our lives; thus, ‘when we communicate, it is an attempt to solve a problem or need of survival’ (Sekyi-Baidoo, 2003:2). However, the advancement in life has taken us to a new level of communication, resulting in the birth of various social media; hence, Computer Mediated Communication (henceforth, CMC). Baron (2005) says CMC is “a cluster of interpersonal communication systems used for conveying written texts generally over the internet” (p.3). This form of communication, according to Crystal (2008), is done through the networked computers and serves as an alternative for Netspeak, Netlish, Weblish, Internet language, cyberspeak and electronic communication which could be categorized into different internet communication situations; that is, e-mail, instant messaging, wikis, litservs, blogging and virtual worlds.

Because communication has changed over time due to the advancements in technology, the process of transferring data from one individual to another, that is, audio, video and images has also grown beyond texting but evolved to enable the transmission of media not only between two individuals but also in a group where a huge number of people can interact and get connected worldwide. WhatsApp

application is one of such social media used widely for transferring media, text, files, multi-modal as well as audio-visual calling.

In fact, WhatsApp has become a powerful means of communication in the world today, enabling the users to communicate spontaneously irrespective of age, gender, status, class, distance, time or place. That aside, WhatsApp medium is currently utilized in office cycles, security services, financial institutions, educational institutions and many other institutions. Presently, WhatsApp has become very popular and relied upon by many organizations for information management and dissemination. Certainly, WhatsApp usage has come to stay with both young and elderly people; however, it is ironical that many people perceive it as children's medium of communication and has adverse effects on their English language usage. Personally, to some extent, this perception about the WhatsApp being children's mode of communication and its language constituting a complete deviation from the standard norm of the English language, is understandable since WhatsApp is most often used openly by the younger people.

In recent times, the issue of WhatsApp language has been the subject matter of discussion (e.g. Thurlow & Brown, 2003; Bieswenger, 2006; Crystal, 2008; Tagliamonte & Denis, 2008). A more devastating issue is the frequent concern raised by teachers that the current crops of students no longer adhere to mechanical accuracy and grammatical rules in their essays because of the advent of the social media. Thus, teachers continue to lambast their students for incompetence in Standard English writing and blame the students' general poor performance on the use of WhatsApp medium. Unfortunately, the alarmists or portrayals continue to fuel the debate surrounding the damaging effects of WhatsApp communication on English language, a fact which may be authentic or, to some extent, only build on sheer extreme

fictionalized accounts. In fact, this consistent attack on the use of WhatsApp medium has created pandemonium, panic, and consequently, provoked national spirit which regenerates some kind of xenophobic feelings for education in Ghana.

This criticism has invariably led to the development of negative reaction towards the people who use WhatsApp medium. More so, public commentators have also joined the alarmists in expressing their reservations about the possible adverse effects of WhatsApp on literacy. The criticism might be one of the many reasons that led to the prohibition of cell phone usage in the second cycle institutions in Ghana.

The question, which may interest many concerned parents is, ‘what kind of language do students use when they communicate via WhatsApp that warrants public criticisms?’ In Ghana, just as in many other countries that uphold English as their medium of communication, an effectual usage of the English language is so dear to parents and other stakeholders of education as it remains an official language over indigenous languages. Despite the assumption that WhatsApp chatting has a negative effect on the English language usage, the effectiveness of its usage depends on the appropriate choice of words and, in the combination of such words, lies what is known as the ‘chat’.

Based on my own observation, WhatsApp language exhibits certain distinctive features which appear to violate the existing norms of the Standard English language. Apparently, WhatsApp might turn around conventional linguistic and communicative practices against the traditional Standard English language. Simply put, the language of WhatsApp is likely to welcome a screw of grammar leading to language change. The central role currently played by the WhatsApp medium in the students’ lives makes its language quite valuable for state-of-the-art linguistic research. In view of such

observation and the belief, yet to be proven, I opine that thorough investigation into language use in WhatsApp be carried out.

1.2 Statement of the Problem

Just as Pidgin English has been thought of as being responsible for poor performance in English language (Sekyi-Baidoo, 2011) which subsequently led to the ban on its usage in Ghanaian schools, WhatsApp language has also been a victim of similar criticism for being imperfect or a reduced form of English language. Indeed, previous studies have indicated that the language of CMC is awkward and has influenced English grammar negatively (Thurlow & Brown, 2003). In contrast, it has also been suggested that even though the language use in CMC is hybridized or truncated, it has no negative effect on English language usage (Crystal, 2008 and Coker, 2011). Unfortunately, in this part of our continent, very few studies have sought to empirically establish the actual language use in CMC, so validating such assumption in Ghanaian context may be unauthenticated.

Meanwhile, Mc-Taggart (1996) believes that the important factor that must be considered when assessing a research report is to authenticate whether the research problem is original and/ or it is appropriately conceptualized. Unfortunately, it is evidenced that some quantum of work has been done on CMC but none of such studies has adequately addressed the language of WhatsApp chatting. For example, Shortis (2001) and Doring, 2002 studied the language of Instant Messenger (IM), Crystal (2005) studied the language of E-mail communication, Ko (1996) studied the language of Inter-Change, Baron (2008) studied the language of Web Logs (aka Blogs), Barnes (2003) studied the language of newsgroups and bulletin boards whilst Crystal (2008) and Coker (2011) studied the language of SMS messaging.

Again, considering the literature on CMC (e. g. Shortis, 2001; Doring, 2002; Hard af Segerstad, 2002; Thurlow & Brown, 2003; Crystal, 2008 and Coker, 2011), some years have elapsed; therefore, one would like to see whether there has been a change in the assumptions made by the previous researchers. Again, by taking a quick glance through the literature, it is obvious that very few studies focus on students of Senior High Schools; the majority of researchers focused mostly on the basic schools' children and the university students users (Thurlow & Brown, 2003; Crystal, 2008; Coker, 2011). The existence of these gaps, however, pin-point the fact that there is paucity of studies on CMC.

Though the phenomenon of language use in CMC has formed the basis of considerable debate in the last decade, the academic interest in Ghana is assumedly recent and scanty (Coker, 2011). The reason for this fall out, I think, might be the ban on the mobile phone usage in the second cycle institutions. Meanwhile, irrespective of this prohibition of the mobile phone usage in schools, it is an open secret that WhatsApp chatting is mostly used among students in Senior High Schools. Although alarmists consistently raise their voice about unique spellings and screw of syntax in WhatsApp chatting, the study of language use in this medium has received very little attention within the academic community in Ghana making the studies on the CMC unattractive. What is indispensable now is making the actual language of WhatsApp available to the public so as to culminate its hear-say syndrome.

The fact of the matter is that some studies on the language use in the domain of CMC have been published but the actual language use in WhatsApp chatting, in particular, is under examined making it necessary for further investigations. It is against this background that I consider the language use in CMC in Ghana very significant, believing that there is scantiness of literature on WhatsApp communication among

students of second cycle institutions, particularly, St. Martin's Senior High School, Adoagyire-Nsawam. Meanwhile, these students represent a community with distinctive linguistic characteristic of chitchat habit appropriate for the present study. More importantly, data on students' WhatsApp language can expose the features stakeholders may consider when establishing social media effects on English language.

1.3 Purpose and Objectives

The researcher is of the view that WhatsApp chatting is an emerging sub-discourse of CMC which is marked by unique linguistic features. Thus, the study seeks to explore the language of WhatsApp chatting among the students of St. Martin's Senior High School. The study also aimed at establishing the preferred language features in the students' WhatsApp chatting.

1.4 Research Questions

The study aims to provide answers to the following questions:

1. What language features do the students of St. Martin's Senior High School exhibit in their WhatsApp chatting?
2. Which of the language features are preferably used in the students' WhatsApp chatting?

1.5 Significance of the Study

The usefulness of WhatsApp communication cannot be underestimated in our contemporary society, especially as diminutive in language use is highly upheld. It is, therefore, worth investigating what goes on in students' WhatsApp chatting so as to be informed about its demands. Thus, in studying a language of this kind, it is vital to analyze the structure and various linguistic components constituting that language. By studying the changes in language use that are as a result of WhatsApp communication,

we may be able to have a better insight into how human communication is changing. To a very large extent, this study seeks to reveal the actual language of WhatsApp chatting which will subsequently provide premises for language teachers to intercede students' poor performance in English language. Besides, the findings of this research will mitigate or demystify the saga surrounding WhatsApp language as it will make available the unresolved issue between language of WhatsApp chatting and that of the traditional English language.

Precisely, the findings of the present research will equip researchers with the insights into the language use in WhatsApp communication so as to establish its real effects on literacy, be it negative or positive. The study will also enable researchers recognize and appreciate language of WhatsApp as a new genre which will invariably provoke further study. More so, the result of the study will provide answers to questions that cannot be obtained through surveys and observations. Beyond that, the lexicographers can rely on the present findings to write dictionary for the language of WhatsApp and other CMC media. Furthermore, drawing on a range of academic sources from various fields, this research aims at investigating the kind of language features that make up the chats in WhatsApp communication and the observable syntactic changes in WhatsApp communication.

Finally, the present research provides an empirical basis for identifying WhatsApp chatting as a sub-discourse of CMC. Zelenkauskaitė & Herring (2008) maintains that the ready availability of new modes provides a rich opportunity to study the emergence of language practices, norms and social behaviors as expressed through discourse and to theorize about emergent language phenomena. In this light, the study will unearth "new" linguistic forms used by WhatsApp communicators, as pointed out by Thurlow & Brown (2003) and Crystal (2008). For this reason, the present study

serves as a contribution to the ongoing research on CMC. This is due to the fact that the academic studies which have examined the linguistic practices of CMC are very limited, most especially as WhatsApp communication is new and has not yet caught up with the norms and practices governing the English language usage.

In this regard, the results of this study may help improve the linguistic or discursive mapping of this new communication technology more generally and find basis for analysis which might be validated or contradicted by future studies. Thus, the current study should be seen in its own right as a modest contribution to the on-going discussions and to the existing scholarships that treat WhatsApp language as an emerging code.

1.6 Limitations of the Study

This study encountered a number of limitations during the gathering and analysis of the data, a phenomenon I think has a likelihood of rendering the present research slightly different from the previous studies. Some of the challenges were centered on methodological issues such as data gathering procedures. First, the participants in the study were engaged on a voluntary basis but just few of them were unwilling so their involvement was based on tantalizing for a token. As a result, the samples of WhatsApp chats used in the compilation of the corpus were gathered only from students who were willing to share them; thus, limiting the generalization of the findings. Again, for the majority of the students who agreed to take part, the researcher was not able to gather their WhatsApp chats for both ethical and methodological reasons. Ethically, it was not possible to request WhatsApp chats from a student in the absence of the co-communicator, since doing so would have included data from people who had not given their consent.

More so, the chats I gathered were only those which the informants felt comfortable contributing to the studies. Therefore, it is likely that the data might not represent the actual language practiced and shared in the WhatsApp chatting I wanted from the informants. A further weakness of the data gathering techniques in the present study is that the WhatsApp chats were often taken out of context. Although the chats were transmitted for particular purposes in a series of interactional contexts, the influence that another person had on the linguistic behaviors of the informants was impossible to control.

Last but not least, the thematic focus of this research is a Crystal's (2008) model. Using this as a springboard, I constructed an argument built on a theory of WhatsApp language to support my position. However, since the topic of this research is still new and evolving, I was faced with a shortage of existing research data and had to conduct significant primary research, gathering, parsing, and analyzing more than a thousand lines of various CMC transcripts. Ultimately, I had to rely on the Crystal's, (2008) idea for the selection, coding and classification of the data. Thus, Crystal's invented terminologies were adopted to explain my observations since there were insufficient existing words to describe the findings of the present study.

1.7 Delimitations

This section of the present research discusses two key factors, that is, the kind of text involved in the study and the students who used the language so as to ensure a manageable scope. The first parameter has to do with the selection of the text for the study. In view of this, the central concern to this thesis highly lies in the language use in WhatsApp chitchat, an instance which informs the basis of the current study. The study, therefore, focuses on the language of students' WhatsApp communication. The

second parameter involved students of St. Martin's Senior High School, an institution where mobile phone usage is strictly prohibited.

Juxtaposing this section, the following delimitations are necessary in order to avoid vagueness and set the premises of the present study into perspective. The study is limited to conveniently selected WhatsApp-chats of 100 messages which I am convinced will reveal the true picture of the study. Thus, the data for this study is restricted to students of St. Martin's Senior High School with the hope that the results will serve as a catalyst for further research in the area of WhatsApp communication and other CMCs. Again, this study is narrowed to qualitative analysis of language use in students' WhatsApp chatting. This decision to deal with qualitative rather than quantitative analysis is to help the researcher gain an insight into the kind of words and sentences the students use when communicating through WhatsApp medium.

1.8 Chapters Synopsis

This study is organized under five chapters. The first chapter sought to address the introduction, the background to the study, statement of the problem, research questions, significance of the study, limitations, delimitation, organization of the study and the chapter summary. Chapter 2, which is a review of the literature, discusses work done by other researchers giving an overview of the analytical framework of the present thesis and establishes the premises of what is left undone. Next, is chapter 3, and it seeks to provide the premises that detailed the methodology of the current study. Chapter 4 follows with the presentation of the various findings, whereas chapter 5 gives details discussion of the findings. Finally, Chapter 6 provides a summary of the findings, conclusions and recommendations for further studies.

1.9 Chapter Summary

The preceding chapter presented the background information about this research. Thus, the background of the study has been given detailing the general concepts of the language use in WhatsApp chatting and what informed the present study. The succeeding chapter seeks to provide a clearer picture and a more extensive discussion of the variables contained in the topic, focusing on the empirical studies and analytical framework.



CHAPTER TWO

LITERATURE REVIEW

This chapter is slated to review the related scholarly work using a three-sided approach. The first approach seeks to discuss the genesis of WhatsApp, giving prominence to its communicative functions. Next, attention is given to a review of the language use in WhatsApp in specific cultures so as to demonstrate how the present study is both similar to and different from previous research. Finally, there is a discussion on the relevant analytical model with emphasis on their significance to the analysis and interpretation of the present data.

2.1 The Historical Background of WhatsApp

WhatsApp is a popular means of communicating via the cell telephone which is believed to have been founded in 2009 by Brian Acton and Jan Koum, both veterans of 'Yahoo'. Others also think that the origin of WhatsApp chatting can be linked to the genesis of CMC discourse. According to Thurlow & Brown (2003), CMC emerged in the 1970s whilst Baym (2006) believed that research into CMC began as computer systems were being installed in large organizational contexts at a time maverick enthusiasts were creating interactive dial-in bulletin board systems. It is for this reason that the language of CMC is generally referred to as "netspeak", web communication, electronic discourse or e-language (Crystal, 2001).

However, the general idea of texting began as part of the Global System for Mobile Communications (GSM) protocol in the mid-1980s (Coker, 2011). Yet, it was not popular until the 1990s that the mobile phone operators started to develop the commercial potential of the technology mainly to facilitate communication among people with hearing impairment (Crystal, 2008). Two years later, Herring (2007)

considers CMC as a text-based human to human interaction mediated by networked computers or mobile telephony.

Synchronicity of WhatsApp Chatting

The unique use of CMC language serves to tie the group together through the development of a common history (Ling, 2002; Kemp & Bushnell, 2011); hence, users understand the use of texts-peaks. Some scholars believe that one important factor to consider when classifying a medium in the paradigm of CMC is its relationship with synchronicity of participation (Baron, 2008; Crystal, 2001; Danet & Herring, 2007). Thus, in situating WhatsApp chatting in the broader context of CMC, much the same need arises for establishing the interplay between what the technology itself allows and what the communicator herself/himself brings to the technology (Thurlow & Brown, 2003). As Herring (2001) comments, “one important distinction of CMC relates to the synchronicity of the participation” (p.614).

In a synchronous communication like WhatsApp, messages are exchanged simultaneously in a real-time situation which requires spontaneous response to conversation (Baron, 2008) of which case, both interlocutors are present on-line and communicate at the same time (Crystal, 2001). In essence, both interlocutors share almost similar features as messages typed by communicators are transmitted directly to the screen of the other person or group of people. Asynchronous communication, on the other hand, occurs in a postponed time of which a response to a conversation can be delayed for sometimes (Crystal, 2005). In asynchronous systems, messages are written and received at widely separated times which are then stored in the addressee's site or inbox.

In a similar study of language use in a synchronous chat-like protocol called Inter-Change, Ko (1996) found that the users produced shorter words and fewer complements than in a corpus of formal writing that was comparable in size. Findings from both Ko (1996) and Baron (2004) reveal that CMC mode tends to have lower average lexical density scores and numbers of words per transmission than either writing or speech in more synchronous modes; a trend which suggests that the burden of producing and processing CMC in highly synchronous modes does not permit users an extended time for message planning, albeit requiring more conscious attention than talking (Herring, 2001: 617). This means that the process involved in WhatsApp communication could either be synchronous or asynchronous depending on the timeframe taken by a participant to respond to a particular message.

2.2 The Features of WhatsApp Language

Since the study on WhatsApp media is uncommon in this part of our continent, this section delves into the previous studies on CMC in general bringing out the Analytical model that establishes the language features similar to that of WhatsApp chatting. It is clear quite a number of studies have attempted investigating the language of CMC (for example, Thurlow & Brown, 2003; Bieswenger, 2006; Crystal, 2006; Tagliamonte & Denis, 2008) but much is left to be done in this continent. While such studies may have been inexhaustible in Asian, American and other European continents, there seems to be insignificant studies within the African context.

