UNIVERSITY OF EDUCATION, WINNEBA

MODALITY USE IN THE COMMUNICATION OF HEALTH TRAINEES

AND POTENTIAL IMPLICATIONS ON PATIENTS:

THE CASE OF COLLEGE OF HEALTH KINTAMPO

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DECLARATION

STUDENT'S DECLARATION

I, Vincent Banantoru Kpieonoma, declare that this thesis, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and that it has not been submitted, either in part or whole, for another degree elsewhere.
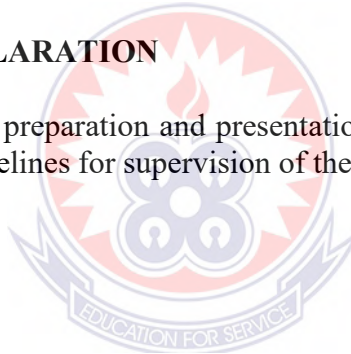
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SUPERVISOR'S DECLARATION

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

DR KWAKU OFORI

Signature :…………………………

Date:………………………………

DEDICATION

I dedicate this study to my family: wife and children.

ACKNOWLEDGEMENTS

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LIST OF ABBREVIATIONS

BAWE:	British Academic Written English
BNC:	British National Corpus
CDC:	Centre for Disease Control and Prevention
COHWK:	College of Health Well-being, Kintampo
GSS:	Ghana Statistical Service
IIUC:	International Islamic University Chittagong
KMH:	Kintampo Municipal Hospital
MA:	Master of Arts
MSE:	Microsoft Excel
NDC:	National Democratic Congress
NUL:	National University of Lesotho
SPSS:	Statistical Package for Social Sciences
UHAS:	University of Health and Allied Sciences
USA:	United States of America

ABSTRACT

Health workers deliver care to sick people who are afflicted with pain due to deteriorating conditions. Hence, health professionals cannot downplay the effect of using English language structures that directly affect moods, emotions and conditions of patients. This study, based on the theory of integrative emotional communication, aims at investigating modality use by health trainees at College of Health and Well-Being, Kintampo, (CoHWK) and potential implications on patients. A qualitative approach was employed with corpus and cross-sectional study designs to examine 120 CoHWK students; and structured interview to study 30 patients at Kintampo Municipal Hospital who were selected using simple random and purposive sampling techniques. Data was analysed using thematic approach. Response rate was 100%. It was uncovered that modal verb use among the students' needs improvement as a majority, 67 (55.8%) of the students used modal verbs only 11-20 times in their examination scripts. The least used modal verbs were: *shall*, 9 (0.6%) and *ought to,* 10 (0.7%). *Should* was the favourite for females and *will*, the favourite for males. Many errors, 89 (5.9%) were detected; some of the students misapplied *will* (50.6%) and *would* (30.3%). It was concluded that wrong modal verb use could have negative effects on the moods and conditions of patients as many, 18 (60%) of the patients indicated that the misapplication of *must* exacerbated by loud tones indicated command which offended them. It is recommended that the Academic Affairs Office of CoHWK should broaden the curriculum for teaching Communication Skills to include a comprehensive topic on modal verbs.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

The preeminence of English language in Ghana cannot be ignored as it transcends educational, economic, religious, legal and professional fields (Ngula, 2017). It has become the major medium of communication across the country (Danquah, 2017). Effective English language use among health professionals in Ghana has become necessary not only to make them proficient in the use of the language but also, to enhance their knowledge in using the language in such a manner to maintain the fame and dignity of their profession. Health workers have the responsibility to deliver quality healthcare to sick people who are psychologically, emotionally and physiologically afflicted with excruciating pain due to deteriorating health conditions. Therefore, acquiring knowledge and competence in the use of the various aspects of the English language that directly affect moods must be of great priority among health professionals. Since modal verbs are very significant in terms of the role they play in grammar and mood, it is vitally important that modal verb use is enhanced among health workers. However, observations point to the fact that some health trainees in colleges across the country, Ghana, demonstrate incompetence in the use of modal verbs. Observations at College of Health and Well-Being, Kintampo, show that students misuse modal verbs in their academic writings. Much attention is not also given to the topic of modal verbs in the Communication Skills curriculum of the college. It has thus become necessary to investigate modal verb use among the trainees of the college in order to inform curriculum improvements that could address the situation.

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1.1 Background of the Study

Globally, the English language leads as the commonest second language (L2) that is spoken in over 55 countries (Holloway, 2014). In Ghana, the English language has assumed much prominence and influence; transcending the social, political, legislative, economic, cultural, educational and professional domains (Adika, 2012). In this regard, competence and proficiency in the use of the English language is a prerequisite for professional effectiveness in Ghana and across the world. For this reason, Zanaton, Affandi, Subhan and Kamisah (2012) observed that the Communication Skills course was introduced at the tertiary level of education in Ghana to uphold standard use of the English language in the professional arena so as to ensure effective communication among professionals in their various careers.

Similarly, students' writing skills and use of the English language at the tertiary level is not only important in learning and assessment activities but also, in their professional practice. This reason lends credence to the importance of exploring students' writings in light of the acceptable standards so as to uncover strengths and lapses. This fact holds no mean importance in guiding curricula and instructional processes aimed at improving English language use among professionals (Ngula, 2017). Furthermore, the English language is composed of complex grammatical nuances including that of modal auxiliary verbs and this calls for a closer attention to be paid to the study of this topic at all levels of education in Ghana.

According to Huddleston et al. (2002, p.173) "modality is defined as the speakers verdict about the necessity and possibility of subjects". Palmer 2001, cited in Abdul-majeed, 2016, p. 156 defines modality as "the subjective opinion of speakers towards the topic". Modal verbs express the attitude or opinion of the speaker concerning the action in the sentence. Thus, in English language use, modal verbs perform more than

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structural functions in grammatical subsystems as they add the effect of attitude, judgment, assessment, desire and permissiveness to what a writer or a speaker expresses (Ngula, 2017). Akeel (2020) also noted that every modal verb performs three major functions, thus, demonstration of possibility, ability and permission. For example, the modal verb *can*, may perform three roles:

- *Possibility:* Eunice *can* be dangerous. Thus, it is possible that Eunice can behave hurtfully.

- *Ability:* Mensah can perform the task. Thus, Mensah has the ability to carry out the task in question.

- *Permission:* You can make use of the bedroom. Thus, the speaker is granting permission to his audience to use a particular bedroom.

Sadia and Ghani (2019) also expanded the grammatical role of modal verbs to cover expression of obligation or responsibility, possibility or probability, necessity or need as well as volition or freedom. Hayat and Juliana (2016) also found that modality use is a great tool for news editors as it is used to convey the realities of issues as they happened. This idea was also explored by Trajkova (2011) who observed that modal verbs were used by editors in hedging so as to create more acceptable context through toning down their expressions by mixing factuality with uncertainty. This technique makes the context, (however terrible the news may be) acceptable to the readers.

Abdul-Majeed (2016), in his classical work on investigating students' ability in identifying English modals asserted that modals were among the most difficult parts of learning the English language. She supported her idea with the argument that modals

do not follow any conventional grammatical rules (Abdul-Majeed & Hassoon, 2016). For this reason, many traditional researchers do not satisfactorily explore the roles of use of English modals. In their study, Abdul-Majeed and Hassoon (2016) found that students had problems with modals in a sense that some treated modal verbs as main verbs and added an –s or –es. For example some college students used expressions like 'she cans', 'he oughts to' 'he dares say' and 'he mights go'. This modal-verb confusion is ungrammatical and calls for a serious redress.