Earlier studies have established almost similar linguistic phenomena. In the United Kingdom, Biber et al. (1999) revealed that the use of truncated constructions, subject deletions and lack of expletives are accepted in conversational events as meaning is recoverable from a shared background. The authors are of the view that speech is an organized set of sounds, that is, “a continuous stream of sounds without a

clear division into units, but can be analyzed into meaningful elements which recur and combine according to rules” (p. 50). In support of Biber et al., Jaffe (2000) opines that the language of CMC is often structurally simple, fragmented and concrete so capitalization and the repetitive use of punctuation enable users to express paralinguistic resources as stress and intonation.

In the United State of America, Thurlow & Brown (2003) also carried out a descriptive study of the linguistic features of SMS among the first-year students of Language and Communication studies at the Cardiff University. Their findings establish that the language of SMS is underpinned by three basic sociolinguistic maxims; that is, brevity and speed, paralinguistic restitution and phonetic approximation. Examples of linguistic processes under brevity and speed are the abbreviation of lexical items, the minimal use of capitalization, standard and grammatical punctuation (e.g. commas and spaces between words). The authors also maintain that paralinguistic restitution seeks to address the apparent loss of such emotional or prosodic features as stress and intonation.

In Germany, Bieswenger (2006) identified similar findings in his comparative analysis of shortenings in English and German private SMS corpora and established SMS varied not only in frequency but in type. However, Bieswenger attributed this phenomenon to linguistic differences between the two languages. His classifications resulted in five types of shortening in lexical items. These include initialisms and acronym, clippings, letter/number homophones, contractions and phonetic spellings. Thurlow & Brown’s findings are similar to those of Crystal (2008) in terms of initialisms, clippings and contractions, though the latter uses the term letter omission.

Tagliamonte & Denis (2008) attempted to show how the linguistic practices of teenagers participating in IM conversations could demonstrate a gradual change in

progress. The authors identified 16 of the most frequent linguistic forms (or variables) they believe to be distinctive to CMC (e.g. *haha* for laughter, *omg* for *oh my god*, *btw* for *by the way*, etc.). Like ordinary speech, language use in CMC is often less formal; thus, enables the users to avoid the various protocols required before they can ask a question or get to the reason why they call.

Perez-Sabater, (2012), investigated whether the posting of comments on Facebook is a conventionalized genre of CMC, despite its relative novelty, and whether a writer's first language impinges upon the register and style of the comments. The results, first, showed that Facebook is still in the process of becoming conventionalized. The study also revealed that non-native speakers of English language use more formal style than native writers.

Another study that discusses the distinctive features of language use in text messaging is Hård af Segerstad's (2002). The study looks at how different types of Swedish CMC take on aspects of speech and writing. She captures SMS data using a combination of methods, including a web questionnaire, requesting texts from family and friends, and having research participants forward texts they sent to her, for a total corpus of 1,152 messages containing 17,024 words. She finds an average message length of 14.77 words and 64 characters. She looks at word frequency as well as punctuation, grammar, spelling and non-graphical items (i.e. symbol-word replacement). The sub-features she notes here (e.g. non-conventional punctuation, accent stylizations) are similar to the features noted in other analyses of CMC.

Moreover, some features which are specific to Swedish include omission of subject pronouns, omission of verb phrases, and omission of articles, prepositions, and possessive pronouns. Although Hård af Segerstad continually returns to the idea that the different forms of CMC are shaped by their limitations (i.e. the screen size, space, limited time to edit), one observation she brings up when talking about the accent stylization - which she calls “spoken-like spelling” – is that sometimes it would take fewer key strokes to type the stylized version, some accent stylizations take just as many or more key strokes than the conventionally spelled word. This insight points to a creative aspect of SMS that moves beyond the proposed limitations of the phone and into features required by a shared language of texters.

In Africa, Chilwa (2008) opines that most SMS messages are constructed in an informal telegraphic style. The results of her study conducted among Nigerian Christians reveal such linguistic features as phonetic spelling, phonetic conventions and general abbreviations. Chilwa argues that those features are occasioned by the influence of the mass media, information technology and Americanism. She further explains that these CMC strategies afford the writer the opportunity to say more within the available space with the advantage of paying less. In this way, she apparently disagrees with Al-Khawalda (2008) on the idea that texters keep their messages short in order to avoid making grammatical mistakes.

With Grice’s (1975) famous maxims of conversation in mind, Thurlow & Brown (2003) take a linguistic look at the research on SMS and compile a list of CMC maxims as brevity and speed, paralinguistic restitution, phonological approximation. Thurlow & Brown suggest that it might have to do with the ease of turn-taking. Either way, a variety of shortening devices are reliably demonstrated in text messaging samples and the maxim of brevity is demonstrated across studies. That said, brevity and

speed does not draw a clear distinction between the possibilities that users want to send brief texts or want to be able to send them quickly so shortening devices could be evidence for either. It is unclear whether the brevity and speed condition is a manifestation of the user's choice to send short messages or whether they are operating under an attempt to get their meaning across with the least effort.

Paralinguistic restitution consists of ways of writing that compensate for the lost prosodic and visual cues found in face-to-face interaction. An example of paralinguistic restitution would be capitalizing something for emphasis, instead of saying it more loudly. Another example might be putting a smiley face emoticon (:)) after a message that would otherwise read neutrally where the emotional affect would be conveyed through prosodic cues and facial expression during interpersonal interaction. By phonological approximation Thurlow and Brown mean writing a word so that it looks the way it would sound if it were spoken, like *wanna* for *want to*. That type of accent stylization has long been found in informal writing.

Another common example is G-clipping (*goin* instead of *going*). Despite the fact that phonological approximation happens in other forms of speech, Thurlow & Brown are right to propose phonological approximation as a maxim of text messaging because they use the category to include many types of this behavior that do not appear in other types of speech. This includes letter/number homophones and forms of accent stylization that would be surprising outside of CMC. Without understanding that in text messages words can be written in a variety of ways that convey their meaning by using sound properties, much of CMC behavior would be opaque.

It should be stressed though, that these are generalizations from the literature, not tested predictions. Thurlow & Brown (2003) define phonetic approximation as a shortening strategy by which texters try to capture the phonetic sounds of words in their

texts. He also explains paralinguistic restitution as comprising such shortening forms as abbreviation and letter homophones. Thurlow & Brown (2003), therefore, characterize the distinctiveness of British SMS in terms of the following characteristics: shortenings, acronyms and initializations, letter/number homophones, Unintentional misspellings and typos, non-conventional spellings and accent stylizations.

In effect, Rössler & Höflich (2002) categorize CMC into different internet communication situations of e-mail, instant messaging, short message service, wikis, blogging, virtual worlds, etc. On his part, Baron (1998) believes that email language represents a creolizing blend of written and spoken discourse. Like email, and indeed, in most new media discourse (e.g. WhatsApp), the language use is much of the same hybrid quality and as Rössler & Höflich (2002) describe it, 'CMC is just like email on the move' (p.21).

It is important to note that even though the linguistic features of text messages are universal, some differences do exist in different cultures. For example, Coker (2011) believes that the use of genuine novelties and logographic emoticons may be more Eurocentric than Afrocentric. This may be because mobile telecommunication first began as a western technology, and so Westerners may be more advanced in its use than users in less developed nations (ibid).

Quite interestingly, one major controversy in the literature is whether to consider the language of CMC a written or spoken variety. The bone of contention in this context is that the language use in CMC is incomprehensible as it often mixes elements of both writing and speech; thus, the phenomenon calls for a suitable framework that will confirm its actual language use. Crystal's (2001) stance on this issue is that the most fundamental factors that differentiate speech from writing are that 'speech is typically face-to-face, time-bound, spontaneous, immediately revisable,

loosely structured, oral/aural and socially interactive; whereas, writing is typically space-bound, elaborately structured, visual and repeatedly revisable' (p, 25-28).

Some few studies also believe that whilst the messages of CMC are physically written and displayed features of written language, they equally have some degree of essential similarities to speech (Leung, 2007, Tagliamonte and Denis 2008; Baron, 2008). Whilst Tagliamonte and Denis (2008) reveal that the language of CMC reflects the same changes that occur in English speech, some researchers also claim that the language use in CMC is communicated in written form but has elements that distinguish it from both speech and writing (Thurlow & Brown, 2003; Plester & Wood, 2008). Though the language of CMC is described as a hybrid of both spoken and written English, it is basically more of a phonological form of spelling than features of spoken language (Leung, 2007).

One central issue highlighted in the literature is that the language use in CMC is highly informal. Crystal (2007) is of the view that the informal elements in text messages are realized through explicitness, repetition and emoticons. Others include exactness of diction, colloquialism and slang. According to Thurlow & Brown (2003), text messages are distinct in respect of three basic sociolinguistic maxims. These maxims are brevity and speed, phonetic approximation and paralinguistic restitution. The author explains the maxim of brevity and speed to include linguistic processes such as abbreviation of lexical items, the minimal use of capitalization, standard and grammatical punctuation. Others are phonetic spellings such as 'u' for the word 'you' and 'oda' for the word 'other' as well as general abbreviations (Chiluwa, 2008).

Another linguistic practice revealed in the literature is omission of some letters. In omitting letters, texters usually drop vowels of words, which in many languages form the peak of sonority. Also, 'silent' consonants and double medial consonants are

dropped. Examples are bt('but'); yr('year'); tmrw('tomorrow') and hv('have'). Here, texters shorten their words by omitting letters from the middle or dropping a letter at the end. Herring (2001) and Chilwa (2008) have both said that people tend to omit letters in their texts mainly so as to be economical in their use of the small screen of the mobile phone as well as save money. A major motivation is that texts with longer messages attract higher tariffs so communicators do this to have short messages.

Effects of WhatsApp Chatting on Literacy

The proliferation of the language of CMC has been criticized for causing deterioration of English language proficiency and its rich heritage. Critics of CMC language perceive that the language of CMC undermines the grammar of English language. They also believe that the words used in CMC are very similar to their English-language counterparts so can confuse the users. However, there are also opposite views that SMS language being detrimental to the English language proficiency is overrated and that it has little or no effect at all on the grammar of English language.

In a review of the literature about the debate over the language use in CMC, the two perceptions have been supported regarding its effect on the English language. On one side of the issue is a common belief that CMC is in battle with written English language (Lee, 2002), while another view contends that it does not affect English language negatively at all; rather, it is another form of communication which medium is slightly different from English language (Crystal, 2008). Whilst majority of studies supported the view that the language use in CMC is detrimental to Standard English because it does not obey the rules of standard grammar, and that the words use are not usually found in dictionaries (O'Connor, 2005), others believe that there are no standard

rules for the use of CMC as words can be shortened anyhow (Shortis, 2001 and Crystal, 2008).

The critics' standpoint is that the more people text the more they are likely to get exposed to the risk of forgetting the syntactic rules, because CMC pays little or no attention at all to the correct spelling and grammar of English language (Thurlow & Brown, 2003). O'Connor (2005) contends in his study that students send poor habit of CMC to classes and it is destroying the way they read, think and write as this phenomenon does not require critical thinking or analysis. He added that the more students use CMC media, the less they are able to separate formal and informal English. His study further unveils that teachers have been noticing informants inability to punctuate or use capital letters correctly in sentences because they are used to the language of CMC, a mode of communication which contains run-on sentences (ibid).

In another study, Thurlow (2006) looked at the anxiety and perception about the impact of instant messaging on language in general. He collected an international corpus of hundred different print media and analyzed the meta-discursive constructions. The results of the analysis show that the nature of the popular discourse about CMC is generally misplaced. The author emphasizes that many people misconstrue what he terms "the evolutionary trajectory of language change" (Thurlow, 2006: 18). According to him, one major narrative thread in public discourse about CMC concerns the way language is used. For example, Thurlow (2006) observes that many people think CMC is making a deleterious impact on Standard English; therefore, the most dominant theme from the study resonates with an over-riding sense of moral panic about declining standards of literacy.

A major significance of Thurlow's (2006) study is the introduction of two scholarly positions on the subject of CMC. These are revolutionists and evolutionists.

Revolutionists, according to Thurlow (2006), reflect the opinions of the media and public outcry concerning the perceived declining standards in literacy among learners. Thurlow (2006) refers to those phenomena as statistical panic. This panic might be due to fictionalized accounts of computer-mediated discourse in general. Thurlow's interest, however, dovetails towards the evolutionary school of thought. The author seems to re-echo the view of Crystal (2004) that language is dynamic, and that it best serves the purpose of its users, although it needs to be appropriated within a specific situational context. On the contrary, Thurlow's position that CMC impedes literacy among learners has been challenged (Al-Khawalda, 2008 and Coker, 2010).

Al-Khawalda (2008) argues that the language of CMC is a new variety replete with errors. The author based his analysis on a data of over one hundred SMS messages texted in English by Arabic university students to their loved ones. Al-Khawalda collected the data by instructing respondents to write down each message as exactly as it first appeared on their mobile phones and drop it in his mailbox anonymously. Participants also had the option to forward their message(s) to the in-box of the author's mobile phone (Herring, 2001 and Squires, 2010).

Similarly, studies have targeted CMC arguing that the use of the media is increasing among teenagers and leading to a "breakdown in the English language" (O'Connor, 2005: 4), since it is "the linguistic ruin of the generation" (Axtman, 2002: 3). In brief, the popular press proclaims that electronically-mediated language is more simplified, fractured, and impoverished than traditional forms of written language (Baron, 2008; Tagliamonte & Denis, 2008). This violation of the resourceful use of punctuation is rightly described by Koritti (1999) as 'constructing paralinguistic markers quite ingeniously as well as breaking orthographical conventions in an inventive manner appears to be a personal linguistic choice' (p.15).

Rafi (2008) also believes that CMC tends to create a novice language, which has become an integral part of the multilingual world pursuing simple sentence structure for communication. Thus, Rafi contends that syntactic and lexical choices by the texters are not so different from a child language in that a child expresses his feelings through simple present progressive tense e.g. *mom eating* for 'Mom is eating' and *Eating* for 'I am eating'. In keeping with Rafi's (2008) and Koritti's (1999) proposals and that of other researchers, it is more inclined to view the language use in WhatsApp communication in both its own term and that of CMC in general.

In response to such claims, however, some linguists argue that rather than treating the linguistic features of CMC as errors caused by carelessness or lack of knowledge of standard writing, the majority of informal variants found in many CMC varieties are deliberate choices to express oneself creatively, and/or to economize time and effort during typing (Crystal, 2001; Barnes, 2003 and Baron, 2008). According to Crystal (2001), the discourse that takes place in CMC is best described as a "new species of communication...more than just a hybrid of speech and writing," since it is complete with its own grammar, lexicon, graphology, and usage conditions (p. 48). Some scholars think that the language use in CMC is best perceived as a unique register, filled with a plethora of distinct varieties of language (Squires, 2010) which cannot be equated to other forms of non-electronic written texts (Crystal, 2001: 48).

Besides, there is much concern over the impact of the use of such forms on the younger people's literacy, a concern that is without strong empirical support (Plester & Wood, 2008). The limited analyses of text language that are available suggest that the language used in CMC is standard and that distinctive or nonstandard forms occur alongside standard ones (Crystal, 2008). As Shortis (2007) points out, text messaging has "de-regulated what counts as English spelling rather than altered spelling itself" (p.21). Carrington (2004) borrows the term 'squeeze-text' to describe the principal features of text language. Obviously, textism demonstrates an appreciation of the sounds of language (Tagliamonte & Denis, 2008; Thurlow, 2006).

Nevertheless, studies have reported positive effects of CMC on children's literacy skills, although phonological skills may mediate some of that relationship. For example, Plester & Wood's (2008) studies found no negative effects of CMC on literacy for young users. However, Rosen et al. (2010) study of young adults showed a negative association between self-reported textism use and formal writing, while there was a positive association with informal writing, though self-reported textism used was quite low in this case, and may or may not reflect the actual use of textisms. The general belief is that CMC reflects language change and innovation in language as the variation depends on the particular use of CMC (Ong'onda, 2009).

In other words, some scholars suggest that time constraints of particular messaging systems significantly influence language use in CMC, and that the more time the users have to compose a message the more likely they are to adhere to standard spellings and orthographies (Crystal, 2001 and Herring, 2001). Yet, it is important to keep in mind that CMC users need to be understood whenever they attempt to break language rules that are traditionally associated with the Standard English language;

thus, there is no sense in communicating a language that is unintelligible regardless of medium constraints (Crystal, 2008).

However, there is little disagreement that the mass media has greatly influenced the public's perceptions about the language of CMC, as well as the users themselves (Baron, 2008; Crystal, 2001; Herring, 2001; Squires, 2010). The fact is that WhatsApp chatting is certainly persistent and seems to demonstrate its own variant of language, yet these factors of hybridism alone do not qualify it for ridicule as a damaging influence on informants' Standard English. The fact is that many people have already formed their minds and invariably blacklisted this new technology as being detrimental to the study of the English language. In most cases, the critics constantly make reference to abbreviations as creeping into formal essays that students write. Well, to a lesser extent, the critics may have a case. In fact, personally, as a teacher of the English language, I am sometimes shocked at some of my students' writings as the words they used are just disheartening. For instance, the sentences are not capitalized and they have a lot of misspellings and bad grammar.

Chiluwa (2008) has noted that the practice of CMC is fostering a disregard for the grammatical rules in standard language. She, however, observes that, in spite of the grammatical infelicities in the messages, texters are able to communicate their thoughts in a coherent and meaningful manner. Nevertheless, many linguists have attributed the violations in standard writing to the very nature of the mobile phone. The linguists believe that texters resort to all kinds of CMC strategies due to the technical constraint of the message buffer, which has 160 character limit (e.g. Thurlow & Brown, 2003; Al-Khawalda, 2008 and Crystal, 2008). For instance, Crystal (2008) sees the violations as linguistic innovations of texters to meet such ends as the need to be more economical

in terms of space and cost. It is, however, not always the case that messages are sent to recipients in a hybridized form (ibid).

Given the situational context, sometimes some messages are sent to readers in standard spelling, punctuation and capitalization in order to be recognized as complete sentences. Since the functions of text messages hitherto thought to thrive in informal situations are now being extended to formal domains (Crystal, 2008), it is important that one knows when to or not to choose certain linguistic features that reflect the context of situation.

On the contrary, Al-Khawalda (2008) argues that the language use in CMC is a new variety replete with errors. The author based his analysis on a data of over one hundred SMS messages texted in English by Arabic university informants to their loved ones. Al-Khawalda collected the data by instructing respondents to write down each message as exactly as it first appeared on their mobile phones and drop it in his mailbox anonymously. Drawing on the concept of speech community, Al-Khawalda (2008) found that Arabic native speakers are fond of using abbreviations, speech-like expressions and ellipsis in their messages. The results of the study further show that text messages contain many grammatical mistakes, are devoid of temporal references and contain elements of code-switching.

According to Al-Khawalda (2008), code-switching is the most interesting feature of mobile phone text messages (p. 204). For him, Arabic is used when the writer of a message wants to express such passions as love and admiration. He adds that expressions such as 'yaaamar' (oh! moon), 'yaawardah' (oh! flower) and 'walah' (I swear by Allah) are more emotional than their English equivalents. An attempt to switch codes thus represents texters' effort to convey their emotions in English as nearly the same way they would be doing in their mother tongues.

Al-Khawalda (2008) further contends that the shortness and preciseness of a text message can be attributed to the sender's and/or recipient's ability in English. He adds that it is the lack of a good command of English that causes senders to minimize their messages so as to avoid any problem in the writing and understanding of their messages by recipients. This view is, however, doubtful because what matters most, as Chilwa (2008) has pointed out, is not the grammatical nature of the message, but rather the fact that it serves a communicative need which can be appreciated by its receiver. Based on data such as the examples above, Al-Khawalda concludes that text messages are a new variety of English that contains many linguistic violations.

Plester & Wood's (2008) study also demonstrates the importance of distinguishing between textisms and misspellings in assessing implications for literacy. Textisms such as g-clippings, symbols and accent stylizations showed positive associations with spelling ability, while texted misspellings were negatively associated with spelling ability, as might be expected. Plester & Wood (2008) also added that "it is clear that [CMC] does not contribute to the demise of pre-teen children's literacy" (p.18).

Obviously, the study of language use in WhatsApp warrants continued research interest, most especially from linguistics analysts and other communication scholars. Specifically, this research seeks to focus on ethnographic analyses; that is, the real contexts of WhatsApp communication to address the use of language; to pay attention to the language of WhatsApp communication linking it with other CMC technologies such as micro-blogging (e.g. Twitter), which are sustained by instant-messaging as well as by emailing. Indeed, both pros and cons of the empirical studies seem to suggest that the language use in CMC over-looks orthographic and syntactic rules of the English language with a great emphasis on written sounds and compressions. In effect, most

computer mediated communications have influenced language use resulting in linguistic variations; thus, there are upshots on lexical and syntactic features as reflected in spelling variation and syntactic modifications.

Inasmuch as I agree with the critics for one reason or the other, I also have personal reservations. In my view, for a genuine scholarly justification as regard the detrimental effects of the language of CMC, we need not be quick to condemn WhatsApp users just because they diverge from Standard English since the kind of English we speak ourselves has always been criticized of being substandard. In view of this, I opine that the issue of WhatsApp chatting is not centered on corruption of Standard English, but on how the language is used by the communicators to achieve their communicative intents.

It is, however, unfortunate that most of the studies in the literature focus on the users of CMC and how the practice corrupts language use leading to its pervasive effects on literacy. It is also clear that there are a number of studies that examine the communicative intent of the linguistic properties of other computer mediated communication (Baron, 2001 and Yates, 1996) but the language of WhatsApp communication has not yet received the same treatment. Nonetheless, the language of WhatsApp chatting is likely to welcome inconsistency of words, screw of grammar and syntax. Similarly, WhatsApp communication evolves new conventional linguistic and communicative practices against the English language usage. It is in this dimension that the present research aimed at finding the noticeable linguistic changes of WhatsApp texts, the way the participants handle the English language when chatting, and the character the users display as they construct their chats.

Again, the review established that the few studies conducted on CMC, the majority were about students in basic and tertiary levels of education, ignoring those students in the second cycle institutions. Thus, the present study seeks to conduct almost similar study but that which relates to the language use in WhatsApp communication among students of St. Martin's Senior High School. In sum, two basic scholarly positions can be drawn on the subject of CMC language. The first position establishes that CMC linguistic features emerged as a result of the innovative methods used by the texters to achieve diminutive whilst the second one maintains an error analytic position that the CMC styles are deviant language which must be discouraged.

As Thurlow (2006) points out, the popular discourse regarding new technology usually treats CMC as 'all good' or 'all bad' and, as a new technology has been adopted, overall literacy has risen. Thurlow (2006) concluded that the standard of literacy had increased across time. However, he maintains it is important to monitor the use of non-standard language in inappropriate contexts (e.g., a formal school assignment), and, similarly, the use of textisms by children, and particularly by weaker readers, requires attention (ibid).

For the majority of texters, the use of CMC language should not be any cause for concern. Some scholars seem to have almost emerged at the positive focal point of the CMC language. For instance, Drouin & Davis (2009) found no difference in standardized literacy scores between texters and non-texters in American young adults' writing samples. Kemp (2010) assessed the effects of textisms on literacy among Australian university students, noting neutral and positive relationships between scores on linguistic tasks and reading and writing accuracy for both textism and standard text. However, Rosen et al (2010) noted a negative correlation between textism and formal writing, an effect moderated by gender and level of education. Rosen et al. also noted

a positive association between textisms and informal writing. Their data suggest that the precise type of textism used might be informative as regards the texter's writing skill.

Tagliamonte & Denis (2008) propose, based on their analysis of IM language, that the use of non-standard linguistic forms reflects a "skilled command" of language and the available linguistic systems. They argue that the manipulation of language evident from IM is possible due to the in-depth understanding of linguistic features, suggesting that this type of language signals "not the ruin of this generation at all, but an expansive new linguistic renaissance" (p.27). Similarly, Plester et al. (2009), using a translation exercise, found that most children switched between standard spelling and textism proficiently.

Thurlow & Brown (2003) labels teenagers as 'generation text', 'generation grunt' and the 'Net generation', while descriptions such as 'bleak, bald, sad shorthand' have been attributed to teenage SMS users (Sutherland, 2002, p. 6). It has also been suggested that an over-dependency on technology has culminated in a youth generation with deficient communication skills, causing a 'dumbing down' of language and a 'lowering of standards' (Thurlow, 2006, p. 11).

Because there are distinctive features of text language, the tendency is to overestimate the degree to which it is nonstandard. It has even been suggested that there may be a link between CMC language patterns (while CMC, IMing, social networking and so forth) and a perceived decline in literacy standards in children and young adults (Thurlow, 2006), who are the largest user groups of CMC and CMC worldwide (Ling, 2005). Thurlow's (2006) analysis of 101 media reports on CMC language found that the vast majority of media reports portrayed the language used in a negative light.

However, empirical research does not support this negative appraisal of text language nor of texters' language skills. Expectant literature show that the majority of text language is standard form, and the nonstandard forms used are often creative, serve an obvious communicative function and reflect a skilled command of language (e.g., Tagliamonte & Denis, 2008). Research analyzing genuine examples of the types of textism and netspeak which appear in CMC - such as non-conventional spellings (fone/phone) and shortenings (goin/going) – has allowed for an examination of the frequency of such linguistic forms, and of their distinctiveness compared to "standard" language. This review considers the research relating to language use in texts and discusses implications for literacy.

The Category of WhatsApp Users

Fortunati & Magnanelli (2002) study the uses of CMC among Italians by collecting data based on a sample of thirty unstructured interviews. The results show that young people prefer SMS to calls because the former are economical both in terms of time and cost. Also, the authors' findings indicate that young Italians are fond of CMC because it is private and certain to arrive at the recipient's inbox.

In a study carried out on 11-12 year old children, Plester & Wood, (2008) established that children's knowledge and use of language of CMC is not related to written language outcomes. Plester et al. (2009) rather maintain that the use of textisms is positively related to word reading, vocabulary and phonological awareness. The last of these - greater phonological awareness - would seem logical given the inclination towards phonetic abbreviation such as non-conventional spellings (cum/come) reported in everyday language usage of CMC.

However, it is worth noting that because girls and elderly women make more use of text messaging, many of the analyses to date have been predominantly based on

data from these groups, with boys and elderly men underrepresented. Female texters seem to produce more textisms (Ling, 2005). Given existing gender differences in early literacy, it would seem important to bear these differences in mind when monitoring effects on boys' and girls' literacy.

In Norway, Ling (2005) investigated Instant Messaging of Norwegian children, age between 16 and 19, and revealed that there are differences in the language of females and males. The finding establishes that teenage girls tend to text more, employ more sophisticated syntax, and use less abbreviation, more salutation, more closing indicators, and more punctuation marks than that of their male counterparts. Referring back to Ling's (2005) study, age and gender seemed to factor into: (a) which types of people are more frequent users of the medium; and (b) which users are more likely to use alternative spellings and orthographic conventions to represent speech in writing in CMC.

In Italy, Zelenkauskaitė & Herring (2008) argue that CMC is changing the way in which men and women have traditionally communicated. The authors analyzed a corpus of gender-defined CMC posted on an Italian reality interactive music television channel. The results of the study indicate that women write longer messages, using more emoticons and abbreviations as compared to their male counterparts. This finding is similar to those of Fortunati & Magnanelli (2002) and Ling (2002). For instance, in their study of Italian youth's usage of mobile phones, Fortunati & Magnanelli (2002) explain that girls text longer messages than boys who typically do not utilize the entire space of their screens but rather opt for messages of about 40 to 50 characters. On their part, girls stress the fact that the space fills up easily, and criticize boys' inability to interpret CMC. According to Fortunati & Magnanelli, girls send their messages in "plain" language without too many expressions, references and suggestions. In support,

Yates et al (1996) intimate that females are more active and more pragmatic users of CMC than their male counterparts.

Contrary to Lakoff (1975), Zelenkauskaite & Herring (2008) found that females used more non-standard language. These include abbreviations or expressive insertions that represent characteristics such as enthusiasm, sadness, emphasis and individuality. The co-authors also found that while women were both economical and expressive, they also came closer to using the 160 character message limit often than their male counterparts. This may be due to the fact that women are more interactive than their male counterparts (Tannen, 1994 and Yates et al (1996)

In Africa, Coker (2011) examines the rhetorical structure of 500 SMS posted by lovers to express love to their partners on one of the most patronized radio shows known as 'Love Reason' organized by ATL FM of University of Cape Coast. Coker investigated the content of students' CMC and revealed confessions, requests, missing you, apologies and forgiveness, encouragements and well-wishes, and indeterminate as dominant. Coker, thus, establishes that men use more affectionate lover address forms than their female counterparts. The study further reveals that men dominated in the use Pidgin English. Like Dako (2000) and Sekyi-Baidoo (2002), Coker observed that students' Pidgin English was used mainly by male texters in the bid to maintain peer bonding and familiarity among themselves. Females, on the other hand, rarely acknowledged Pidgin English in their messages partly because they may not like to be thought of as not having been properly educated or being unladylike (Dako, 2000).

A study on gender variation in CMC was also conducted by Coker (2009). This study examined the discourse functions of CMC among undergraduates at the University of Cape Coast. Participants were made up of forty male and forty female undergraduate students. Data were collected from lecture theatres, departmental

libraries and on the main campus of the university. A corpus of over 300 messages was analyzed using both quantitative and qualitative methods. Coker (2009) establishes that men used CMC to send information and avoid conversation during important moments while women aimed at exteriorizing their emotions and maintaining social networks. Gender sensitive with respect to message length, Coker observed that men send longer CMC than their female counterparts, thereby contradicting earlier claims adduced by Fortunati & Magnanelli (2002) as well as Zelenkauskaitė & Herring (2008) that women send longer messages more than men do.

The subject of code-switching in CMC has also been examined by Ofulue (2008) among educated speakers of Yoruba. The research was ethnographic in nature and so the author relied on the participant/observer method. The author argues that texters are creating new communicative functions as well as extending existing functions of Yoruba within the context of Information and Communication Technology.

Following Thurlow & Brown (2003), Ofulue (2008) found that most messages sent in Yoruba had an orientation of religious friendship maintenance. For her, texters prefer to convey certain aspects of their messages in Yoruba, their mother tongue, as an indication of their communicative intent to add a natural flavor to the messages. The study also reveals that such features as the use of honorific plural nouns which indicate politeness are not lost in the SMS context. Unless otherwise explained as differences in culture, it may be said that Ofulue's (2008) observation contradicts the argument raised by Akyea & Aziaku (2009) that the advent of mobile technology is promoting the use of inappropriate language since users are not constrained by face-to-face interaction.

Studies have also revealed the communicative usefulness of CMC in many cultures. With respect to which age groups exhibit a higher frequency of use of the

medium, Ling (2005), found that 85% of teens (the two youngest age cohorts were divided into 13-15 and 16-19 year-olds) and young adults (those in the 20-24 age range) reported sending text messages daily; they “are more adroit users” of the medium (p. 348). In fact, most studies consider age differences in texting; however, it is worth noting that both young and older people have been found using CMC in different ways. In spite of the fact that teenagers and young adults are typically the most avid texters (Ling, 2005), this is not to say that it is exclusive to, or has relevance only for young people as popularly claimed by various studies.

Obviously, some elderly people are currently very soporific in CMC so it is inappropriate to pinpoint a particular age group or gender as avid texters in our contemporary society. However, it is understandable that the young people are full of youthful exuberance so they are likely to be habituated to modernity. Irrespective of this, the young people we find today as avid texters likely grow with the CMC habit in the near future so it may be inappropriate tagging a particular age group to WhatsApp communication.

Again, to analyze which age groups are more likely to use linguistic practices that are believed to approximate speech, Ling (2005) examined the following variables: the lack of structural complexity, the use of abbreviations, punctuation and capitalization. Except for the 20-24 age groups which appeared to be the most prolific users of punctuation and capitalization, the two teenage groups outperformed all other groups in the remaining variables laid out by Ling (2005), and the frequency of use declined rapidly with an increase in age. From these, they isolated three highly frequent forms (*lol*, *haha*, and *hehe*), and noticed that frequency of use of *lol* and *hehe* were increasing among younger teenagers in the 15-16 age range, whereas older teenagers in the 19-20 age range retained a clear preference for *haha*.

From all indications, CMC, of which WhatsApp is not an exception, has become one of the most popular means of communicating among people irrespective of age, gender, class or educational background. It is, therefore, apparent that CMC usage has come to stay with both the young and the elderly people in the contemporary Ghanaian society. However, it is interesting but quite ironical that the use of CMC, most especially WhatsApp chatting, is perceived as solely children's mode of communication leaving out the fully-grown adult users. To some extent, it is quite understandable to view this category of people as the habituated users of WhatsApp communication because they are prone to acculturation or modernity. This is reasonably linked to the creativity embedded in its usage. In essence, the succeeding chapter attempts to examine some of the very few CMC research models that have attempted to bridge this gap.

Communicative Functions of WhatsApp Chatting

Contemporarily, many young Americans were not interested in the technology of CMC. This was mainly caused by infrastructural related constraints and high pricing (Crystal, 2008). It is in this context that Yu, Sacher & Loudon (2002) analyzed the communicative patterns of CMC among American teenagers. Based on an ethnographic research design, Yu et al. (2002) collected data from teenagers, through interviews. The study reveals that mobile communication products and interfaces do not support the social interaction and communication behaviors of American teenagers. The study also shows that young American mobile phone users vary their communication style, depending on the recipient and social context.

Four types of communication needs were identified. These are close friends group communication and school friends' group communication. The last two are job contact group communication and parent group communication. Thus, in contrast to

previous research, Yu et al.'s (2002) work presents a monolithic use of mobile telephony. But, like other studies, Yu et al (2002) realize that mobile telephony promotes virtual fraternity, group identity and minimizes loneliness.

In Africa, Akyea & Aziaku (2009) discussed the impact of new media such as mobile communication on basic indigenous cultural values with specific reference to face-to-face interaction and greeting. The authors collected data through informal interviews with service providers and their clientele. According to Akyea & Aziaku (2009), new technology is at variance with the social context and ethos of the African. They argue that new technology is hampering interpersonal relationships, and is, thus, separating Ghanaians from their cultural values.

Using the mobile phone as a case, Akyea & Aziaku (2009) argue that communication among people is nowadays characterized by lack of warmth and emotion, otherwise commonplace in a typical face-to-face interaction. The co-authors maintain that the mobile phone is promoting the use of inflammatory language on the airwaves, given that interlocutors enjoy some degree of anonymity. Baym (2006: p. 37) terms such practices as “uninhibited behaviors”, citing examples of these as insults, impolite statements and attacks on individuals or groups.