Adika (2012) explored three major types of modality, namely; epistemic, deontic and dynamic modalities. Deontic modalities were seen to project a sense of possibility and necessity in terms of the flexibility and freedom required in an action; dynamic modalities concern with the internal willingness and ability of the subject to act; and epistemic modality refers to types of modality that concern the likelihood that a particular assertion is true (Adika, 2012). With regard to the versatility of use of modalities, Danquah (2017) found that *should* was used frequently relative to *ought to* even though they carry the same sense. An analysis of the British National Corpus (BNC) revealed 111,237 frequency of use of *should* compared to only 5,979 use of *ought to*, which showed that *should* had been used over 19 times as used *ought to* (Danquah, 2017). Akeel (2020) also confirmed among Saudi English users that modal verbs were underused, except *should*.

Nwabueze (2018) identified a similar problem in a rather different context of feminism. He applied his work to the importance of modality use among women because of their feminist self-perception. Thus, women should be able to use more of politest forms of modality such as *should*, *could* and *can* and so forth in order to prove their feminist

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functions. Nwabueze (2018) also noted that much emphasis was not laid on the use standards of modal verbs in traditional research on syntactic structures. However, the lack of emphasis on the standards of modality use must not be condoned as it has the tendency to eventually culminate in an abject neglect of the rules for the use of modal verbs among intellectuals (Siddique, Shah, & Ahmad, 2019).

Remarkably, the topic of modality has caught the attention of many contemporary researchers in several contexts. In the context of gender, Nwabueze (2018) explored modal verbs and their application among women writers. In Pakistan in the Asia pacific, Ahmed, Mahmood, and Farukh (2020) explored the use of modality as it applies to stance making. In the Saudis, Akeel (2020) explored the incidence of modal verbs in academic writing of native writers and Molina (2012) equally studied the use of modality in maritime conversation and writing. Among Ghanaian researchers, some works on modal verbs are notable; Ngula (2017) explored epistemic modalities that are found in research articles; Danquah (2017) limited his scope to a comparative study of the use of *should* and *ought to* and Aning (2020) also focused attention on the political perspective of the use of modal verbs in the manifesto of the National Democratic Congress (NDC) in Ghana.

Modal verbs are regarded as auxiliary verbs that lend additional or specific meaning to the main verb in a sentence (Nwabueze, 2018). In grammar, the role that modal verbs play as a subsystem of mood makes them unique grammatical features to be expected in the language of health trainees. More importantly, the health profession is a unique sector that requires modesty of language as it seeks to give hope, relief, and care to people who are suffering from disease conditions (Nishina & Yoshioka, 2018).

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Health trainees at College of Health and Well-Being, Kintampo, include health promotion officer trainees, mental health officer trainees, physician assistantship trainees, medical laboratory trainees, health information trainees, community health trainees and many others. They are enrolled on these stated programmes with the aim of receiving adequate and quality training and to acquire relevant knowledge and skills that can help them to effectively and efficiently provide care in the health service industry in Ghana. Some of the students, especially the sandwich students are usually serving health personnel who are on study leave for further study at the college. It is therefore necessary that they improve on their use of the English language, especially the modal verbs, in their professional delivery of health services.

In this regard, improving the competence and proficiency in the use of modal verbs among health trainees will do a great deal of good to the future of health service delivery in Ghana and across the world. Unfortunately, unethical and impolite communication have been noted to characterize the health profession across developing countries (World Health Organization, 2018).

Unfortunately, research on modality use as it applies to health trainees in light of their profession has been rare if not totally missing in the prevailing body of literature.

1.2 Problem Statement

Health trainees at College of Health and Well-Being, Kintampo, include future health promotion officers, mental health professionals, physician assistantship, health information officers, and community health workers who are tasked with the role of offering relevant care services including counseling, consultancy, surveillance, supplies, prenatal/antennal, education and many more healthcare services to their clients and patients suffering from various disease conditions. Their competence and

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proficiency in the use of modal verbs will add much modesty and politeness to their professional communication styles as it applies to managing the mood of already afflicted patients under their care. They are required to use the English language to provide psychological healing to their patients and clients. However, at the College of Health and Well-Being, Kintampo (CoHWK), careful observations through the researcher's interactions with the students bring to the fore, that modality use poses a challenge to some of the students. Some of the trainees also have problems with the usage rules.

Knowledge gaps of health trainees in the use of modal verbs coupled with less attention paid to the topic of modality use in the Communication Skills curriculum for health trainees has led to lapses and problems such as over use and or under use of modality, modality use errors and deliberate avoidance of modality use in college students' writings (Danquah, 2017). However, the health profession requires modesty and politeness of language use to communicate mood in appropriate tones. Thus, modality use competence is even more important in the context of health professionals as they need to use it to hedge in their communication with their clients or patients.

To better understand the problem, the researcher made a preliminary assessment of the curriculum content of the Communication Skills course and observed that the designers of the curriculum though had done a good job, had not paid much attention to the role of modal verbs in the grammar aspect of the curriculum. This insufficient attention paid to the topic in the curriculum may suggest that there seems to be no formal avenue of correcting these inadequacies in modality use by the curriculum designers of the college.

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A careful review of existing literature also solidifies the problem by bringing to light, less efforts being made to explore the role of modality use as part of the Communication Skills training of health professionals. For instance, works have been done on modality use on stance markers (Ahmed, Mahmood & Farukh, 2020), among politicians (Aning, 2020), and among native speakers in Pakistan (Akeel, 2020). However, there seems to be no evidence of a research that explored modality errors, wrong use, over use or under use of modality among health trainees. There is, therefore, a gap in current studies on the extent of modality errors among health trainees and such errors have the propensity to affect the quality of healthcare in the future. It has therefore become necessary to investigate modal verb use and its associated errors and the influence it may have on healthcare provision in Ghana.

1.3 Purpose of the Study

The principal aim of this study is to investigate modality use in the communications of health trainees at College of Health and Well-Being, Kintampo, and potential implications on patients.

1.4 Specific Objectives

1) To explore the frequency of use of modal verbs in the academic writings of health trainees.

2) To identify modal verb use errors in the trainees' writings.

3) To determine gender differentials in the use of modal verbs among the health trainees.

4) To explore implications of modality use in health service communications on patients.

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1.5 Research Questions

1) What is the frequency of modality use in health trainees' academic writings?

2) What are the modality use errors in health trainees' academic writings?

3) What are the gender differentials in the use of modal verbs among health trainees?

4) What implications does the use of modal verbs have on healthcare provision to patients?

1.6 Significance of the Study

The study will bring new insight into issues related to modality use among college students by looking into the dynamics and errors of use. The findings will therefore be relevant to departments of the English language in various colleges and universities in guiding curricula content for teaching Communication Skills, especially in the area of grammar. In the context of the study setting, the study will bring improvement in the scope of the curricula content for teaching grammar that will equip the Department of Communication Skills of CoHWK to help the students to effectively and appropriately use modal verbs. With regard to health services communication, the study will bring new insight into the importance of employing modality use techniques to ensure modesty and professionalism in communication between health professionals and clients or patients. Thus, the findings of the study will help health training institutions to improve the quality of healthcare professionals they produce by enhancing their communication competencies. Additionally, the study will serve as an improvement in the body of knowledge and literature related to modality use. In that regard, the work will serve as a reference material for future researchers in their efforts to conduct related studies.