Unlike Ofulue (2008), Akyea & Aziaku emphasize that solidarity terms or greetings are barely used in CMC owing to the informal nature of the medium. The authors claim that such a practice is anti-Ghanaian and added that when greeting is not performed the context of interaction is threatened. However, the authors' arguments are contestable for two main reasons. First, it would be noted that sending a text may occur in either a horizontal or vertical plane. A CMC is used among either people of equal status or super-ordinates. Thus, it seems that Akyea & Aziaku (2009) were preoccupied with how interlocutors of equal status communicate, which is certainly marked by an air of informality.

Chiluwa (2008) believes that text messages are used by texters to achieve specific communicative functions. The author collected data from members of the Pentecostal and Charismatic faith from the Lagos and Ota areas of south-western Nigeria between 2005 and 2007. He considers text messages as discourses because text messages presuppose speech events among interlocutors that share a common social behavior and cultural values. Chiluwa's (2008) study, however, faces a methodological difficulty. That is, the author does not specify the actual data collection procedure, thereby opening the study to such criticisms as one characterized by introspection.

2.3 Analytical Model

Although the literature provides various models which are equally suitable for the present research, Crystal's (2008) model is more distinct as it gives precise terminologies necessary for consideration. Crystal (2008), in his work, 'Txtng: the gr8 db8', examines the linguistic conventions used in separate media and how they differ from not only real life speech and traditional forms of writing, but also how they differ from each other, recognizing that the language of chat groups is not the only 'genre' of the internet. Though aimed at a non-linguistic audience, the book draws on relevant

academic sources and will not only be read widely for enjoyment, despite the author portraying it as a birthday or Christmas gift.

Crystal, therefore, offers a comprehensive look at the linguistic features of several online communication media and establishes that texters make use of both standard and nonstandard forms, labeling its language as 'teen-talk', or more specifically 'textisms', 'textese', 'textspeak' (in the case of SMS), 'netspeak', 'netlingo', and 'weblish'. He added that texting serves as an alternative for Internet language, cyberspeak and many other electronic communications (ibid). The work 'Txtng: the Gr8 Db8' is a contribution to the debate surrounding the CMC media. Here, Crystal emphasizes that texting has positive effects on literacy. This view contradicts the very thought of the people and the media against the CMC media. Such media reports contribute to the huge popular mythology in which exaggerated and distorted accounts of what youngsters are believed to do when they text has fuelled prophecies of impending linguistic disaster. Crystal's work is possibly the first populist, full-length book to put together an argument for texting and it achieves this goal very well, with accessible glossary of both linguistic and technological terms.

Crystal's (2008) rebuttal of this myth is both convincing and amusing: he gives, for example, short shrift to the panic that ensued in 2003 when a girl wrote a homework assignment in textese. The assignment, which began *My summrholswr CWOT*, did not depict the downfall of English language but was, "a clever case of 'trying it on', the linguistic equivalent of walking into class wearing a hoodie" (Crystal, 2008:28). He debunks the popular perception that the use of abbreviations and slang in CMC leads to low literacy and bad spelling among students.

On the contrary, Crystal (2008) further opines that the long term impact of CMC on the existing varieties of the English language is likely to be negligible since it is not

a bad thing. He contends that the negative views on texting are just a mere reflection of people's anxiety over the new generation of users trying to gain control of the English language. This means that the impact of CMC is not of any important consideration since it is not responsible for either bad English or moral decay as criticized. Crystal (2008), thus, emphasizes that CMC is, by no means, a cause for bad spelling but rather leads to an improvement in the literacy of the users (ibid).

Crystal's (2008) counter-argument is that variation in spelling is neither new nor unique to CMC. Acronyms have always required insider knowledge, as Crystal illustrates with a line from a hospital memorandum: "*The PHCT* are going to be looking at the *CRS* with the *CPO*"!; logograms or homophones can be seen in *rebuses* such as *YYU R YY U B I C U R YY 4 ME* (cf. the quiz show *Catchphrase* or board game *Dingbats*); the long history of initialisms is evidenced by occurrences of *NB* (*nota bene*) in 1673; *pm* in 1666; and *IOU* in 1618. Crystal (2008), several of the non-standard spellings are so much part of the tradition of English literature that they have been given entries in the *Oxford English Dictionary*. For example, '*cos*' is there from 1828, '*wot*' from 1829 and '*thanx*' from 1936.

Again, the author of 'Txtng: d Gr8 Db8' asserts that commercial advertising and pop music, especially rap music have all had an influence on the spelling system of texters. Text messaging is also prevalent because of its potential for initializing words. The author holds that people have been initializing common phrases for centuries. For instance, the Latin initialism NB, '*nota bene*' meaning 'note well', was first recorded in 1673 and IOU is known from 1618. Other examples are RIP ('rest in peace') and *AWOL* ('absent without leave').

Where respellings in CMC appear novel, they result from the extension of these processes as texters 'up the ante' on existing forms or their combination (*2bctnd for to*

be continued), a finding which my data supports. At the same time, however, Crystal's second point is that the inevitable focus on these eye-catching forms obscures the fact that "nobody says you *have* to use abbreviated language" when CMC and, indeed, not everybody does. This is perhaps not surprising in the light of Crystal's observation that it is not only young people who text.

Instead, messages are 'stylistically diverse', with styles dependent on factors such as gender and familiarity with the technology, as well as age. His conclusion is that CMC should be seen as "just another variety of language" that children can learn to use appropriately, much as they need to recognize that they cannot write as they talk. In his rap up, Crystal has countered the claims that SMS has a deleterious effect on language with numerous scholarly studies and summarized the findings as:

- In a typical text message, words are not abbreviated as frequently as widely thought
- Abbreviating has been in use for a long time, and thus is not a novel phenomenon only found in SMS language. Furthermore, some words such as 'sonar' and 'laser' that are accepted as standard words in the dictionary are actually acronyms.
- Both children and adults use SMS language, so if adults do not display the errors seen in children's written work, they cannot be attributed to SMS language alone.
- Use of abbreviations in written work and examinations is not that prevalent among students
- A prerequisite to using SMS language is the knowledge of spelling, so use of SMS language does not necessarily imply low literacy

He further observes that this is by no means a cause for bad spelling, where in fact, CMC may lead to an improvement in the literacy of the user. He further claims such terms support the notion of a distinctiveness which is generally assumed a deviant language by an outsider. In furtherance, Crystal (2008) refers to CMC as the form of communication that takes place among human beings through the networked computers. These devices are used via several forms such as Internet newsgroups, online chat sessions, instant messaging and Short Message Service, which users become an integral part.

Finally, Crystal argues that the manipulation of language in CMC is appropriate and creative, and he proposes that it be exploited as such in the classroom. In essence, Crystal's (2008) work confirms Eco's (2002) finding that words used in CMC are shortened and that we are living in an era where the diminutive, the brief and the simple are highly prioritized in communication. His study also supports Androutsopoulos (2006) that online communities generally make their social profile explicit. Crystal also thinks alike with Herring (2001) that the claims of structural fragmentation mediated discourse is sometimes claimed to be incoherent due to the limitation imposed by computer messaging systems on turn taking.

Crystal (2008), therefore, postulates that the most striking linguistic features of CMC include non-standard spellings, initialisms, omitted letters, clippings and genuine novelties. The author asserts that non-standard spellings are perhaps the commonest linguistic feature of text messages and that they are of three types. These are unique spelling conventions such as **2** (to) and **b4** (before). The term 'genuine novelties' was first coined by Crystal (2008) to express how texters build on some of the linguistic processes developed in the past. An example is IMO, that is, 'in my opinion'.

One characteristic of all the genuine novelties, according to Crystal, is that the letters and/or symbols are run concurrent without spaces, which, to him, is unusual in the history of writing systems. He further gives examples as, 'I only want to be with you' is texted as 'iowan2bwu' and 'iydkidkwd' means 'If you don't know I don't know who does' (p. 54). Furthermore, Crystal added that some genuine novelties are slang or a secret code (ibid). For instance, it will be difficult for one to decode 'F?' or 'a3' without being part of the group which introduced them. While the first one means 'Are you free?' or 'Are we friends?' the second one is a reference to a hope for assignation – 'anytime, anywhere, anyplace' (Crystal, 2008).

Crystal's observation that text message abbreviations can be found in earlier writing is earlier made by Kessler and Bergs (2003) who compare Valentine text messages with love letters written by 'fallen' Victorian girls and find similar uses of *bcuz*, *luv*, *missd*, *gud* and the use of *xx* for kisses; while Shortis (2007) traces the use of 'Txt' features to trade names, pop music, children's spelling and web-chat. Other studies note a limited use of abbreviations in their data (Doring, 2002 and Faulkner and Culwin, 2005), and the idea that CMC is creative and appropriate is widely accepted (Hardaf, 2002 and Shortis, 2007).

Here, the difference is obvious as linguists are rather interested in the language that communicates the message. The question is, 'Should WhatsApp language be considered an aspect of CMC as propounded by the previous studies?' One important medium that constitutes CMC is WhatsApp; however, this medium is not given attention in the literature. Obviously, WhatsApp gives preference to an electronic cognitive tool tailored to function as an intellectual partner of CMC with its technological advancement. In essence, the phenomena that take place in WhatsApp

chatting paves way for a detailed discussion of the analytical framework that underpin the present study.

Secondly, the modification attempts to strengthen the linguistics characteristic in view of the emergence of new media such as WhatsApp. Moreover, studying the language of CMC is viable in the linguistics studies because linguists place emphasis on language choice rather than prescribe what language users do with language. For this reason, a key assumption in the CMC analyses is the language choice. In view of this, the linguistic analysis was carefully selected because it bears implications on how communicators employ language resources in fashionable ways to achieve their communicative purposes. It, therefore, has a direct bearing on a premise of linguistics.

The literature clearly shows that the study on CMC language used among students of second circle institutions is not given prominence; meanwhile, these generational crops of students constitute active users of WhatsApp in a Ghanaian context. Secondly, it is obvious most of the studies on CMC are not of African setting, particularly Ghana, making this kind of research unpopular. Furthermore, the literature establishes that majority of the previous studies focus on the texters, in terms of age and gender, and the communicative functions of their messages.

CHAPTER THREE

METHODOLOGY

The previous chapter reviewed the related literature so what is left to delineate now is the methodological issues with the aim of explaining the very nature of the data, the methods used to collect the data and the processes of analyzing the data to arrive at the conclusions of the present study. Therefore, this chapter presents the methodological procedures used in this study; specifically, it covers the research design, the population, sample and sampling procedure, the data source and the informants, data analysis procedures and the challenges encountered in the study.

3.1 Research Design

The present study is a case study that adopts a qualitative approach in investigating a phenomenon within its real-life context drawing on multiple sources of evidence and benefits from the aforementioned development of theoretical propositions, having considered it very significant when undertaking a research on a problem which concerns everyday occurrences. In essence, the qualitative design may equip the researcher with a deeper understanding of why certain phenomenon in WhatsApp happened, and what might become important to consider more extensively in future research. Thus, the qualitative design used for this study helped the researcher to have holistic view of certain phenomenon or series of events which provided a round picture since 'many sources of evidence are used' (Punch, 1988: 32).

On the other hand, this design enabled the kind of linguistic features and students' pragmatic intent with respect to language features to be ascertained. Again, the qualitative design as an approach to language analysis enables readers to appreciate the uniqueness of language use in WhatsApp communication. Finally, a qualitative design supports the proposed model of Crystal (2008) which allows linguists to

examine the kind of language resources that the informants employ in their responding behaviors in this study.

3.2 Description of Research Site

The study was carried out in one of the public senior high schools in Ghana, specifically, St. Martin's Senior High School. The school is located at Adoagyiri-Nsawam in the Eastern Region of Ghana (see appendix E). For the fact that I am a staff of the school, it enabled me to gather data for the study without prejudice from any quarters. St. Martin's Senior High School is a Roman Catholic school established in 1966 with the aim of nurturing individual both academically and morally. Unlike tertiary institutions where the usage of mobile phones is allowed, the students of senior high schools in Ghana are not permitted to use cell phone at all. Most importantly, St. Martin's Senior High School is a mission school so discipline is hardly compromised.

During my interactions with these students as a tutor and house mistress, I realized that in spite of the ban on the use of cell phone, the students still hide and use it. As a result, students are pushed more and more into the use of WhatsApp to avoid their being caught by the school's authority. St. Martin's Senior High School is selected because the culture of WhatsApp communication is noticeable among the students. It is, therefore, an open secret that St. Martin's Senior High School has a large population of WhatsApp users that will provide a broad pool from which I have been able to build my corpus for the present study. Indeed, the choice of students is apt because if we are to study the future of a language, it is appropriate to use the future members of our society as the subjects of such research.

3.3 Data Source and the Informants

WhatsApp is another important medium in which to observe how people manipulate their writing in somewhat online encounters. It is a means of engaging in

online conversation through the networked computers, dedicated applications on mobile phones or pc tablets via the social networking website. In chatting, the users see a list of their friends who are online and, thus, potentially ready to chat at that moment. This medium is a mobile application which allows exchange of text messages, pictures, videos and audio media messages via smart-phones. The application is available for Android, Blackberry, iOS, Symbian (s60), and Windows phone. Unlike SMS, there is no restriction on the length and number of messages one can exchange and no carrier IM fees apply.

The requirements for the use of WhatsApp are a supported phone, an internet connection and a storage space on the phone to download the application. After the WhatsApp is installed, it creates a user account using the phone number as the username which in turn automatically synchronizes with the phone's contacts from user's phonebook with its centralized database of WhatsApp users showing the list of people who are already using WhatsApp.

Conversely, the present corpus is wholly textual rather than multimodal. This means that chain messages were excluded from the corpus. Also not included were visual or audio materials. Since the study that prompted the data collection is completely linguistics in nature, images, videos, and sound files were not gathered. Another deciding factor in asking contributors not to add media files when providing their WhatsApp conversations is that copyright and privacy protection would make the inclusion of pictures, videos, or sounds highly problematic.

The researcher was quite aware that he might face problems in accessing student's WhatsApp chats since most informants would not be ready to grant the researcher the permission to read their personal chats as it is interfering with their personal and private life; hence, the researcher chose to look at academic and learning

related chats . My choice of this category of informants in a Ghanaian Senior High School and their WhatsApp-chats was appropriate because their English compositions continue to characterize samples of a learner language depicting certain features associated to WhatsApp-chatting rather than samples of English for important communicative purposes. As a result, teachers always frown at the usage of WhatsApp for being the brainchild behind the phenomenon making it necessary for a research like this.

However, the privacy and prohibition on mobile phone usage in most schools in Ghana make it difficult for researchers to collect chats as natural data from informants. Owing to this, most researchers who would wish to authenticate the reality of WhatsApp influence on language use find it difficult to collect chats from informants' phones. A common protocol most scholars applied in gathering data from mobile phone for studies is simply by distributing a template for informants to write diaries that record exactly all the text chats they transmit over an observed period of time (Baron, 2008). The fact is that with the development of more sophisticated telecommunications systems, many of the participants were already equipped with technological resources and functions on their mobile phone devices to send archived chats to the researcher directly via WhatsApp. Since this proved to be a more efficient method that additionally limited the number of transcription inaccuracies, this was the preferred technique.

The informants are students from a senior high school. Thus, the data for the current study are genuinely informants' WhatsApp-chats they used among themselves via their cell phones. These chats were natural data gathered from informants who were currently in year one, two and three. Within this group, the specific informants are selected on the basis of easy accessibility and their willingness to participate and

provide the kind of information needed for the current research. I collected 115 chats of which 100 texts were conveniently sampled as the latter contained the exact features I needed for the present study. The data are, therefore, WhatsApp-chats collected from informants. In all, 100 chats with, at least, one shortened element in each WhatsApp-chatting was finally earmarked and shortlisted for the analysis. To some extent, the chats obtained were authentic since the method used was modest and not influenced by the researcher.

3.4 Population, Sample Size and Sampling Techniques

The target population for this study is 2,200 students who are expected to provide thousands of chats but due to the time constraints coupled with the related personalized nature of WhatsApp-chats, only 35 participants were able to provide a total of 115 chats for the study. Two main sampling methods – purposive and convenience sampling were employed at different stages of the study to obtain the required data. I eliminated long-winded and illogical chats from the corpus and I sampled 100 chats from the 115 chats gathered. Although convenience sampling procedures were used in the recruitment process of the participants, the final selection of the participants was based on my personal judgment that they must all own cell phones and be willing to provide the necessary information needed for the research.

Another basic qualification for a participant is that he or she must be accustomed to the culture of WhatsApp-chatting. Convenience sampling is normally utilized when the participants for a study are simply selected because they are accessible or available (Punch, 1988). I, therefore, selected the informants who are made up of 10 males and 25 females based on their willingness to participate in the study.

A second reason for the choice of purposive sampling was its prospective nature of achieving research purpose, and also allowing for careful selection of data to achieve representativeness. This technique of sampling was, therefore, found to be appropriate in the selection of the chats from each student because the building of the corpus was done by means of what I termed 'playing the devil advocate'. The sampling mode – purposive – was also important in ensuring that the questions for which the study sought to answer were adequately answered by the targeted data as it helped me to gain quick access to the explanation for answering the specific research questions investigated in this study. The selection was influenced by the number agreed with my supervisor, to be sufficient for the analysis.

The researcher assured the participants that the data were solely going to be used for academic purposes. Each participant was asked to forward at least two related chats from the items on their WhatsApp-walls to that of the research. A total of 115 chats were collected by the researcher but out of that 100 charts were analyzed. The researcher also used unstructured interviews as an effort to understand the factors which influenced the choice of words and structure of sentences in the chats. The unstructured interviews allowed room for further questioning and for more probing to be carried out after the data was collected from the participants. In all, the data were analyzed using a descriptive approach.

3.5 Research Instruments and Data Collection Procedures

I took several steps in gathering the data for the present study. First, the data were collected directly from the informants through documentations. Since the chats were written texts on informants' WhatsApp walls of their cell phones, they became their personal documents; hence, the appropriate instruments, particularly documentations were used in collecting the data. The corpus was generated by asking the participants to provide authentic WhatsApp chats to me personally and/or through my specially created diary.

Before the start of the project, I anticipated some challenges regarding the gathering of the data. The first one is about the difficulty in accessing student's chats directly since most of the informants might not be ready to grant me the permission to read their personal information as it is more of interfering with their personal or private life; thus, I chose to copy the informants' academic related chats and others which they felt appropriate to provide. The second challenge has to do with conflict of interest resulting in a violation against the school authority. Since the use of mobile phone is prohibited in the second cycle institutions in Ghana, interacting with informants to collect chats on their phones might mean encouraging them to violate school rules and regulations. Thus, appropriate permission was sought from the head of the institution before embarking on the project. (See appendix C).

In spite of all these inconveniences in gathering the data, the chats obtained were real because the method used was perfect and not influenced by any interaction by the researcher. To collect the data successfully, I first educated the participants about the project at hand and appealed to them to allow me copy the chats they communicated among themselves, but not those chats they sent to or received from friends, relatives and other loved ones outside the school premises. After the participants were informed

about the purpose and objectives of the study, their consent was solicited to make them feel they were part of the study. The informants were further advised that the expected chats should be those they could forward and not the pre-typed chats so as to represent the true reflection of the data.

Finally, I assured the participants that their responses would only be used for research purpose so they needed not entertain the fear that their contact numbers and names would appear somewhere in the study which may later be used against them. Further, I convinced the informants to give out their chats to me directly or forward the chats through my phone inbox to enable me establish the kind of linguistic features they used as well as their frequencies of occurrence in the chats. The corpus was collected within September, 2014 and May, 2015. By this, the data were documented for the study via interacting directly with each informant and from the informants' WhatsApp walls through the researcher's wall.

3.6 Data Analysis Procedure, Coding, Validity and Reliability

The method of analysis employed in the present study was linguistic analysis. Linguistic analysis is a key methodological apparatus for analyzing language of CMC (Herring, 2007). Punch, (1998) believes linguistic analysis helps the analyst to understand the types, characteristics and organizational aspects of the documents under investigation. As the data is qualitative in its natural state, the linguistic analysis will enable the researcher to understand the process of language use by an individual to achieve a communicative intent. Moreover, information that might be difficult or even impossible to obtain through direct observation or questionnaires can be gained unremarkably using linguistics analysis.

The researcher used coding to summarize the data by pulling together identifiable patterns in order to find linguistic categories in the data. Thus, I used numbers to label the language features and further categorized them, using the analytical framework of Crystal (2008). In the end, each category of linguistic feature was counted for frequency and percentage as illustrated in the succeeding chapter. For the sake of reliability, after the initial coding of the 100 chats, a second coder who is a linguist was given 10% of the corpus to examine independently which resulted in an inter-rater agreement of 98%. The next section provides a discussion on the limitations encountered in the pursuance of the research as evidenced during the data collection.

3.7 Limitations Encountered during Fieldwork

The corpus compiled for this project is an addition to existing corpora of CMC protocol. A social medium which usage is currently popular in Ghana is WhatsApp; however, its language has created bad feeling among the populace. There is, therefore, a great need for the texts collected in the present project. This is an indication that the creation and analysis of WhatsApp language corpora is contemporarily an active research area. However, most studies explore language data that are publicly available and are relatively easy to obtain. WhatsApp language corpora with non-public language data are still scanty as they are private, more time-consuming and difficult to obtain, because they require active participation of contributors. The present pioneering projects are in no race with any specific research but a forerunner of private social media message collection.

One major challenge that confronted the researcher in the present study concerns the efforts made during the collection of the data. It was, indeed, a snag collecting data from the informants for the fact that mobile usage is prohibited in Ghanaian schools, although the researcher had painstakingly educated them on the

purpose and the significance of the study. As a cover-up, the informants demonstrated that they did not know of what benefit the study would be to their academic work. The informants also registered the sentiment that such a study would reveal their behavioral disposition as mobile users. Surprisingly, Henry (2001), Kasesniemi & Rautianen (2002) and Crystal (2008) also encountered a similar obstacle and have opined that it is not easy to obtain data from cell phone because they are private and intimate. Therefore, it was felt that the informants aimed at safeguarding their individual identity, hence, their unwillingness to be part of the study.

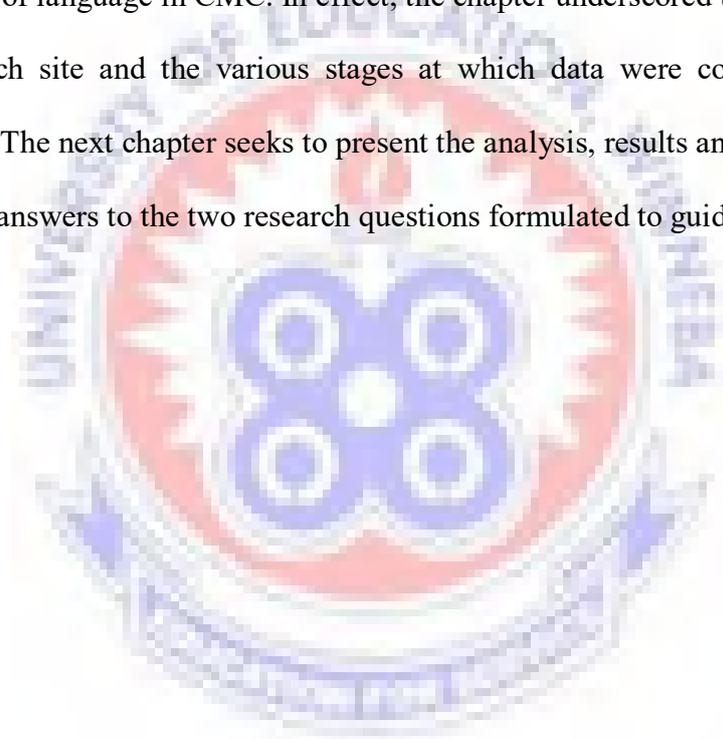
Another concern was ethical issues. The researcher was entangled with an ethical obstacle considering the fact that “whatever the specific nature of their work, researchers must take into account the effects of the research on participants, and act in such a way as to preserve their dignity as human beings” (Cohen, at el. 2000: 56). Although linguistic analysis ensures that researchers collect data in a naturally occurring process, the methodology raises moral issues because it is usually done without the fore-knowledge of the co-interlocutors (Androutsopoulos & Bieswenger, 2008). It was considered ethically inappropriate to use informants’ chats for the study without their co-interlocutors’ approval.

This attempt aimed at avoiding using the names of interlocutors without seeking their consent because the researcher could hardly get in touch with them. In this regard, instances of ethical issues detected in the chats which have the likelihood in denting the image of the participants, pseudonyms were used as names instead, because pseudonyms do not refer to specific persons (Coker, 2011). Besides, any other information that triggered the spotlight of the informants’ identity was detached, most especially their contact numbers. The reason is that WhatsApp chats are often confidential so dissociating them from their respective owners deemed necessary

(Kaseseniemi et al, 2002). Irrespective of these limitations, the researcher was able to build an adequate corpus for the present study since the data were made up of over one hundred chats.

3.8 Summary

This chapter delineated on a methodology of a case study that employs qualitative design. Indeed, this research paradigm is considered the appropriate methodological framework because of its effectiveness in unearthing the rich data about the choice of language in CMC. In effect, the chapter underscored the research design, the research site and the various stages at which data were collected, coded and classified. The next chapter seeks to present the analysis, results and discussions; thus, providing answers to the two research questions formulated to guide the study.



CHAPTER FOUR

FINDINGS AND DISCUSSION

This chapter seeks to provide a step-by-step analysis and discussions of the data on students' WhatsApp chats. Thus, the analysis is done in two folds: the first part has to do with the analysis of WhatsApp language while the second part aims at finding the frequencies of the various features of WhatsApp language with the attempt to establishing the most recurrent ones utilized by the students.

4.1 Analysis of WhatsApp Language

This section addresses the Research Question1: 'What language features do the students of St. Martin's Senior High School exhibit in their WhatsApp chats?'

4.1.1 Reactive Tokens

The Reactive Tokens are phrases or words which signify a reaction to a previous message. The reactive tokens are also manifested in the form of interjections and onomatopoeic words (Crystal, 2008).

Chat 1

1. hi wasup u g8 somethin 4me eeeeh loooong tym
2. Nothing 4 u ooo mmh wht day r u tlkin abt
3. **ooo** 4g8 adobeasfunrl so soon **eeeh** abi U de CRAZE
4. OMG **mmh aoo** ddnt 4g8 **ooo** abi u go go ope u knw d
5. better sure **yeah** I knw wil meet u gyz dea bt tym
6. they se morning t **ooo** cu **oooooooo**
7. ok cu thr **byeeeee**

The above chat explicated the reactive tokens in the form of ‘yeah’, ‘mmh’, ‘eeeeh’, ‘ooo’, ‘aoo’, ‘mmh’ and ‘byeeeee’. Some other reactive tokens which appeared across the entire data are (e.g. haha!, kkkk!, ahhh, mhwa!, eh??, wohhh! Oh kk, etc.). Again, there was a range of exclamatory spellings in the data that portrayed the reactive tokens (e.g. WOAOOO!, papapaaa!, hipyepyp!, ahhh, mhwa!, etc.) and a couple of typographical devices which add prosodic impact to their chats (e.g. yidebekekeeee!, holalaaa!, etc.).

Biber et al. (1999) say the reactive tokens are ‘a relatively new category of words, which are free from syntactic structure marked off by pauses, intonation or, in writing, by marks of punctuation’ (p. 56). It appears the students used these reactive tokens to express their emotions or keep the communication intact, an observation that confirms Crystal (2008) and Koritti (1999) that share almost similar view and emphasize that the reactive tokens are very important in communication as they depict an acknowledgement that one is following what the other interlocutor is saying. However, Thurlow & Brown (2003) think that these reactive tokens do not play any significant role in communication; instead, they depict unprepared talk or mistakes caused by inattention to the formal language (ibid).

4.1.2 Paralinguistic and Prosodic features

Paralinguistic and Prosodic features refer to a linguistic behavior associated with collaborative language use which pragmatically depicts turn-taking in ordinary conversation. These features are used to signal the signs of spontaneity and a written representation of what the communicators are physically doing as they chat.

Chat 2

1. hi am fyn n u gyz r u bak now cos avjstaryvfrmhm ba wht hppn hvnt sin members aroun
2. fynooo we de lyk we no de ba u kuraaa wht appn 2ur fon
3. thats ma prblm o loooooong tym m arran now ma fon de gv me prblm papa
4. **THINKN U R TRYIN TO AVOID US OR WHAT?**
5. o hw whr 4rm this one2

Chat 3

1. pls is tym m stl standin thr whr r u gyz!!??!?
2. any prblm !!!???...thn y
3. gud!!!! my plans r just simple 4u gyz⊗
4. waitin 4u to com n educ8 us on sex ths aftnu
5. y **ME??** Omd b abi **U CRAZE**
6. ooo so then..... alryt u will taste how it feels

From the sample chats above, the capitalized words used indicated the paralinguistic and prosodic features. For example, the words, ‘**THINKN U R TRYIN TO AVOID US OR WHAT**’, ‘**ME**’ and ‘**CRAZE**’ as used in the chats above appear to be phenomena that express the communicators’ emotions and the tone of their chats. The students employed the capital letters (e.g. **ME??**, **U CRAZE**) to demonstrate loudness and the repeated punctuation marks (e.g. *why???*, *well...*, *no!!!*) to add emphasis. The data also revealed that the students used exclamation marks (**!!!!**) and question marks (**??**) and, in some cases, both were used concurrently (**!??**) to create the presence of paralinguistic signs which seem to express their emotions and the tone

of their chats. Furthermore, the sprawling dots ‘...’ as used in the data could be more of a style that the students used to indicate a change from one point to another or simply to demonstrate a state of contemplation than grammatical violation.

This excessive use of a particular punctuation marks, especially ‘end marks’ or in combination with other punctuation marks appears to be a sign to exaggerate emotions or show personal expression or further contextual emphasis. Here, the students composed their charts as if they were facing each other in a normal face-to-face conversation as one could sense the tendency of writing as if speaking. However, Henry (2004) says that the communicators used these multiple exclamation marks to emphasize the main ideas they intended to convey, a feature Crystal believes is quite noticeable in the language of CMC in general where existing rules of word formation are applied with greater generality than are customary.

4.1.3 Emoticons and Smiley

Emoticons and smiley are graphic features used to create a written representation of what the communicators are physically doing as they chat. Baron (2004) considers the emoticons as text modifiers, while Crystal (2008) has likened them to visual cues used in face-to-face conversation which express emotions or add semantic values which convey the meaning of facial expressions.

Chat 5

1. Gm
2. SweeeetMornin dear
3. r u arrnd mum is visitin 2day o
4. Gr8 one ther☹☹☹☹☹
5. but idont see u arrnd y☹
6. u no u r soooooooooo special 2 me y r u doinths 2 me ☹U r soooooooooo special 2 me opethztymul make it
7. pls NO cant mak it dis tymroun
8. u dont mean it☹
9. is not lyk that trus me☹ y r u talking lyk that plsths is me
10. is dathw u r goin 2trit me !!!???👏👏👏👏

Here, the students used smiley and emoticons such as, ☹, ☹, [:- (], [:-)] and [;- -)] in various forms as shown in the chat above. Some other emoticons include a multitude of forms, most of which represent clapping of hands (👏👏) to show gratefulness, the raising of thumb (👍) to demonstrate one's endorsement, glossed 'pseudo-picture of humans on the run' to show total rejection or avoidance. Pictures of certain objects were also used to demonstrate the meaning that a body language conveys in a spoken discourse. In fact, most cell-phones have a touch screen while others do not; thus, the form of emoticons utilized in the chats depends on what is available on the system of the phone.

The commonest emoticons recorded from the data are (the happy face [:-)], the sad face [:- (] and the winking face [;- -)] (Preformatted). Here, when the students tried to make a point clearer in their chats, they put a rebus that depicts a smiley face at the

end ‘-:)’ of it. Traditionally, rebus chats are defined as a form of writing that consists of ‘entirely of pictures (or pictographs) to represent the sounds of words, instead of the objects to which they refer to’ (Crystal, 2008: 39). Such nonlinguistic or pseudo-verbal features were used by the students to display active listening and interest or signal understanding, demonstrate agreement, indicate skepticism or a critical attitude, demand clarification or show surprise.

Again, while WhatsApp language lacks facial expression, tone of voice, and gesture, all of which help to convey meaning in conversation, it attempts to bridge that gap through the use of emoticons and other prosodic features; thus, increasing the ability of written language to have the same expressive capabilities as spoken language. These features depict the textual representation of auditory information such as prosody, facial expressions, eye contacts, body language and other contextual cues quite common in oral communication (Herring, 2001 and Bodomo & Lee, 2002) confirming the finding of Crystal (2008) who sees emoticons as features that convey the textual equivalent of verbal prosodic features. These emoticons greatly explain the meaning of the messages just like how body language adds details to the meaning of verbal communication (Thurlow & Brown, 2003 and Crystal, 2008).

Also, pseudo-pictures and symbols as used in their chats to represent whole words, phrases or sentences make their chats appear to be real. The students experienced communicators seemed to know that some chats might need additional information to disambiguate text based communication. The use of these emoticons was to create a written representation of their mood as they communicated. They might also use the emoticons to depict body language, which is usually done in face-to-face communication. It could be established here that the students composed their charts as

if they were facing each other in a casual face-to-face conversation as one could sense the tendency of writing as if speaking.

4.1.4 Acronyms and Initialisms

An acronym is a group of abbreviations that involves shortening of words to their initial letters and pronounced as a word (e.g. GRASAG, UNESCO, GNAT, GNATOC, CHASS, SMARTS), whilst an initialism is a group of abbreviations pronounced letter by letter (e.g. TV, UEW, US, CPP). Sample of acronyms and initialisms as used in the data are shown in the chat below.

Chat 5

1. hi
2. **GE** Ma bro **iawtbwu** where r u
3. **Omg** whr did u slp
4. do u mean what uv just said
5. well **lmfao lol**
6. yes **iou ttyl** ok
- oh is that so **GN** swt dreamz cul8r

In the chat above, the students wrote ‘**iou**’ to mean ‘I owe you’ and ‘**iawtbwu**’ to mean ‘I always want to be with you’. The students also utilized initialisms in the form of ‘**gf**/girlfriend’ and ‘**ttyl**/talk to you later. Some other words used in the data which depicted instances of initialisms are ‘**GE** /good evening, ‘**GN**/good night. From the data, words such as TG (Thank God), TGBTG (To God Be The Glory), GM (Good Morning), Ge (Good evening) and OMG (oh my god) authenticate Ambiguous Spellings as they can give various interpretations.

Chat 6

1. hi **GM**
2. **Gm** dear
3. **TGBTG**ar u
4. not vet
5. **OMG** y r u lyk that
6. pls its not me w8 let me xplain **lol** ma women sickness has com
7. u r the sexiast &sexia dan juicy aple **OMOG xx**
8. *xcus me* **brb2u** luv uuu miss u soooo much were goin tmoro

The kind of acronyms utilized by the students in their WhatsApp communication are shown in the form of (e.g. **IMHO**/ in my humble opinion, **lmfao**/laughing my fucking ass off and **OMOG**/oh my omnipotent God, **lol**/ laugh out loud, etc.).