1.7 Limitations of the Study

This study was limited in terms of methodology regarding the observational process as the trainees' awareness of such observations may influence them to as much as possible, try to use the right modal verbs in their communication with patients. This then could lead to a high pretense index which could limit the true reflection of modality use among the students. The pretense index was, however, minimized through avoidance of participant awareness and application of confidentiality of a cross-investigation of patients' experiences with health professionals over the years. Thus, the patients were assured that their identities and any information about them would not be disclosed to any other person or persons. This was to make them reduce possible pretense. Besides, the findings may be influenced by the observer's paradox, a situation where the observer's presence naturally influences the performance and disposition of the person being observed (Thieberger, 2012).
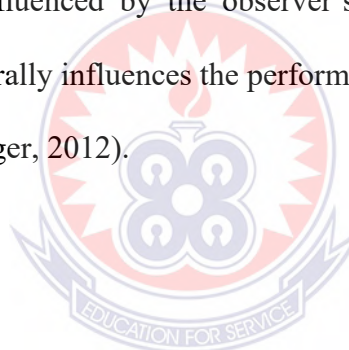
1.8 Delimitations

The scope of this study was delimited to the College of Health and Well-Being Kintampo, the Municipal Hospital in Kintampo and the health facilities where trainees of the college usually do their clinical practice. The study investigated variables such as frequency of use of modal verbs, modal verb use errors and prospective implications of modal verb use errors on patients.

1.9 Organization of the Study

The study is organized into five chapters. Chapter One includes items that discuss the introduction. These include background of the study, problem statement, purpose of the study, specific objectives, research questions, significance of the study, and organization of the study.

Chapter Two is made up of the presentation of reviewed literature consisting of articles, journals and other authorships that are relevant to the topic. The review is presented under the various specific objectives and other relevant themes explored in existing studies.

Chapter Three presents the methodology. It gives more insight into the study design, study variables, profile of the study area, study population, sampling procedure, data analysis procedure and ethical considerations.

Chapter Four deals with the results of the analysis and syntheses of the information gathered. The analyses are presented under each research question so as to provide a direct understanding of the prevailing findings regarding each research question.

Chapter Five, which is the last chapter, comprises a summary of the entire study procedure and a highlight on the key findings. Based on the findings, the conclusions and recommendations are drawn.
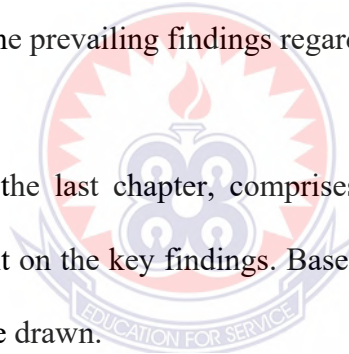
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review on key concepts, theories and related studies. The chapter seeks to situate the topic under study within existing body of knowledge regarding modal verbs.

2.2 Theoretical Framework

This study was based on the integrative theory of emotional communication. The integrative theory of emotional communication was initiated by the co-authorship of Anne Bartsch and Susanne Hübner in 2005. They set forth a theoretical foundation upon which the multidimensionality of the influence of communicative elements could be examined. In their scholarly masterpiece entitled, "Towards a Theory of Emotional Communication", Bartsch and Hübner (2005) propounded a model of emotional communication where emotional communication is conceptualized as a process of mutual influence between the emotions of the parties in a communication process. The theory of emotional communication conceptualizes that, the emotional effect of what is communicated occurs based on three major domains. These domains are namely: innate stimulus-response-patterns, associative schemata and symbolic meaning. The innate stimulus-response-pattern defines the inner response pattern of the receiver which defines how the receiver reacts or responses to emotional stimuli communicated in the environment.

The associative schemata is seen as the socio-relational aspect which agrees with the stand-point of social constructivists view which states that emotional knowledge is represented in a purely symbolic manner such that the meaning of emotion words is

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constituted by a set of rules that specify the kind of persons, situations, and actions to which the emotion words apply. The rules that govern the use of emotion words and other symbolic expressions are thought to be equivalent to the social norms concerning emotions. In effect, this means that if a person finds herself/himself in a situation to which a specific emotion word applies, this person has the emotional disposition to experience the emotion/stimulus and to behave accordingly.

Finally, the third aspect of the emotional influence in communication is the concept of symbolic meaning. This explains the visible part of the communication which adds to the expressive aspect to give meaning in the form of gestures and symbols associative with the expressions. This integrative theory of emotional communication derives its strength from its ability to integrate various levels of communicative influence in a linier and more understandable manner. It also has remarkable scholarly support (Burgoon & Judee, 1993: Buller, David & Burgoon, 1996; Buck, Ross & Ginsburg, 1997). However, its weakness is seen in the inability to explain into details, the various classifications of communicative elements.

This theory applies to this study in a sense that the basic principle of communicative elements influencing the mood of audience is paramount. The possibility of expressing to influence the mood of audience underscores the need for health professionals to adopt proper communicative elements that can express the right mood to their patients/clients. Based on this reality, health professionals must mindfully select the kinds of modalities that can soothe the emotional discrepancies in their patients/clients, but not to aggravate them. This study proposes that competence in the use of modalities could help manage the mood of the receiver of a piece of information.

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2.3 Conceptual Framework

This study conceptualizes that the manner of use of modal verbs among health service providers can have significant implications on the patients they provide services to. This conception stems from the functions modal verbs play as a sub-structure of mood. In effect, modal verbs may not only be used to express the mood of the speaker but also, to affect the mood of the audience. Thus, this study concerns with the idea that modal verb use must not only be considered in the light of the function it plays in allowing the speaker's or writer's mood to be effectively expressed; the effect it has in affecting the mood of the audience (the hearer or the reader) is even more important.

Furthermore, many available researchers (cf. Siddique, Shah and Ahmad, 2019; Nwabueze, 2018; Ahmed, Mahmood and Farukh, 2020; Ngula, 2017; Danquah 2017) in their studies were concerned with the former to the neglect of the latter. They focused on the structural function of modal verbs as it applies to the mood and the opinion of the originator of the expression. Little attention is paid to the functions modal verbs play beyond the structural functions.

In this regard, this study postulates that it is very important for speakers and writers to choose modal verbs based on the effect they want to create on the hearer or reader rather than using modal verbs to let their own moods and opinions alone be known to the audience. Thus, in the consideration of modal verb use, it is essential to connect these aspects of the two parties in the conversation – the originator (speaker/writer) and the audience (reader/hearer).

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On the part of the originator, variables such as frequency of use of the modal verbs and competence (dynamics and choices) of use of modal verbs are very essential whilst on the part of the audience, the prevailing mood, expected effect and resultant mood are very important variables. The communicator or originator must bear in mind the expected effect that he/she wants to create in the mood of the audience. The resultant effect of the originator's choice of expression is an intersection of the prevailing condition of the hearer and the mood communicated or conveyed by the originator's expression.