Though these non-conventional abbreviations of spellings follow legitimate letter-sound association, they are sometimes not the spellings of the particular words represented. In essence, the words formed mostly have different interpretations or ambiguous spellings so the communicators may have to consider the context for their meanings as they interpret the abbreviated words based on the context in which they are used. For instance, the use of such popular abbreviations (*ttyl* and *lol*), according to Crystal (2008), may mean ‘*talk to you later*’ and ‘*lots of love*’ as opposed to *talk to you last*, *laugh out loud* respectively. Also, the word **OMG** which the students interpreted as ‘oh my god’ could also be interpreted as ‘oh my goodness’ so as **TGBTG** (To God Be The Glory) could have another meaning as ‘Thank God before they go.’ In another

instance, *brb2u* may mean ‘*be right back to you*’ or ‘*brought rice-ball to you*’; a maneuver which are all familiar to CMC scholarship (Anis, 2007; Baron, 2008; Barnes, 2003; Danet & Herring, 2007; Tagliamonte & Denis, 2008).

However, Doring (2002) believes that abbreviations and acronyms fulfill a collective identity function which requires a special shared knowledge to be able to understand the language and, consequently, use it. Crystal (2008) shares similar view that it becomes an empowering badge of identity, distinguishing those having the shared knowledge from those outside the social network (in particular, teenagers from their parents and teachers).

4.1.5 Capitalization and Punctuations

Capitalizations and Punctuations, in this context, refer to the inappropriate use and/or the lack of appropriate use of upper case letters and end markers. Investigating the use of capitalizations in the data, it was established that the students violated its correct usage when chatting. In effect, the students WhatsApp communicators showed little attention to case sensitivity of letters in their chats by using lower case letters in places of the upper case and vice versa.

Chat 6

1. **GM** hw r u today?
2. Gudmornin, m fyn n u
3. Noooo rlax abi u no
4. shud i com 4d thng now
5. **U** we liv2cwhatkindof lyf is that iexplain evrthn
6. 2u ba u dont wan 2 ndrstd me
7. pls **STOP** it don go there is ok by

Most of the chats gathered do not contain formal capitalization at all; rather, the majority of the chats that contain the capital letters made use of ungrammatical capitalizations. For example, in the chat above, the students began the conversation with a greeting ‘**GM**’ (good morning) with that of the interrogative end mark asking for confirmation, each starting with a lower case letter. Obviously, the use of capitalization in the first word of the first line might not be intentional, rather a default capitalization setting of their mobile devices. Again, the students used capitalized letters **U**, **Y** and a whole word **STOP** to represent words like ‘you’ ‘and’ ‘why’ and ‘stop’ respectfully. This they might do for emphasis and/or for expressing a rising tone which is typical of imperative, interrogative and exclamatory sentences.

There was a random use of the capital letter or a complete chat in the lower case or upper case which signaled grammatical incongruent to the ordinary reader. In this case, the use of the lower case occurred at the beginning of sentences, or even with proper names, which shows grammatical and lexical mistake to an outsider. This phenomenon could represent a case of a person who is in a hurry to talk to save time and cost. In fact, the students disregarded the orthographical rules of the traditional Standard English language but this did not affect their message content. For example, certain instances where capital letters were needed to be strictly adhered to they were ignored, whilst certain words were also capitalized where they were not required. As revealed by Baron, (2001), this kind of omission happens in CMC ‘which closely resembles the telegram jargon’ (p.157).

In the case of Punctuations, they refer to the noticeable phenomenon of unconventional uses of punctuations and absence or omission of punctuation marks in the chats. In fact, the most distinctive feature of the students’ WhatsApp language is the awkward use of punctuation marks as revealed in the sample chat below.

Chat 7

1. Gudmo dr hw r u missin
2. who dis plsdont know u
3. is me KM they said d guy came 2clas n what hapnd
4. oh sorry its wel when were doin d assgnmt he came n pinch ma ear ba i shtd is paini me aa i dont lyk that
5. wruu2
6. o y dd u do that !!!??? BCNU
7. no more intrstd in hm u i wl tel u smthng whn w meet
8. thas ok cu den

There is a total absence of the period mark (.), the question mark (?) and the exclamation mark (!) in the chats. Even, certain instances where the students applied the punctuation marks, they used non-standard forms to show the presence of paralinguistic signs as used in face-to-face conversation. For example, the multiple exclamation marks (!!!) and (?!!?) in the chats 1 and 2, were used to emphasize the main idea being conveyed or the sincerity of the communicators. Here, again, the students repeated punctuation marks (e.g. *why???*, *well...*, *no!!!*) to add emphasis but not for their original purposes.

Again, quotation marks were not used in the various chats collected. For instance, in the sample chat above, the sentence “**i shtd is paini me aa i don’t lyk that**” should have been appropriately quoted as [**i shtd, ‘is paini me aa I don’t lyk that’**]. Likewise, it is evidenced the majority of the students did not make use of an apostrophe mark in their chats, especially in constructing modal auxiliary verbs. Here, an apostrophe (’) has three principles: to show possession, for instance, **John’s**, to form contraction, for example, **don’t** for “do not”, and to form plurals of letters or numbers

as in **T's** and **50's**. Moreover, since it is not compulsory that these communicators use apostrophes to ensure that their intents are communicated and understood, this phenomenon might be attributed to the communicators trying to maintain clarity so that their chats could be easily deciphered. This informal way of writing in which the use of punctuation tends to be violated in most situations makes the WhatsApp medium appear pseudo-conversational.

In furtherance, the use of these non-standard punctuation marks (!!) and (!!??) clearly suggests that an outsider cannot decipher the meaning outright. The use of this kind of punctuation marks in the data is more of a code than deviation and needs rich linguistic background to comprehend it. In the traditional Standard English usage, end marks show where a sentence ends. A period is normally placed at the end of a sentence and a question mark is used after a direct question. An exclamation mark, on the other hand, is used after any exclamatory sentence. Again, in Standard English language orthography, one exclamation mark or question mark is allowed at a time; however, the students used doubled or tripled end marks.

4.1.6 Letter/ number homophones

Letter and number homophones refer to certain written numerals and letters which sound identical to some words. These types of features comprise words and numbers substitution, words and letters substitution and, letters and numbers combination.

Chat 8

1. hi **F2T2M?**

2. don worry **F2T2U** lets chat

3. alryt hop **u r** fyn i want us **2** meet somewhr

4. no problem m free so **4u2c** me is **up2u**

5. **m gr8fl** ba is **2mrw** ok**4u**

6. no problem bat ym

7. **d** usual tym ok**4u**

8. fyn when urrdy just let me no

9. alryt bye**4now**

In the chat above, the students substituted a whole word with a single numeral. The most frequently used numerals are **4** instead of “for” or “fore”, **2** for “to”, “too” or “two”. The popular letter homophones in the data are **u** for ‘you’, **b** for ‘be’ and “**c**” for “see”. The students also used letter and number combinations as a style to represent word(s) or combination of numeral and words which sound like them. The popular ones found in the data are **b4** for ‘before’, **4u** instead of “for you”, “**d8**” for “date”, “**ru**” for “are you”. “**f8**” for “fate”, “**4giv**” for “forgive”, “**2gthr**”, for “together”, “**9s**” for “nice”, **gud9t** for ‘good night’ and **10q** for “thank you”. Others are **L8r**[later], **devi8**[deviate]. One other homophone used by the students in the data is the sequence of word-letter substitutions (e.g **r** for ‘are’, **d** ‘the’ and **n** for the conjunction ‘and’).

One other popular example is ‘**cul8r**/see you later’ as shown in chat 5. This example illustrates both types of homophone, where ‘cu/see you’ denotes a letter homophone and ‘18r/later’ denotes a combination of a letter and a number homophone.

Some other examples from the data include ‘wruu2/what are you up to’ and ‘**BCNU**/be seeing you’ both in chat 7. The most frequently used example of word-letter substitution, which seems to be an acknowledged marker of the WhatsApp communication code among the students, is the second person pronoun **u**. The homophonic abbreviation **u** is a significant character used in place of English second person pronoun ‘you’. The students also used distinctive capital letters such as, (**CU**) to represent syntactic structures (*See you*) and (**CB4UT**) to stand for ‘See before you talk’ and **F2T2M?** (Free to talk to me?).

The letter and number homophones also take the form of logograms and pictograms which are typographic symbols used to signify words (Androutsopoulos & Bieswanger, 2008) as shown in the sampled chat below.

Chat 9

1. Gm where r u dear
2. @domlrngsc @d momntwer u u de
3. ba w8ng 4u & urfrnds@lab
4. sorry cnt come hpe 2CU@mas in d evng zzzz
5. dear r u sur wasup rmembr luv ones com n go bt tru luv liv futprints in ones <3 urs is left in ma <3 luv UUUU bye xxxx
6. I<3U too cu den

The students’ used the sign I<3U to mean the construction ‘I love you’. In this case, the use of the mathematical symbol ‘<’ (less than), the number ‘3’ and the letter ‘U’ for pictogram of a heart, representing the word ‘love’ and the letter ‘U’ replaces the word ‘you’. It is also seen the students employed ‘x’ to mean (kiss), ‘&’ to represent the coordinating conjunction (and), ‘@’ to do the work of the preposition (at). Other style used by the students is the compounding of simple grammatical structures using logograms (e.g. now@sclab4practicals and even@prepnw).

These are unique and more of a distinctive style where, instead of two or three words, logograms were joined with contracted words to create new words. These are all logograms and pictograms the students' communicators used in their chats as substitute for words which usage might not be accepted in a formal writing. All these typographic symbols are allowed in formal written communication but their indiscriminate use in the data raised academic concern, and this is exactly what the current study seeks to expose. The data also revealed the use of the pictograms and logograms in the form of multiple 'xx' to mean signing off or 'z's' to show that one is asleep or tired. One other instance of such pictograms and logograms found in the data is the awkward reduplications of the capital letter 'U'. The use of this letter 'U' repeatedly demonstrates pseudo-emphasis or buttresses the information being communicated.

4.1.7 Phonetic Spellings

These are non-conventional or non-standard spellings that follow legitimate letter-sound association in a language but are not the actual spellings for the traditional English language of particular words represented.

Chat 10

1. hi m **fvn** nd u

gud dear av u finish

- 2.
3. nooo y not do it 2gthr **aftaklasdsaftnu**
4. btter
5. **alrvt** same plce same **tvm** ok **luvuu!!??**.
6. pls **neva** 4g8 abt ma thng gudnyt
7. labr is b8r **dan** d **klas** bcos of 2mch nois
8. **wud lyk 2 mt u aftaklasdsaftnu thnx**
9. pls **neva** 4g8 abt ma thng

The non-standard features identified in the data can be classified into a group with simplification of vowels on one side and a group with simplification of consonants on the other. For example, a student wrote ‘m **kuul** nd u’(I’m cool and you). Among the most frequent words manifesting changes of vowels in the students’ chats are *would* (**wud**), *good*(**gud**), *some*(**sum**)and *love*(**luv**), *school*(**skuul**), *after*(**afta**) etc. They are sometimes more complex and use a substitute of two or three letters by one with an equivalent sound. Some other examples found in the data are ‘alryt/alright’, tym/time, fyn/fine ‘gudnyt/goodnight’, ‘thnx/thanks’, ‘neva/never’, ryt\write’, ‘skul/school’, and ‘nys/nice’ as shown in the sample chats above. Most of the forms appear to be more of inventions than modifications of the consonantal type which involved only a consonant transformation {e.g. than(**dan**), *class*(**klas**), the(**d**)}.

Indeed, Thurlow & Brown (2003) affirm that interactions move on smoothly when participants are familiar with referring expressions and how they are related to common socio-cultural and situational experiences. This revelation confirmed the findings of Shortis (2007) and Crystal (2008) but disconfirms Döring’s (2002) finding that there is no existence of CMC-specific short form of word which could manifest a

collective identity of language use. Additionally, the words use in CMC are not usually found in standard dictionaries or recognized by language experts (Crystal, 2008). Moreover, once the communicators can rely on context cues such as part of the sentence to decide what the word should mean makes the structure very easy to comprehend. This manifestation seems to have buttressed the findings of Kasesniemi et al. (2002) that 'a text filled with code language expressions is not necessarily accessible to an outsider' and that the unique writing provides opportunities for creativity (p: 183).

4.1.8 Contractions

One major feature that has been established in the chats is 'contractions'. According to Crystal (2008), contractions refer to the short forms of words in which vowels are omitted and consonants retained. Some examples are revealed in the chat below.

Chat 11

1. Hi dear hw now u too wasap meatlist
2. Ba u no is not ma fort
3. bt I dont cu there
4. O m ther 4U ba r u sure u go buy d **anvsryclof** some
5. ME nfact no evn wan to **dmonstrat** to spoil d **prgrms** b4
6. sure☺
7. u is lyk ma batry av **prblm** let me **charg** d fone nd gt bck to u
8. in class nwjstarrivd **frm** home n u
9. Wan2 go hom 2moro 2 d hse can **mk** it 2dy

The chat above shows that the interlocutors made use of contractions by deleting just a vowel in each of the affected words. For example, the students wrote *prblm* for problem, *charg* for charge, *trffic* for traffic, and *progrm* for program. Others are the words ‘demonstrate’, ‘sweeping’ and ‘anniversary’, are truncated as *dmonstrat*, ‘*swpin*’ and ‘*anvsry*’ respectively. Thus, the word history becomes *hstry*, agreement becomes *agrmnt*, encouragement becomes *ecrgmnt*, assignment becomes *asgnmnt* and dictionary becomes *dctnry*. Majority of the contracted words used by the students are the auxiliary verbs such as, *must*, *will* and *have* (*mst,wll, av*). The students also truncated words such as make/*mk*, house/*hse*, how/*hw*, back/*bck*, etc. With the coordinator *and*, they used three variants: *n, nd, an*.

The data presented contractions to be a phenomenon that promotes the deletion of one letter from certain words, shortening of words by cutting off the ending, the beginning, or the middle. In the case of words that have no common abbreviation, they just removed all the vowels from such words and retained the consonants, so the recipients have to interpret a thread of consonants by continually re-adding the vowels. The students’ WhatsApp chatting seems to have endorsed the omission of vowels as its key feature. It appears the students were aware of the communicative value of consonants over vowels and tried to exploit this phenomenon by omitting vowels while chatting.

The phenomenon is noticeable from the following popular examples from their chats e.g. *bt*[but], *cnt*(cannot), *frwd*(forward), *gd*(good), and *pls*(please). The data also showed that the middle double consonant letters were reduced and as a result rendered the lexical features a complete deviation from the existing norm of traditional standard spelling. The most prominent contractions that shown up in the data are the coordinating conjunctions ‘and’ and ‘but’. Regarding the word *and* phonemically

transcribed as /ænd/, the informants elided the form to letter 'n' and pronounce it as /ɒn/. Common spelling variants of *and* tend to represent the phonetically reduced forms with *an* or *n*, with or without an apostrophe.

Furthermore, in Standard English language, one cannot form a word without making use of any of these vowels (a, e, i, o, u) (Crystal, 2008) but, in WhatsApp communication, one could find quite a number of words without the appropriate vowels. This phenomenon could be due to the bid of the communicators to respond quickly to the recipient's message. However, Crystal (2008) believes that contraction of words without vowels is not something new and that it is even easier to understand a word built out of consonants only since they are the main message carriers, whereas it is impossible to do same if we remove all the consonants and retain only vowels.

Again, the students condensed syntax simply by shortening the middle part of phrases or sentences while chatting, an instance which results in ungrammatical structures. Typical examples found in the data are *Hwslife* for 'How is life', *wassap* for 'What is up' and *CUltr* for 'see you later', *Whru?* for 'Where are you', *hwru?* 'How are you', *Iwan2cu* 'I want to see you', *wev* for 'we have', *av* for 'I have', *heznt* for 'he is not'. These examples illustrate that dropping the middle of a word, a phrase or a clause alters the structure of the sentence. Again, the study documented different crop of contraction in the students' WhatsApp language, an instance that reflects a high degree of creativity, intellectual exercise and peculiarity in human communication e.g. *now@dom* for 'now at dom', *@schl*, for 'at school', *@mitn* for 'at a meeting', *@wrshp* for 'at worship'.

These findings, therefore, support Helve and Holm (2005: 76) that, 'CMC in itself is an argot, the last cultural element in the notion of style' which is seen to produce a new form of CMC lingo which redefines vocabulary, language and spellings

altogether. More so, Crystals (2008) asserts that contracted forms of words, even in everyday conversations are used rather than their full word counterparts, and that it is only in formal conversations and formal writings that contraction of words are not realized.

4.1.9 Clippings and Other Clippings

Clipping is a term used to refer to a word formation process where the length of a word is shortened at the beginning, the middle or the end. Some examples found in the data are depicted in the chat below.

Chat 12

1. ehhh u deyhv u bin **swpinth** same plot ds tym
2. plz we knwwht u can do m **beggin** u CB4UT
3. ooh whr from this one too u **mak** me bad
4. Hahahaha😊😊😊😊😊
5. mit me @ d g8t 4 **smthn**spcl

Chat 13

1. @lab bt alrdy **prmis** 2cu @ d base 2mrw
2. alws @lab u can **com** @urconvniec
3. **Comin** jxnw **bro** bt mst frst tlk 2 d su **prez** b4
4. me tofiakoa ombd u can tak me 2hel

The students omitted final letter from certain words, especially double final consonant letters. For example, in the chats above, the word 'fill' is reduced to 'fil' and those silence vowels at the end of words such as 'make' and 'take' are also reduced to

'mak' and 'tak'. The students also truncated the 'ing' ending words simply by dropping the final letter 'g' (e.g. cmin, beggin, smthn, swpin). Also, there was a reduction of words like 'mama' for 'ma' and 'sis' for sister in the data. Indeed, the clippings, as revealed in this study, comprise 'g-clippings' and 'other clippings' as the final letter omission of words, especially, double final consonant letters were given prominence in the data. This finding supports Crystal (2008) that in the process of clipping, parts of a word is cut off or clipped and when this is done, the word that remains is shorter than the original word.