These variables are conceptually represented in Figure 1.
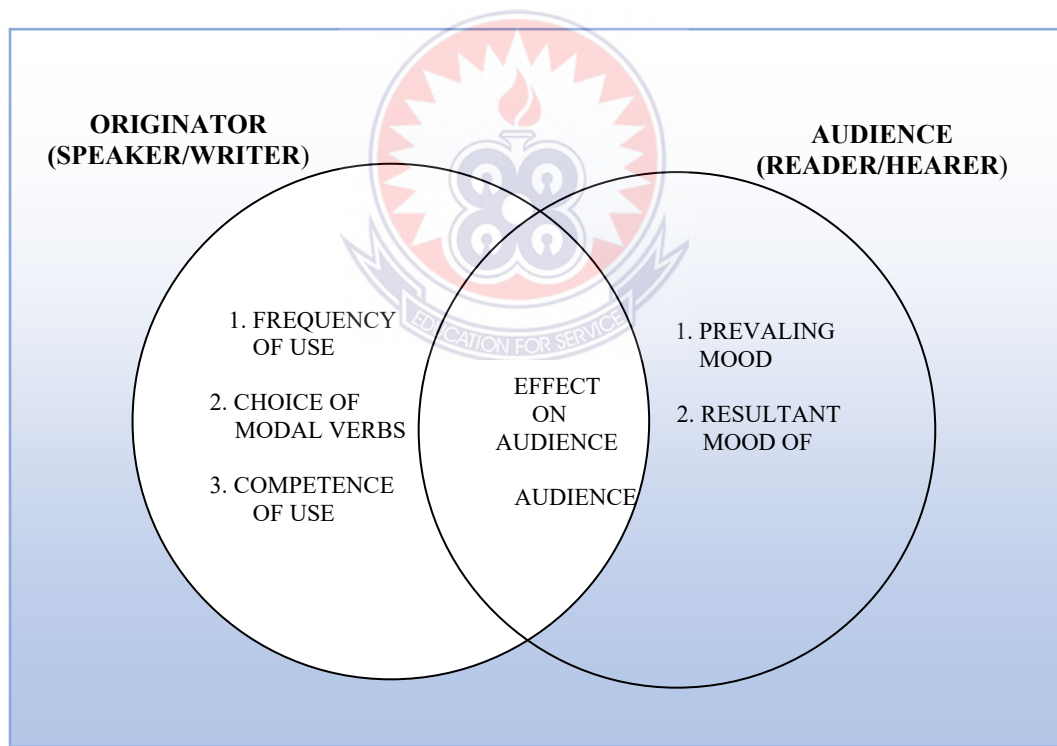
Figure 1: Conceptual Framework

Source: Author's construct, August, 2021

By implication, this study is established on the view that expressions of health professionals influence the mood, emotions and condition of their patients. This is even

more important when considering English language elements such as modal verbs that play a major role in communicating mood. When the health professional, acting as a major communicator in the hospital setting is trained to select the right modals in communicating with patients, the patients' mood, emotions, and conditions could be better managed (Mensah, 2013). However, when health professionals choose wrong modals in communicating a particular health issue, they should know that patients' moods, emotions and conditions will be negatively affected as well (Centre for Disease Control, 2018).

2.4 Concept of Modal Verbs

2.4.1 Definition of Modal Verbs

Modality refers to a broad spectrum of linguistic elements which are concerned with expressing the intention and attitude of a speaker or writer about what is expressed (Castello, 2014). Similarly, Sadia and Ghani (2019) confirm that modality gives extra information or details about the speaker's judgment and urgency as well as degree of probability attached to what is expressed. Akeel (2020) also agreed with Sadia and Ghani (2019) and went on to give clearer classification of the extra information modal verbs give about the speaker. Sadia and Ghani (2019) noted that modal verbs were used to express extra information about what has been expressed which can be classified into obligation, permission, necessity, probability, possibility, and volition.

Halliday and Matthiessen (2014), in their book "Introduction to Functional Grammar", presented a broader picture about modality in general. Their argument was underscored by the fact that the functional scope of modality is a broad one that can be expressed using different grammatical and lexical elements. In the first place, modality can be expressed through adjectives such as *likely* and *possible*. Furthermore, modality could

also be expressed using adverbs such as *perhaps* as well as and using verbs such as *believe*, *perceive* and *think*.

These notwithstanding, existing literature has also made it clear that modal verbs could further be expressed through categories such as full verbs, modal auxiliary verbs and semi-modal verbs. According to Halliday and Matthiessen (2014), there are nine (9) modal auxiliary verbs in English which include **can, could, should, will, would, may, might, must and shall.** An auxiliary verb is a helping verb that usually occurs before a main verb and qualifies the meaning of the said verb (Castello, 2014). Some of the semi-modals that could share the same functions as modal verbs are: **have to, supposed to, used to, have got to, had better and ought to** (Akeel, 2020).

2.4.2 Types and Classification of Modal Verbs

Prevailing literature reveals that modal verbs could be classified into three main types (Adika, 2012). The first type is referred to as deontic or intrinsic modal verbs, the second is termed epistemic or extrinsic modal verbs and the third is dynamic modal verbs. According to Halliday and Matthiessen (2014), deontic modalities refer to modal verbs that show the speaker's involvement through permission, obligation, and volition: thus, demonstrating the speaker's intrinsic human control over events being expressed. It also expresses the originators' expectation of what the audience should do, and the manner it must be done.

Another category of modality classification is epistemic modal verbs. Epistemic modal verbs express one's level of certainty and uncertainty about what is expressed. This category demonstrates the speaker's human judgment of what is or is not likely to happen.

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In close consonance with the works of Akeel (2020), Adika (2012) also confirms this position about the classification of modal verbs by vivid distinctions among the three major types of modality, namely; epistemic, deontic and dynamic modality. According to Adika (2012), deontic modality was seen to have projected a sense of possibility and necessity in terms of the flexibility and freedom afforded for an action; dynamic modality concerns about the internal willingness and ability of the subject to act; and epistemic modality refers to types of modality that concern with the likelihood that a particular assertion is true (Adika, 2012).

Halliday and Matthiessen (2014) presented an interesting peculiarity of epistemic modal verbs as contrasted to the order of modality systems. According to them, the most distinctive characteristic of epistemic modal verbs is the gross detachment of the speaker's commitment to the action being expressed. In other words, epistemic modal verbs express the weakest commitment or certainty towards the action being expressed than the other classes of modal verbs (deontic and dynamic). It is very remarkable to say that this indication and explanation presented by Halliday and Matthiessen (2014) concerning epistemic modal verbs is one of the finest explanations to the epistemic modality system that has appeared in literature. This is because, the description helps to easily make out the clear dissimilarity epistemic modal verbs have relative to the deontic and the dynamic functionalities.

However, it is noteworthy that after extensive review of literature, some journals with meta-analysis on modal verbs in corpus studies presented a disputed opinion regarding whether it is important as a function of epistemic modal verbs to indicate the weakening of the speakers' commitment to what is expressed as the main functionality of epistemic modality. A study conducted by the Canadian Academy of Oriental and Occidental

Culture (2010) earlier tried to relegate the function of epistemic modal verbs, which has to do with weakening of the writer's or speaker's commitment to what is expressed to a place of insignificance. Though the idea expressed in this research served much good to the improvement in the body of knowledge on modal verbs, the fact still remains that expression of the strength or weakness of the originator's (writer's or speaker's) commitment to the action being expressed is the core function of modality systems at large. At the heart of all the functions that modal verbs, as well as the entire modality system plays (whether necessity, possibility or certainty), all demonstrate a linear scale of how possible or impossible, how certain or uncertain or how strong or weak the action expressed is to happen or is committed to. Therefore, this functionality of indicating strength or weakness of the originator's commitment to what is expressed is the most important aspect of the functionality of modal verbs.

2.5 Frequency of Use of Modal Verbs

Due to their unique and highly indispensable function, frequent and appropriate use of modal verbs is very important. In fact, Omer (2016) stated that modal verbs were the third most frequently used verb forms apart from the simple present and past tense verbs.