As stated earlier, it would be tough to construct a word without vowels but quite a number of words were found in the data without vowels portraying that the dropping or omission of vowels is the key feature of WhatsApp chatting. This kind of language used in the data clearly goes against the rules of English phonology but it appears such phenomenon is an informal language of WhatsApp chatting. In reality, this type of informal writing is unacceptable in the formal English language usage. This finding, therefore, supports Helve and Holm (2005: 76) that, 'CMC in itself is an argot, the last cultural element in the notion of style' which is seen to produce a new form of CMC lingo which redefines vocabulary, language and spellings altogether.

More so, Crystals (2008) asserts that contracted forms of words, even in everyday conversations are used rather than their full word counterparts, and that it is only in formal conversations and formal writings that contraction of words are not realized. From the analysis, the researcher is tempted to believe that since WhatsApp chatting is one guided way of sharing information, the attempt of resorting to writing of words in their full contexts would rather affect the communicator's time. Looking at the results, it would be much easier and faster for the communicators to write the short forms of words than the full words since the short forms do not affect the meaning they

want to convey. This idea seemingly supported by Al-Khawalda, (2008) that CMC users share such linguistic features of interaction which they understand only among themselves.

4.1.10 Omission of Parts of Speech

The corpus shows the use of truncated sentences or what is known as sentence fragment. The omission of part of speech is analyzed based on Structural Representations of subject and verb (predicate) (SV), Omission of Articles, Syntactic Contractions and Non-adherence to Concord.

Chat 14

1. Hi is me
2. wasap u bt u dindt rson.... was totaly mbaras
3. slpin by then
4. now@domjstarrivdfirmclss callin ur bro d hol day bt nt answrn

Chat 15

1. now@sclab4practicals
2. in *xul* nw?
3. yes even @prep now
4. callin u r nt pickin up. pls ttl GN
5. salut

Structural Representations

The structures in the chats 14 and 15 show that there is no systematic pattern when the students composed their chats, an act which clearly depicts syntactic

variations of structural representation of English sentence structure. For instance, in the sentence, 'now@sclab 4practicals' translates as '**I am** now at the science laboratory for practical', the first structure indicates that the subject (S) NP component 'I', the V (verb) element 'am' and both S (subject) and the V (verb) elements '**I am**' are omitted. Other examples in the chats above are 'in xulnw?' (**Are you** in the school now?), 'callinurntpickin up' (**I am** calling you but you are not picking up), 'Pls ttl GN' (Please, **I will** talk to you later, good night), 'now@domjstarrivdfrmclss' (**I'm** now at the dormitory. **I have** just arrived from class.), 'callinur bro d hol day bt nt answrn' (**I have been** calling your brother **the** whole day but **he is** not answering.) and many more.

Also, the data revealed that the informants could have taken more time and more space to type, 'I am not in school today' than to just type 'not in xul 2day' or type 'now@domjstarrivdfrmclss', instead of "**I'm** now at the dormitory. **I have** just arrived from classes." This kind of writing convinced the researcher to understand that it is faster to just type '@xulnw?' than to use all the words 'I am at school now'.

Again, this phenomenon of subject and verb (predicate) and (SV) omission has resulted in 'Pro-dropping' and the omission of auxiliary verbs. Here, the students mostly composed their sentences without subjects or made use of minor sentences. For example: 'is me' (**It** is me), 'wasap u bt u dindt rpsons', (**I** wasap you but you didn't respond.). In these examples, there is omission of the pronouns "it" and "I" indicating a feature neither written nor spoken.

The students also ignored both noun and verb phrases to make up a complete sentence in their chats, features which if missing in a sentence render the sentence incomplete and unacceptable. For example: '*in class nwjstarrvdfm home*' (**I am** in class now. **I have** just arrived from home). Apparently, it might be that the students omitted the subjects in order to save space, cost or, sometime, due to their urge to

response immediately or spontaneously to the chat. This may represent a case of a person who is in a hurry and wants to beat time.

Omission of Articles

There are two types of articles in English language, the indefinite *a* or *an* and the definite article *the*. Interestingly, none of these indefinite articles was found in the entire data. As for the definite article 'the', the students used it in most cases but in its short form *th* along with other variants such as (*d* and *de*). In fact, this omission of the articles from the sentences in WhatsApp chatting clearly depicts a kind of grammatical incongruity.

Non-adherence to Tense and Aspect

The violation of grammatical agreements between lexemes in terms of tense, aspect, person, number and gender in the data could be considered linguistic variation. The students violated the aspect of tense which has a distinct function of marking time relations, for example, the verb *finish* and *miss* in the Chat 13 should have been written in the simple past tense form *finished* and *missed* for the sentence to satisfy the standard norms of English language. This structure, therefore, presupposes that the interlocutors were talking about a past activity. Again, in the structure '**was totally mbaras**, the verb *embarrass* should have been written *embarrassed*, that is, in its simple past tense form.

Apparently, the language used by these students in the WhatsApp medium does not conform to the grammar of formal English usage at all. It might be this violation of the grammatical rules that has drawn the criticism from many philosophers of language as it appears the WhatsApp users have their own linguistic license to violate the grammatical rules of the traditional English language. Ideally, most of these features are not different from what have been revealed in other CMC research. To some extent,

it might be true that certain elements of the evidence conflicted with one another in the general CMC studies; however, the actual picture of WhatsApp language needs to be given a scholarly platform for thorough discussion. Certainly, the widespread comprehensible grammatical constructions used in the various chats would lead to the impression that language of WhatsApp is not unique, and overall, this is perhaps, the conclusion that should have been drawn.

4.1.11 Pidgin

The students' WhatsApp communicators also used pidgin in their chats thereby making their chats so informal. For them, pidgin saves more time as it is quicker for them to write. For example, they wrote, 'wetindey worry U' which is quicker to write than to write 'what is disturbing you?', 'Wetin' and 'dey' are pidgin words which injected more informality and spirit of commonality among the communicators. Some other instances in the data that depicted the use of pidgin include 'hi wasup u get somethin 4me', 'hop u no 2day b d day' and 'abi U de CRAZE' as in Chats 1 and 2. In fact, the students' use of pidgin in the data clearly makes their chats so conversational. The kind of Pidgin English employed in the chats greatly enabled the interlocutors to express their feelings towards one another, an instance that is characterized by a reduced grammatical structure (Sekyi-Baidoo, 2002). This is to say that the communicators were aware of the domain of language use but mixed the codes appropriately in order to communicate the desired intent of their chats by taking into consideration the situational context.

4.1.12 Code-mixing

The students' use of language in WhatsApp chatting brings about language phenomenon of 'code-mixing'. The following examples in the chats authenticate the use of code mixing: 'u lie bad woyenyameanaaa?', 'my friend medadaame' [code-

mixing i.e. English and Akan language] – meaning ‘Are you God?’ and ‘My friend, don’t deceive me’ respectively. Again, the linguistic features of code-mixing, for example, ‘tofiako’ as used in the data reflect the realities of spoken English language in Ghana, that is, to clarify a point, to stress, amplify or reiterate a message as shown in chat 12, to hide information from other interlocutors and to show solidarity and identity. Indeed, in traditional Standard English this type of writing is not accepted but the communicators used it in their WhatsApp chatting to achieve their communicative intents.

4.2. WhatsApp Linguistic Features in the Data

Linguistic Form	Frequency (N)	Percentage (%)
Contractions	980	27
Clippings	950	26
Letter/ number homophones	820	22
Phonetics spellings	640	17
Reactive tokens	150	04
Omission of parts of speech	103	03
Capitalization & Punctuation	20	0.5
Emoticons	13	0.3
Acronyms & Initialisms	09	0.2
Paralinguistic & prosodic features	09	0.2
TOTAL	3,694	100

Table 4.1: Frequency of WhatsApp Linguistic Features

Following the kind of typology offered by Crystal (2008), similar examples are found in the data depicting non-standard orthographic forms. For the purposes of quantification rather than descriptive overview, these features are organized into broader categories and discussed. The categories of features exhibited in WhatsApp communication with their number of occurrences are shown in the table. Prevalence in the data was 3,694 instances of linguistic and non-linguistic features, accounting for about 85% of the total word used. Of the 115 chats collected, only 15 of them had completely standard spellings. This means only 8% of the chats contained no hybridized linguistic features of any kind (including capitals or punctuations omission).

Again, of the 3,694(85%) nonstandard words, otherwise termed CMC linguistic features in the dataset, only 87 representing 5% were rated to have the correct spellings (This count used stringent criteria, including only those words that were spelled, punctuated and capitalized correctly). The requirement for punctuation and capitalization was, in particular, rather a strict criterion as capitalization is often seemed to be abandoned in WhatsApp chatting. Of course, this is a marginal overestimation, as quite a number of words might have been coded more than once.

From the analysis, the most preferred features were contractions (27%) and clippings (26%), followed by letter number homophones (22%) and phonetic spellings (17%). This means that contractions accounted for the highest proportion of the linguistic features in WhatsApp communication at 980 (27%) of the total features counted, followed by Clippings with 950 (26%). Consistent with Crystal's (2008) analysis of text language, Contractions and Clippings were identified to be responsible for the frequent deviation from standard spellings. In fact, this is usually the case with most CMC where similar features appearing in a relatively higher degree across the

data. Observably, these features stand in for the conversational aspect of WhatsApp and seem to have given the opportunity for creating unique linguistic features.

Again, there were more ($n = 820$) examples of language play using letter-number homophones which, in popular representations, at least, have become the most definitive feature of CMC. Letter/number homophones were frequently employed, with a greater number of occurrences, accounting for 22% of the total features utilized. The data also registered 640 features of Phonetics spellings accounting for 17% of all the language features placing fourth in the analysis. In fact, just a small number of acronyms and initialisms appeared across the dataset; most of which were standard acronyms rather than exaggerated initialisms portrayed by Crystal's (2008) work.

In fact, Punctuations and Capitalizations were not given attention at all. There were, indeed, question and exclamation marks used alright across the entire data but not for grammatical purposes. Accounting for about one in every three chats or 0.2% of them, their occurrence seems surprising given the technological imperative for speed and ease of typing. Without anything to compare these neglect with, no serious claim can be made for their figure, except perhaps, to say that as far as the minimal number of participants in the current study are concerned, it does not appear that the Capitalizations and Punctuation are quite dead as claimed by Crystal (2008).

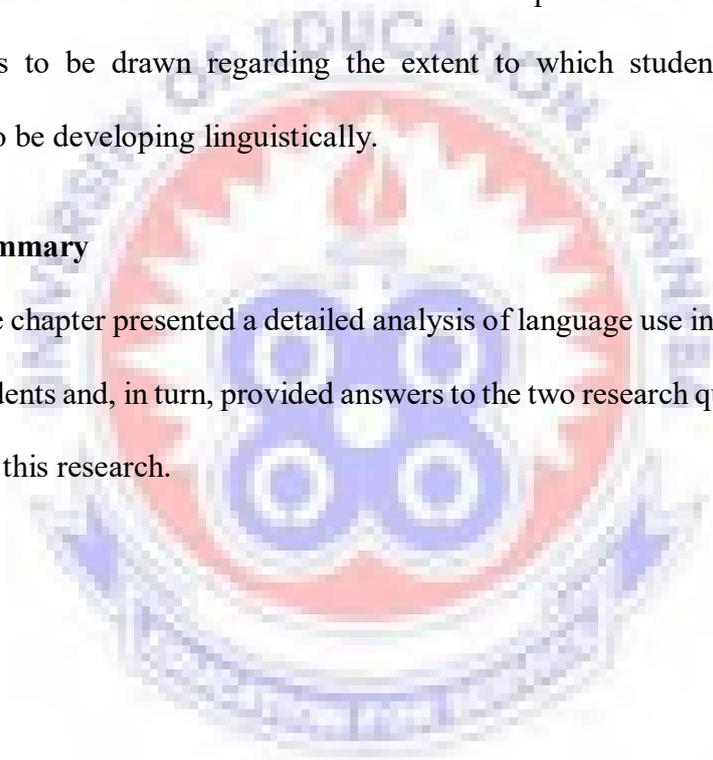
Interestingly, most of these features, especially Paralinguistic & prosodic features with a total of only 09 counts of 0.2% as evidenced in the data were also found in other social media. However, while I expected to see the language use in WhatsApp communication to display some kind of monumental phenomena beyond other media, and while thinking that certain facts examined in the data would go extra extent to disconfirming the models adapted, it did not appear to be so. In my intimation, it could be concluded that language use in WhatsApp is obviously more structured but less

formal than other CMC media with which the present study is compared (Barnes, 2003; Fouser et al., 2000, Crystal, 2008 and Thurlow, 2006).

Having said so, where the data did diverge slightly from the traditional Standard English language, it has often, in most cases, been observed across a range of genres; as such, it would not be reasonable to attribute these features to the fact that the medium is WhatsApp itself. From the analysis, a number of conclusions could be drawn in favor of the analytical model, although it is certainly worth noting, to a lesser extent, that certain elements of the evidence contradicted the adapted models. The results allow for conclusions to be drawn regarding the extent to which students WhatsApp users appeared to be developing linguistically.

4.3 Summary

The chapter presented a detailed analysis of language use in WhatsApp chatting among students and, in turn, provided answers to the two research questions that formed the core of this research.



CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The research sought to investigate a case of students' language choice in WhatsApp chatting using Crystal's (2008) model. In view of this, the current chapter seeks to provide a summary of the entire study, the key findings, recommendations of the study and the implications for further research.

5.1 Summary of Findings

In this thesis, the researcher sought to investigate the language use in students' WhatsApp chatting focusing on the following questions:

1. What language features do the students of St. Martin's Senior High School exhibit in their WhatsApp chatting?
2. Which features are preferably used by the students in their WhatsApp chatting?

As stated earlier, the researcher drew more on qualitative analysis to arrive at most of the findings which was further complemented with frequency counts to test for the most preferred language features. In view of this, 35 students made up of 10 males and 25 females voluntarily agreed to take part in the study. Through documentation and semi-structured interviews, the informants helped to build a corpus of 115 chats, out of which 100 were purposively sampled for the analysis. The data was analyzed with respect to Crystal's (2008) model in which the results illuminated my understanding of how students co-shared WhatsApp language features of which some were proved to be preferred to others.

In answering the first research question, the results established that the students' mode of communication via WhatsApp is typified by features such as reactive tokens, paralinguistic and prosodic features, acronyms and initialisms, contractions, clippings and other clippings, punctuations and capitalization, emoticons and phonetic/misspellings.

For the reactive tokens, the analysis revealed features such as 'yidebekekeeee!', 'yeah', 'loooooong', 'mmh', etc. The second set, paralinguistic and prosodic features, revealed spellings which represent auditory and visual information of repeated letters e.g. *sooooo*, *ooooops*, *aaaaahhhhhh*), repeated punctuation marks e.g. *No!!!!*, *well...*, *what???*, *sooo!!!!* to express paralinguistic of prosodic cues for emphasis, emphatic conventions of capitalization for shouting (e.g. 'R U TRYIN TO DENY ME OR WHAT?') and orthographic representations for laughter e.g. *holalaaaa!*, *hahahaaaa*, *ohoooo*, *woohoo*, *ooo*, *aoo*).

The emoticons revealed are a happy face ☺☺☺☺☺ or :-), a sad face :-(and the winking face ;-), (all preformatted) to represent objects or concepts. Also established in the data are the closing of both hands (👐👐👐👐) to show thank you and images of human beings on the run to demonstrate warning or avoidance. Others are letter and number homophones e.g. 'u' for (you), 'w' for (we), 'y' for (why), 'h' for (he), 'n' for (and), 'bt' for (but), b4(before) 2(to), 4(for), l8r(later), u(you), c(see), gr8 (great), ru(are you), 2nyt(tonight), 2gthr(together) which take the place of phonemes, syllables, or words of the same sounds.

One popular feature found in the data is a contraction. Features in these category have to do with omitting letters from the middle of words and/or omitting the end of a word losing more than one letter e.g. *wknd*, *dnt*, *pls*, *bday*, *rmeber*, *prblm*. Another unique contraction used was in the form of condensed syntax simply by shortening the

middle part of phrases or sentences e.g. *Whru?* [Where are you], *hwru?* [How are you], *Iwan2cu* [I want to see you]). Again, the study documented certain unique contraction e.g. *now@dom* for ‘now at dom’, *@schl*, for ‘at school’, *@mitn* for ‘at a meeting’, *@wrshp* for ‘at worship’.

For G-clippings, the data revealed e.g. *goin*, *talkin*, *comin*. Some other clippings were also established in the form of spellings with silence letters or double letters at the end of words e.g. *com*, *hav*, *wil*, *tel*). Also found in data are Initialisms, most of which are CMC specific acronyms e.g. *lol* = *laugh out loud*, *gf*=girlfriend, *OMOG* = oh my omnipotent God, *GM*=good morning, *GN*=good night. With the Phonetic or unconventional spellings, the analysis manifested features such as *(fone)* phone, *(nyt)* night, *(luv)* love, *(don)* don’t, *(wan)* want), *(taut)* thought, *(fyn)* fine, etc.