Akeel (2020), conducted a contemporary corpus-based study to examine modal verb use in English academic writing of Saudi Arabian advanced learners whose mother tongue is Arabic. The study was conducted with the aim of developing better understanding of the uses of modal verbs in academic writing by non-native speakers of English as compared to native speakers. The text analysed was a corpus created from a Master of Arts (MA) dissertation. The study compared the use of modal verbs by the Saudi advanced writers with that of the writing of native speakers of British English using the

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British Academic Written English (BAWE) corpus. It was discovered that modal verbs were generally underused by the Saudi writers when compared with native speaker writers. Furthermore, the study found that the modal verb *should* was overused by the Saudi writers whilst the modal verbs *would, could* and *may* were significantly underused.

The finding in the study conducted by Akeel (2020), which revealed that *should* was overused is consistent with that of Danquah (2017), who also found that the modal verb, *should,* was used more frequently relative to *ought to* even though they carry the same sense. Similarly, an analysis of the British National Corpus (BNC) confirmed the fact of a more frequent use of *should* when compared with other modal verbs. The BNC analysis revealed that there was as much as 111,237 frequency of use of *should* compared to only 5,979 use of *ought to* which showed that *should* had been used over 19 times as used *ought to* (Danquah, 2017). Akeel (2020), again confirmed among Saudi English users that all other modalities were underused, except *should*.

Moreover, Ngula (2017), also found that epistemic modal verbs were used more frequently among international speakers than Ghanaian speakers. Ngula (2017), examined epistemic modal verbs in research in Ghanaian and international contexts. The study examined comparative differences between the use of modal verbs in Ghana and that of international scholars. Research articles in disciplines consisting of Sociology, Economics and Law, were examined and the results compared among Ghanaian speakers and similar features produced among international scholars who were primarily, native speakers. It was found that use of modal verbs in Ghana differed from international scholars' use of these devices. Moreover, Ngula's corpus analysis presented a total frequency of 1,562 epistemic modal verb use among international speakers compared to 563 among Ghanaian speakers. This statistics therefore, presents

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a ratio of approximately 3:1 which is an indication of the fact that international speakers used modal verbs three times as frequently as indigenous Ghanaian speakers.

2.6 Types of Modal Verbs and Functions they Express

The modal verbs with varied meanings and functions are discussed as follow:

1) **Uses of "will"**

1a. Sarah <u>will</u> undertake further studies at the University of Ghana. (Certainty)

1b. The soup <u>will</u> not be delicious if you don't put enough spices. (Probability)

1c. Every evening Joshua <u>will</u> have supper at seven o'clock. (Usuality)

2) **Uses of "can"**

2a. Health workers <u>can</u> sometimes be careless. (Possibility)

2b. Sulemana <u>can</u> swim across the Sinyuoli River. (Ability)

2c. You <u>can</u> go with your mother to visit your grandma. (Permission)

3) **Uses of "may"**

3a. The Director <u>may</u> be in his office. (Possibility)

3b. It <u>may</u> rain this evening. (Probability)

3c. You <u>may</u> submit the assignment tomorrow. (Permission)

4) **Uses of "might"**

4a. Some reptiles <u>might</u> exist in the dilapidated building. (Possibility)

4b. Susan <u>might</u> have been sleeping soundly last night. (Probability)

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5) Uses of "must"

5a. The eggs <u>must</u> be well cooked by now; they have been boiled for fifteen minutes. (Certainty)

5b. I <u>must</u> have to go tomorrow; I have not been able to finish the report. (Necessity)

5c. Students <u>must</u> abide by the examination rules of the college. (Obligation)

6) Uses of "should"

6a. You <u>should</u> wear uniforms on the mid-semester examination day. (Obligation)

6b. You <u>should</u> take your umbrella along, for the sun may scorch. (Advisability)

6c. <u>Should</u> I tell you how I got the patients' information? (Volition)

7) Uses of "shall"

7a. We <u>shall</u> write the final examination next week. (Certainty)

7b. Every member <u>shall</u> pay a monthly dues of Gh15.00. (Obligation/compulsion)

7c. <u>Shall</u> I send you the items by the afternoon bus tomorrow? (Permission)

8) Uses of "could"

8a. If the door was not closed, an unscrupulous person <u>could</u> enter the office. (Possibility)

8b. When I was a child, I <u>could</u> walk ten kilometers in one hour. (Ability)

8c. You <u>could</u> submit the report next week. (Permission)

9) Uses of "would"

9a. <u>Would </u>you please switch off the light for me? (Polite request)

9b. When Kwame was young, he <u>would</u> fish in the Sinyuoli River. (Usuality)

9c. I <u>would</u> like to announce that the mid-semester examination being scheduled earlier is cancelled until further notice. (Volition)

10) Uses of "ought to"

10a. You <u>ought to</u> check your calculator before you go to the examination room. (Advisability)

10b. Students <u>ought to</u> be seated in the examination room twenty minutes to the start of the examination. (Obligation/compulsion)

10c. I <u>ought to</u> get to office before eight o'clock am tomorrow. (Necessity)

11) Uses of "need to"

11a. You <u>need to</u> come back for review in two weeks' time. (Necessity)

11b. Kofi <u>need to</u> examine the car's tiers before he sets off his journey tomorrow. (Advisability)

11c. <u>I need to</u> let you know that the college does not have scholarship for students. (Volition)

Taking a critical look at the various meanings expressed in the sentences above, it could be noticed that the modals *will* in 1a, *must* in 5a, and *shall* in 7a all convey the sense of certainty. Sentence 1a gives information about Sarah's intention in the future. Sentence 5a expresses certainty on the premise of an existing knowledge of the number of

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minutes eggs take to boil whilst in 7a, the certainty is expressed in view of a fore knowledge of when the final exam will be written.

The use of *can* in 1b, *may* in 3b, and *might* in 4b expresses the sense of probability. Sentence 1b conjectures that the soup is likely to be tasteless without the required spices. Similarly, in 3b the assertion is made based on an observation of the weather whilst in 4b, it is not certain whether Susan actually slept soundly or not because the subject might not have slept in the same house or even the same room with Susan.

The sense of possibility is ostensibly expressed variously by the use of *can* in 2a, *may* in 3b, *might* in 4a, and *could* in 8a. In 2a an assertion is made based on an observed behaviour of health-workers some times, and also on the fact that they are not hundred percent perfect. In 3a it is not certainty whether the Director is in the office or not whilst the same analogy holds for sentence 4a.

Again, the sense of ability has been forcefully expressed by the use of *can* in 2b and *could* in 8b insinuating talent and physical strength to perform activities.

Through the use of *can* in 2c, *may* in 3c, *shall* in 7c, and *could* in 8c the sense of permission has been explicitly expressed. For instance, in 2c the address informs the addressee that he/she was allowed to follow the addressee's mother to a place. Also, in 3c the address does not compel or authorize the addressee to fulfill a duty. Thus, the use of *may* in that context insinuates some level of liberality. Similarly, in 7c the address seeks to be given the green light to carry out an act. Then in 8c the address exhibits a sense of liberality by allowing the addressee to conveniently submit a report.

By using *will* in 1c and *would* in 9c, the idea of habitual action is being implied. Sentence 1c postulates that it is the habit of Joshua to eat supper at a particular time

every day. Then sentence 9c implies that the referent in the past used to perform a habitual act.

The idea of necessity has been expressly presented in sentences 5b, 10c, and 11a through the use of the modals *must, ought to*, and *need to*. The subject in 5b expresses that it is practically unavoidable to postpone an intended journey. Then in 10c the subject finds an urgent need to be at the office at a definite time.