In analyzing the capitalization, it has been established that the traditional usage of lower and upper case letters were violated. In fact, most of the chats revealed nonuse of standard capitalization, only few had first letter capitalization and very few had complex capitalization but for different purposes rather than grammar. Again, the results established words spelt without appropriate capital letters e.g. **accra**, **i’d**. There were also instances of awkward use of repeated punctuation marks (e.g. *No!!!!*, *well...*, *what???*, etc.). Typical of the use of punctuation, omitted periods and spellings with missing apostrophe were rampantly used e.g. **dont**, **cant**, **guys**.

Furthermore, omission of parts of speech was found in a form of syntactic variations as reflected in the omissions of subject pronouns, auxiliary verbs, omission of objects, omission of articles, inattention to grammatical agreements, and contractions of phrases and clauses. Some other informal features which are neither spoken nor written in Standard English were represented in the chats by the common use of ellipsis.

More so, the definite article '**the**' and indefinite articles '**a**' and '**an**' were omitted from the various sentences.

Some other phenomena that have been established were the common use of syntactical ellipsis of e.g. sentence subjects and verbs, especially the first person pronoun 'I' and the auxiliary verb '**am**'. In most cases, the students used '**m**' to replace 'I am'. Considering the example, "impsbljstrtrnfrmhm not quite sure", there is total omission of full structures such as 'It is', 'I have' and 'I am'. It is, therefore, clear there was total negligence of grammatical rules, making WhatsApp platform an informal or care-free kind of communication.

Also found in the data was Pidgin English e.g. 'wetin dey worry U' meaning 'what is disturbing you?' Here, the words, 'Wetin' and 'dey' are pidgin words used which portray the informal nature of their chats. Again, the study revealed code-mixing e.g. 'Chairman papaanie' (this is the proper chairman), 'u lie bad woyenyameanaaa?' (you lie bad are you God at all?), 'my friend medadaame' (My friend, don't deceive me) and the local parlance of a popular Nigerians' swearing word 'tofiako' (God forbid).

Responding to the second research question, the results established that even though almost all the features proposed by Crystal were manifested in the present data, some were preferably used to others. Thus, the most occurring features established in the data were contractions and phonetic/misspellings, followed by clippings. The implication for their preference could mean that the students deliberately shortened the words by truncating the beginning, the middle or the end of the words for the primary purpose of communicating faster to avoid being caught by the school authority. Indeed, this research has proved beyond all reasonable doubt that communication via WhatsApp has changed the way students communicate in CMC, particularly by

allowing for immediate interaction as well as constant accessibility of contact among them.

5.2 Conclusions

In conclusion, some key issues that arose in the analysis are worth re-echoing here. First, this study revealed that hybridized words and some other unique linguistic features were prevalent in the students' WhatsApp chatting. Again, it was established that though the students' WhatsApp interlocutors employed almost similar features postulated by the previous scholars, they also exhibited preference for some of the features. Furthermore, this research has reaffirmed the fact that traditional English language was violated by the students due to their language choices to achieve their communicative intents (Thurlow and Brown, 2003). Finally, the paralinguistic phenomena, code-mixing, pidgin and unique compounding as established constitutes the core language choices that the informants employed to suit the situations that they found themselves in the communication arena, an instance that demonstrated the kind of commonality they enjoyed among themselves.

Beyond the linguists' lenses, lies the fact that WhatsApp reflects informal language that exposed a high degree of creativity, intellectual exercise and peculiarity; thus, blindly authenticating the existence of WhatsApp as the cause of the decline in Standard English. Of course, the anti-WhatsApp rhetoric was more or less prone to fallacies, attributing casual relationships to events which are only interrelated, and its core opinions might purely be based on hearsays and imaginations. The present findings, therefore, established that the skillful use of these personalized language short forms was attributed to a group affiliation constituting a component of a group identity.

From the linguistics standpoint, the central concepts that contradict this line of thought has been established leading to the more reasonable conclusion that WhatsApp

usage has no negative impact on a student's English proficiency confirming Crystal's (2008). The observation in the present data also supports Kasesniemi et al (2002) that 'a text filled with code language expressions is not necessarily accessible to an outsider' and that the unique writing style provides opportunities for creativity but not a violation of grammar (p, 183).

Notwithstanding that, inappropriate conclusions may be hastily drawn so to find a case for which the theory of WhatsApp language and Standard English appear airtight, one needs to look at the full work of Crystal (2008) and compare it with students' live essays. Again, it was observed, though not measured, that the authentic topic of language choice tended to veer towards technology and casual virtual speech. While it is possible that WhatsApp users tended to fall into the same interest categories, there is still a very real possibility that the informants in this study were not wholly indicative of the full range of WhatsApp user base.

As such, it is best to proceed with caution when assuming the results of the study to be absolutely conclusive. Nevertheless, the study provides some empirical information with regards to language use as a linguistic creativity within WhatsApp community; thus, establishing a ground for further research on the topic. Aside, it is worth considering the possible methodological limitations of the study, the implication that it may have on the results and any valid conclusions drawn. As mentioned earlier about the initially planned methodology, whereby a larger self-selecting sample would be collected and a subsequent samples taken in order to balance the data was not possible due to lack of the informant volunteers. Moreover, the fact that the few potential informants were made aware of the study personally, could mean that the spread of informants was somewhat skewed, with only those involved given the opportunity to participate in the study.

Personally, I believe it is possible WhatsApp chatting would continue to be a prominent form of communication, most especially among students as it allows them to communicate with one another in a way that parallels the fast paced nature of campus life. Again, justifying the advent of WhatsApp as being the cause of the students' grammatical inaccuracies, I think, there should be more efforts from all quarters of our educational system to stamp out the use of unapproved abbreviations in formal settings so far as English language study is concerned. In view of this, I contest that the language of WhatsApp, even though informal and hybridized, does not affect students' grammar so the present study does not endorse the argument that counteracts the attributes of Crystal's (2008) findings.

I also opine that the rapid rise in popularity of the language used in WhatsApp chatting among students has no deleterious effects on traditional literacy, a stance that, as a teacher of writing, I was a bit hesitant to accept, because I was once in the opposing camp, having seen ample evidence of the decline in the traditional writing ability of students in recent years. Besides, through WhatsApp communication, the dynamic nature of language has been exposed. This is to say that a new language has emerged and its actual features are manifested in WhatsApp communication. Albeit, we can equally not deny the fact that WhatsApp communication has certain features which are different from English language. Therefore, it will be premature or an indictment when we attempt to brand WhatsApp communication a sole agent for grammatical incorrectness in our schools.

5.3 Recommendation for Further Research

To wrap up, this thesis is very significant as it serves as a contribution to linguistic scholarship. The findings may attract lexicographers and other researchers who wish to undertake similar study. Also, the present findings may help individuals

pursuing courses in English language studies. Finally, it offers both teachers and students a premise of awareness of WhatsApp language and its repercussions when used in a formal setting.

Despite its significance, the present research has left us with certain questions that pose a number of lacunas which, I think, other researchers may be interested in exploring. First, 'Can WhatsApp be worth considering just as any other arena for communication?' I have concluded that it is a valid form of communication since it provides another form for which all functions of language can be expressed. Again, while I have found that WhatsApp chatting is permitting students' users to stay in better touch with friends, it begs the question: 'Is WhatsApp causing over reliance and invariably preventing the students from interacting with their new friends on their campuses at the expense of the old support networks?' No, in that the students can use WhatsApp to communicate with friends at school just as with friends at home, an indication that WhatsApp is immensely increasing communication among peers.

Once it has been established WhatsApp medium has come to stay with us, it is important also that its users are made aware of the situational and contextual factors as well as the relationship between people involved in its communication process so as to make the appropriate choice of language. The fact still remains that the language use in WhatsApp chatting is a hybridized form of the traditional English language which seems to be an inter-language for the adults. The students see this phenomenon among themselves as an in-group language of a secret and prestigious code. In fact, for them, it is only their educational authorities who view this kind of writing a deviated form of the traditional English language.

I strongly recommend that the students be made to know who they are, whom they are writing to, for what purpose, and in what situations they are writing in order to

make an informed decision on the choice of words and level of formality in their writings. Also, samples of formal written texts and that of WhatsApp chats can be examined comparatively by asking students to identify features of formal and informal languages as well as the punctuations commonly used in writing as opposed to the punctuations used in the social media. Again, I implore teachers not discourage their students from using WhatsApp, but educate them to know the contexts within which to use either WhatsApp code or formal English.

Again, at a time when young men and women are expanding their social circles and shaping their identities, WhatsApp chatting provides an easy way for them to be in constant contact with multiple people, as well as create and maintain a sense of self identity and commonality. For these reasons, and in light of the questions I have raised throughout this research, coupled with my personal experience, it is clear that there are multiple faces of WhatsApp that merit more scholarly investigations. On this note, I suggest WhatsApp language is seen as another language variety which should be of linguistic interest. Therefore, a future research can investigate correlations of demographic characteristics such as age and gender in relation to WhatsApp chatting.

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APPENDIX A

Some Selected WhatsApp Chats

Chat 1.

1.

2.

3.

4.

5.

6.

Chat 2.

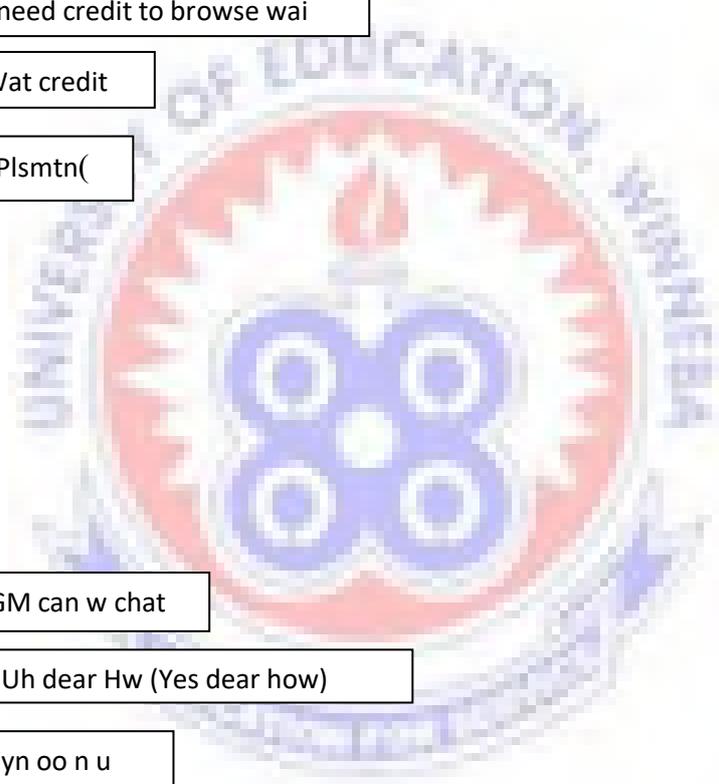
1.

- 2.
3.
4.
5.

Chat 3.

1.
2.
3.
4.
5.

1.
2.
3.
4.
5.
6.
- 7.



Chat 4.

1.
2.
3.
4.
5.
6.
7.
8.
9.

Chat 5.

Chat 6.

1. GE
2. gehw r u
3. am guddr
4. Waddupdey go on
5. m hungry
6. hmmm wah ii u eat

Chat 8.

1. sap Hy, Hw
2. gud n u
3. fvn
4. ma
5. i do 1000 tysms
6. saaaa

Chat 7.

1. Kme lets eat
2. Kk, wuiz @ home
3. Mum n sblings
4. and u exp me tu com
5. v r u shv
6. v veah
7. Hahaha
8. inva no u shy
9. Eiisaaa

Chat 9.

1. hw a u doin
2. m fyn n u
3. gud
4. hw was up pper 2dae
5. Cuuleverthnbdy was hpy
6. thnx m hppy 4u
7. bah can w mk it
8. sorrv m busv nwplz

Chat 10.

1. KkEii miii
2. h u Y
3. Hmmm she z difcult
4. gyp dah if I sesmt
.....fire go drop
5. Oh truobuh I fyn
shudhgv up he shudjux
be a gudfrnd
6. z her n i de luv u

Chat 11.

1. kk, wah u doin
2. ar u awt of cls
3. naaa
4. kkhpe u dumgud
5. Yh u
6. same TG

Chat 12.

1. boitlk z mi
2. m learnin so nls wen am dun
3. kk dear shark hard

Chat 13.

1. so wahnxt
2. c if u r jokin shun
3. les 4get dah 4 new
4. saaa

Chat 14.

1. dnt go offlyn coz aim lonely
2. tell me smt
3. am hr 4u
4. only dat
5. any way l onlzya
6. soo soon, kk mi miz u more
7. so watsup

Chat 15.

1. am nt in skull nw
2. weriz ma tin
3. taktyneplz am yet to go and buy it
4. hmhhh
5. aboa, ode
6. Charlie idey thirst oo
7. u wan mk w go take sum

Chat 16

1.
2.
3.
4.
5.

Chat 17

1.
 2.
 3.
 4.
- 

APPENDIX B

PERMISSION TO UNDERTAKE THE PROJECT

ST. MARTIN'S SENIOR HIGH SCHOOL
P. O. BOX 85
ADOAGYIRI-NSAWAM

8TH AUGUST, 2014.

THE ASSISTANT HEADMISTRESS (ADM.)
ST. MARTIN'S SENIOR HIGH SCHOOL
P. O. BOX 85
ADOAGYIRI-NSAWAM

Dear Madam,

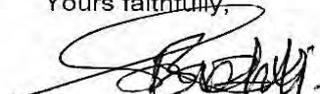
PERMISSION TO COLLECT DATA ON STUDENTS

I wish to seek permission to undertake a research exercise in your institution. This is in partial fulfillment of my M. Phil programme.

This exercise involves Data Collection on WhatsApp messaging from students of your school between October and December, 2014.

I would therefore, be grateful if this permission could be granted.

Yours faithfully,



SUZANNE BOHLI

APPENDIX C

PERMISSION GRANTED TO UNDERTAKE THE PROJECT



ST MARTIN'S SENIOR HIGH SCHOOL

"Sapientia Divitis Melior"

SMS/TP.95

15TH AUGUST, 2014

Our Ref:.....

Your Ref:.....

SUZZANE BOHLI
ST. MARTIN'S SENIOR HIGH SCHOOL
P. O. BOX 85
ADOAGYIRI-NSAWAM

PERMISSION TO COLLECT DATA ON STUDENTS

This is to notify you that your permission has been granted to enable you undertake your research exercise of data collection on Students' WhatsApp Messaging between October and December, 2014.

I wish you success in your programme.

Yours faithfully,

GEORGINA AKOTO-NSIAH
ASSISTANT HEADMISTRESS(ADM.)

PROVINCIAL HEADMISTRESS (ADM.)
ST. MARTIN'S SENIOR HIGH SCHOOL
ADOAGYIRI-NSAWAM

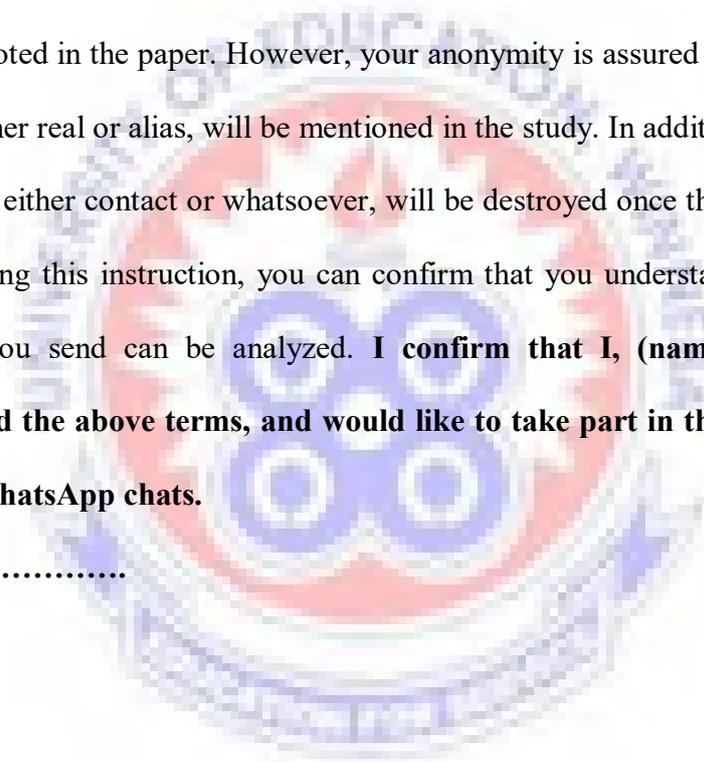
APPENDIX D

SEEKING THE CONSENT OF STUDENTS

CONFIRMATION OF STUDENTS INFORMANTS' CONSENT

I, Suzanne Bohli, wish to conduct a research on WhatsApp language. The research is part of my M. Phil. thesis at the University of Education, Winneba. If you would like to take part in this important study, all you need to do is to give me your contact number. You will be contacted for further discussion. Note that anything you send or give to me may be quoted in the paper. However, your anonymity is assured at all times; thus, no names, either real or alias, will be mentioned in the study. In addition, any information about you, either contact or whatsoever, will be destroyed once the study is complete. By following this instruction, you can confirm that you understand me and that any message you send can be analyzed. **I confirm that I, (name), have read and understood the above terms, and would like to take part in the study by sending you my WhatsApp chats.**

Signature



APPENDIX E

LOCATION OF RESEARCH CITE ON THE MAP OF GHANA