The sense of compulsion/obligation is ostensibly expressed in sentences 5c, 6a, 7b, and 10b through the use of the modals *must, should, shall,* and *ought to*. Sentence 5c expresses a command that it is mandatory for the students to observe the examination rules. Sentence 7b conveys a legal tone compelling the subject to fulfill a constitutional requirement. Sentence 10b expresses a friendly yet a compelling tone on the referent. The use of should in 6a tones down the harshness often expressed in most obligation sentences.

Again, the sense of advisability is clearly insinuated through the use of *should* in 6b, *ought to* in 10a, and *need to* in 11b. It is clear from these sentences that advisability modals usually tone down harshness in an expression. They are mostly suggestive.

Finally, sentences 6c, 9c, and 11c show willingness on the part of the subject to carry out an act through the use of the modals *should, would*, and *need to*. However, 11c can also imply a sense of compulsion or necessity on the part of the subject to carry out an act.

Generally, modal verbs derive their broad function from their definition as auxiliary verbs that give additional or specific meaning to the main verb in a sentence (Nwabueze 2018). Akeel (2014), also classified the functionalities of modal verbs into three.

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According to Akeel (2014), every modal verb performs functions that can be classified under possibility, ability and permission.

In the context of grammar, the role of modal verbs cannot be overemphasized. Sadia and Ghani (2019) expanded the expression of obligation or responsibility, possibility or probability, necessity or need as well as volition or freedom. However, the functions of modal verbs depend on the context and structure in which they find themselves. More than that, Ngula (2017) noted that modalities perform more than structural functions in grammatical subsystems as they add the effect of attitude, judgment, assessment, desire and permissiveness to what a writer or a speaker expresses. That is to say, the functionalities of modal verbs transcend structural and semantic boundaries. This peculiar feature about modal verbs makes them very unique in language use in general.

In agreement with this proposition, existing literature reveals the role modalities play in several contexts as hedging, stance and feminism. In this regard, Omer (2016) conducted a study to investigate the importance of using hedging and modality in academic discourse. The study by Omer also explored how modality and hedging had been taught, and to what extent students were aware of the appropriate use of hedging and modality in their writings. Omer's study revealed that Kurdish students were not conscious of the use of hedging and modality as it was significant for L2 learners. The findings also revealed that students were taught modal auxiliary verbs and adverbs explicitly. Omer suggested that teaching hedging and modality by using inductive examples, and by focusing on forms and functions will help Kurdish learners to distinguish themselves by using more boosters and tentative language in their academic discourse.

Beyond the grammatical functions, Hayat and Juliana (2016), also found that modality use is a great tool for news editors as it is used to convey the realities of issues as they happened. This idea by Hayat and Juliana (2016), was a confirmation of the findings of Trajkova (2011) who earlier realized that modalities were used by editors in hedging so as to create more acceptable context through toning down their expressions by mixing factuality with uncertainty. This technique makes the context (however terrible the news may be) acceptable to the readers.

Moreover, Nwabueze (2018) conducted a very interesting study which uniquely applied the concept of modalities and their use to women self-expression. His study throws no mean light on the distinct functions modal verbs play in expressing gender related characteristics. Nwabueze (2018) studied the meaning and content of modal verbs as a syntactic element expressing women perception of their social positioning and power in the Nigerian psychosocial arena. This study corroborates the long-standing discriminatory culture against women in African societies earlier presented by Akinola (2018). Interestingly, the study enlightens that woman themselves perceived the state society classified them and consent to that position through their use of language. Nwabueze (2018) concluded after examining modal verb use among Nigerian women in newspapers that women's perception of equality in rights and abilities comparable to their male counterparts is yet to come to full realization. Thus, women continue to consent to the patriarchal social order which is a usual characteristic of most African societies.

Beyond grammatical functions, one could also speak of the works of Qun (2010), Trajkova (2011), and Ntsane (2015). Qun (2010) conducted a research based on corpus analysis techniques to study the features of modality in scientific papers as well as

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newspaper editorials. The results of his research indicated that the authors of academic papers evaded such epistemic modals as "surely" and "I think" because of their focus to present unbiased views about different news events. Apart from being unbiased, the authors of scientific papers presented their findings in reasonable, consistent and forceful ways. Therefore, the occurrence frequency of "often" was higher than "sometimes" and "usually". So, as newspaper editorials were concerned, *could* and *should* were found as the most distinguished features of the editorials. A reason behind this preference, according to Qun (2010) might be that the majority of the editorialists tried to remark on previously happened events. Hence, the past tense had been preferred. The editorialists had been reported to mark stance in 112 Asia Pacific Media in 30 unclear ways. It might be due to this reason, in view of the researcher, that they do not intend to offend their readers. Thus, they preferably used mitigating modals: thus, *might* and *could*. Trajkova (2011) examined linguistic functions and forms of hedges in Macedonian and English newspaper editorials. He observed that hedges worked as interpersonal meta-discourse markers and helped editorialists tone their statements down and present uncertainty in their factuality thus making them acceptable for the readers. On the basis of these observations, he made the editorial readers aware of the editorialists' persuasive power and style. Ntsane (2015) investigated the management of contact between editorial writers and their readers with an aim to explore how an editorialist involves the readers as participants in his discourse while maintaining his persona as an author. Still, another aim of his study was to know about how the reader of an editorial is aligned or dis-aligned with the views of an editorial writer. Thus, applying Engagement System of the Appraisal Framework, he explored that contractive means were used slightly more than the expansive means. The slight differentiation means that the writer of an editorial tries to maintain a balance between

maintenance of his authority as an author and bringing in his readers in the communicative events. The results of his study also indicated that different newspapers used engagement means in the same way.

In Pakistan, Ahmed, Mahmood and Farukh (2020), also analyzed the use of modals for stance marking in newspaper editorials. The corpora used for the study consisted of 500 editorials published in Pakistani English newspapers. Thus, the Daily Dawn and the Daily News (250 editorials from each newspaper) which were analysed with the help of AntConc 3.4.4.0. It was discovered that Pakistani editorial writers used all types of modals which were inclusive of prediction, possibility, indicators, reporting verbs, knowledge verbs, necessity indicators, modal adverbs, and generic phrases. The investigation further revealed that editorial writers used modals to make personal stance while communicating the state of affairs. Among these modals the use of prediction markers is the most frequent which indicates that prediction is a characteristic feature as well as functions in the said newspaper editorials. It was also uncovered that there is a difference in the use of modal adverbs in the editorials of both newspapers. In addition, the results revealed that the editorial writers of The Daily Dawn made less use of prediction markers as compared to the editorial writers of The Daily News.

From the literature presented in this section, it is clear that modal verbs perform functions that cut across: grammatical, legal, editorial, psychological, and gender dimensions.

2.7 English Language Use Errors in Students' Writings

One of the interesting areas that has been explored by existing literature is that of use errors in students' writings. In this regard, a study conducted by Abdul-Majeed and Hassoon (2016) is a remarkable piece. In their study, Abdul-Majeed and Hassoon

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(2016) found that students were having problems with modals in a sense that some treated modal verbs as main verbs and added an –s or –es. For example, some students used expressions like 'she cans', 'he oughts to' and 'he mights go'. This modality-verb confusion is ungrammatical and calls for a redress. This finding of the addition of – s to the named modal verbs point to the fact that most students are ignorant of the tenet that modal verbs do not have different tense forms in terms of number, like some irregular verbs do.

Another study conducted by Verbling (2018) confirms the findings of Majeed and Hassoon (2016). Verbling (2018) explored major errors that are frequently made in the use of modal verbs among college and university students in Spain. A survey approach was adopted for the investigation and it was revealed that three (3) major errors are prominent among English users. The first error is an attempt to switch modal verbs from tense to tense. Many English users are not aware of the rule that modal verbs do not change tenses. Modal verbs do not have participles or past forms (Verbling, 2018). Another common error identified by Verbling (2018) is the combination of modal verbs among some users. Some of the respondents said 'I will can go out tonight' which is wrong. The third common error was the use of preposition after modal verbs such as 'she can to come at 9:30pm.'

It is argued by most scholars that the challenge of errors in the use of grammatical elements is not only limited to second language speakers of English but even to those who speak English as their first language. Thus, the ability to communicate effectively in English by both native and non-native speakers requires intensive and specialized instruction. Due to the integral role that writing plays in students' academic life, academic literacy has garnered considerable attention in several English-media

universities in which Ghanaian universities are no exception. In his study, Amoakohene (2017) argued that much time and space should be given to academic writing and Communicative Skills in order to enhance students' competence in English for their academic and professional development. Amoakohene's argument was based on the findings that came out after exploring the errors in a corpus of 50 essays written by first year students of UHAS. The findings revealed that after going through the Communicative Skills programme for two semesters, students still had serious challenges of writing error-free texts. Out of the 50 scripts that were analyzed, 1,050 errors were detected inclusive of modality errors. The study further revealed that 584 (55.6%) of these errors were related to grammatical elements, 442 (42.1%) were mechanical errors and 24 (2.3%) of the errors detected were linked to the poor structuring of sentences.

Similarly, Chele (2015) explored errors in subject verb agreements among students of the National University of Lesotho (NUL). Tests were given to the students in the fields of their study and the scripts examined. Additionally, Chele gave series of sentences containing errors to be identified and corrected by the university students. After adopting a comprehensive corpus analysis on the results, it was discovered that subject verb agreement errors were common among the National University of Lesotho students. The study classified the errors discovered into two: performance errors and competence errors. Performance errors were seen as errors that appeared in constructions where most students had corrected the errors. On the other hand, competence errors appeared in constructions where only a small number of students had noticed and corrected the errors. The study discovered fifteen (15) performance errors and thirteen (13) competence errors. The study concluded that in complex

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linguistic environments, English language use errors are common. His findings and conclusion underscored the likelihood of discovering similar errors among college and university students in the Ghanaian complex linguistic environment.

Moreover, Pelzang and Hutchinson (2018) conducted a recent study to investigate patient safety issues and concerns in healthcare centres in Bhutan. The study classified errors that affected patients' safety in healthcare settings. The qualitative findings revealed that communication errors posed great threat to patients' safety. In light of this, dealing with errors regarding communication should be of priority for every healthcare system striving for quality and professionalism in care giving (Pelzang & Hutchinson, 2018).

David Cox also conducted an interesting study which enlightens on four (4) communication errors health college students make in the use of *must*. Cox (2020) discovered that a main problem that English learners have is their inability to use modal verbs appropriately. According to Cox, errors regarding the use of *must* are very prominent among college students. Cox discovered that many of the students used the phrase *must to*. For example, some students say "I must to go". Secondly, some respondents used *will* and *must* together. For example "you will must come". Others used *have to* when they should have used the modal verb, *must*. According to Cox, we choose between *have to* and *must* if authority decides that an action should be performed. For example:

'I have to resume work this week (your employer demands).

'I have to pay my tax' (the government demands).

However, if it is personally necessary to carry out the activity in question, then *must* is most appropriate (Cox, 2020). Example:

'I must go to the farm" (I decide it is necessary).

'I must eat some rice' (I decide to eat the rice).

Another study conducted by Karim, Fathema and Hakim (2015) investigated common errors in university students' writings in Bangladesh. The investigation was focused on investigating errors in the use of verbs in English essay of comparison and contrast method. Thirty-six (36) tertiary level EFL learners at International Islamic University Chittagong (IIUC) were recruited for the study and it was found that errors of agreement with verb, missing of verbs, misusing verb tenses, misusing past tense after infinitive and misusing the *to have* verb were notable among respondents. Some of the errors of agreement were:

Shadinata park have (has) many ….

The zoo where the animal are (is) ….

It give (gives) us joy. When any one ask (asks) about ….

They both attracts (attract) me most.

Two memorable visits was (were) …..

Children likes (like) most ….

Both places was (were) very peaceful.

Some of the errors of omission found by Karim, Fathema and Hakim (2015) were as follow:

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I can not … any time

This visited place will … very helpful.

Some times it ….used as a court.

Two places … situated in Bagerhat …..

It … also important …..

There … many hills in ….

Rangamati We … staying in Cox's Bazar.

It … also a historical place.

Though the two places …. so much wonderful.

Amiri, Alami, Matlabi and Shomoossi (2021) also investigated errors in healthcare journals. Descriptive study approach was used to investigate fifty (50) original articles on healthcare that were selected from five health journals publication firms with nonnative editors/proofreaders using convenience sampling in 2019. The articles were carefully read several times; errors were identified according to Gass and Selinker's model and classified into four categories. It was much surprising to find out that over 4322 errors occurred in the 50 articles. The errors were then classified into grammatical errors, punctuation errors and errors in using modal and auxiliary verbs.

Furtina, Fata and Fitrisia (2016) also discovered in their study conducted in Indonesia to investigate grammatical errors in writing tasks among males and females that males and females differed in their carefulness index when writing. Their investigation further established that while 35 errors constituting 3.5% were identified among females, 43 grammatical errors constituting 4.3% were found among males. Consequently, Furtina, Fata and Fitrisia (2016) concluded that females are more careful writers than males.

In this regard, it makes sense to infer that even though Furtina, Fata and Fitrisia (2016) talked generally about errors in writing tasks among males and females, their findings can be linked to other researchers' findings such as Cox (2020) and Abdul-Majeed and Hassoon (2016), who investigated specifically on modal verb use errors in students' writings; since the used errors explored in writing tasks among males and females by Furtina, Fata and Fitrisia (2016) might have included modal verbs.

2.8 Modal Verbs and Gender

Nwabueze (2018) identified a similar finding. Nwabueze (2018), in an attempt to compare gender differentials in the use of modal verbs, discovered the peculiarity in the use of modality to express feminism. He applied his work to the importance of modality use among women because of their feminist self-perception. Thus, women should be able to use more of politest forms of modality such as *should* instead of *shall*; *could* instead of *can* and so forth in order to prove their feminist functions.

Moreover, Wesseldijk and Eugenie (2020) conducted a study on modal verb use in the 19th Century focusing on representation of women. The gender differentials in the use of modal verbs, especially the perspectives of females was emphasized. A corpus tool was used to review existing collocations, clusters and concordance lists and analyse these findings in terms of the deontic modality associated with the female characters. Besides, the authors established the differences between male and female authors in the type and amount of modal verbs used to represent female characters. It was discovered that there were significant differences in the use of modals among females and their male counterparts. It was revealed that female authors use more permissive modals such *as should, can, could* and *may* compared to their male counterparts.

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Ayhan (2020) also explored gender differences in the use of modal adverbs as hedges with the aim to investigate the claims made by Robin Lakoff regarding women's language, where she claims that women use hedges more than men. A frequency analysis has been conducted, where data from the British National Corpus 2014 (BNC2014) was extracted and analysed. Since hedging involves various linguistic forms, Ayhan (2020) focused on the modal adverbs presented by Huddleston and Pullum. The results showed that women use more hedges than men. Yet, there are not any major dissimilarities across genders. Although there were some findings that supported Lakoff's claims, there were also some that contradicted her claims.

Similarly, a study conducted to compare modal auxiliary use among males and females; and adults and adolescents by Macaulay (2005) revealed that, adolescents use more modal verbs than adults whilst females use more epistemic modals than their male counterparts. The variations in the use of modals were found to depend mainly on the topic under discussion in a particular discourse instead of social considerations.

Kemoba (2013) also explored the same issue and came out with similar outcomes. The main aim of Kemoba's (2013) study was to establish whether modal verbs are gender-sensitive language elements. He examined speech extracts carrying out comparative, quantitative and functional analysis to bring out how men and women express capability, uncertainty, doubt, reproach, order, necessity and supposition. To analyze 'female' and 'male' style of speech as speaker variables, the latest pieces of filmography representing spoken English since 2004 to 2013 were selected and examined qualitatively and it was discovered that men and women use different modal

verbs in cooperative and confrontation strategies. Meanwhile, Кемова (2013) revealed that the modal verb *can* was the most universal means of expressing different meanings with both gender groups; the meanings of ability and necessity are the most frequent in the speech of both men and women; both genders avoid using *must* in the meaning of necessity. The findings illustrate that women tend to sound more expressive and that in confrontation strategies, women prefer complaints and reproach using *can* in the meaning of ability and possibility, while men prefer accusation and threats using *have to* and *should* instead. Кемова (2013) therefore concluded that modal verbs are gender sensitive, though in some cases both genders resort to similar grammatical patterns. Women's speech is more expressive and close to the norm while men are reserved and pragmatic in the use of different modal verbs.

2.9 The Role of Health Service Communication on Healthcare

A descriptive study was conducted by Neville et al. (2012) about nurse-patient communication and it was discovered that effective communication was an important tool for good interaction between health workers and patients. Effective nurse-patient communication was perceived to be the most important aspect of the role of health workers. Furthermore, proper communication has an impact on how patients and their families perceive nursing care.

In Ghana, Mensah (2013) found that effective communication was found to be fundamental to quality patient care. According him, communication is not simply sharing of information. It also requires overt demonstration of nurses' knowledge, skills and empathy. Mensah (2013) argued that authoritarian nursing is a major problem affecting patients in health facilities. According to Mensah (2013), authoritarian nurses

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use language that indicates their total control and authority over patients. The patients who were participants in the study reported that the nurses used their power to dictate to them: disregarding their right to be involved in issues concerning their care. It was found that the nurses interpreted the patients' attempt to voice their opinions as an attack on their authority. Such authoritarian nurses were depicted to have frequently used the *must* dominant expressions. "… There are some places too, we were restricted to go but when we mistakenly went there, they shouted, "hey! we don't pass here", or, "you must not pass there" (Mensah, 2013).

The nurses were reportedly in complete control over patients and hardly gave them any chance to be involved in their own care. There was poor mutuality in communication as nurses-imposed things on the patients instead of mutual agreement on what was to be done. These impositions were enhanced by the use of rude language which is dominated by the modal verb, *must* or a combination of words that performs the same function as the modal verb *must*. This is not the tenet of the health profession (CDC, 2018). The health professional is required to be polite in language, and also exercise knowledge in choice of words that can enhance the mood of patients. In the healthcare circles, language is seen as a very essential therapy that is ever constant in all care categories. Even hopeless health situations should be communicated tactically to portray hope (Mensah, 2013).

2.10 Chapter Summary

Based on the integrative theory of emotional communication, this study conceptualizes that the manner of use of modal verbs among health service providers can have significant implications on the patients they provide services to. This conception stems from the functions that modal verbs play as a sub-structure of mood. In effect, modal

verbs may not only be used to express the mood of the speaker but also, to affect the mood of the audience.

The studies reviewed under this chapter reveal that modal verbs are well-known features in the English language and are adopted to express several functions such as necessity, obligation, ability, possibility and probability. The literature also pointed to the fact that modal verbs use has functionalities that go beyond grammatical structures to affect the mood of audience. Modal verb errors also exist among college students across Ghana and the world.

The review further indicated that there are hardly studies that specifically examine modal verb use among health training colleges' students. Modal verb use among health professionals is not adequately explored as literature focuses on the importance of general communication in healthcare; specific areas of English language use such as modal verbs and prepositions have not been explored among health professionals and health trainees. This gap gives credence to the importance of this study on modal verb use among health trainees.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents methods, procedures, techniques and materials that were used for the study. These include the study design, study variables, study area, study population, sampling procedure, data collection instrument, data analysis and presentation and ethical considerations.

3.2 Research Approach

Qualitative research approach was adopted for this study. Qualitative approach involves the collection and analysis of non-numeric data collected through interviews, observation and focus group discussion. It focuses on making inferences into direct conversations so as to identify major themes of interest around which the understanding of the topic under discussion evolves. In instances where narratives from interviews are to be analysed, it is more desirable to use qualitative inferences in drawing meanings from the narratives. In most cases too, qualitative approach complements quantitative approach to analyse data that cannot be quantified into numbers. In this research, the investigator elicited data through a corpus analysis and structured interview. It was therefore important to adopt the qualitative research approach to make sense of narratives given by respondents to be able to deduce important themes that define issues relating to the use of modal verbs among the respondents.

3.3 Research Design

This study is in two stages and hence adopted a combination of two designs – a corpus and a cross-sectional study designs. A corpus study design concerns performing meaningful analysis and investigating into a large collection of texts that are organized

in consonance with acceptable linguistic procedures and appropriately applied sampling techniques (Castello, 2014). A cross-sectional study design, on the other hand, concerns collection of primary data on a single occasion to investigate contemporary problems affecting a study population. A cross-sectional study is more focused on investigating present phenomena through examining a cross-sectional proportion of a study population.

The researcher deemed it appropriate to use a blend of a corpus study and cross-sectional study designs because the nature of the topic under consideration required two stages of investigation; an investigation of the corpora of an examination on the use of modal verbs and then, an investigation of how the use of selected modals affects the condition of a proportion of the study population. In this regard, the corpus study design was more appropriate for the analysis of texts from the scripts of college students than any other design could do. This is because the corpus study design helped to synthesize the frequency of use of modals, giving an account of which modal verbs were used most frequently in the texts, as well as the weaknesses/lapses and errors in the use. In fact, Cushing (2017) enunciated that the advantage of a corpus approach is the inherent strength of allowing for comparative analysis to be made of language. Stated differently, a corpus analysis helps in conducting detailed investigation of linguistic features across language users regardless of genre, type of users, contexts of use and volume of use.

The cross-sectional study on the other hand, was adopted because it is simple and straightforward to conduct. This is because data for the study were collected once for the study. The cross-sectional study is also advantageous because it focuses on investigating the present situation such as the effect of the use of modal verbs in health

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communication and the potential it has to influence the conditions of patients. Both the corpus and the cross-sectional studies also allow generalizations to be made on the entire study population from the findings gleaned from the investigations and therefore, are more appropriate to be used for this study.

However, it is worth mentioning that both designs (the corpus and the cross-sectional) are not without flaws. The corpus study design has its weakness of not being able to investigate the "why" of the problem. Thus, though the corpus analysis can tell the errors and frequency of use of words and expressions, it cannot tell why people make such mistakes or prefer the use of particular words. The cross-sectional study on the other hand, also has a weakness of not being able to investigate the trend of problems for a very long time in a single study. Thus, because the cross-sectional study concerns contemporary or present state of the problem, it is a snapshot study at a point in time and cannot be used to study the trend of events without repeating the study over and over. Thus, when the characteristics of the study population change over time, the findings of a cross-sectional study lose applicability gradually. However, a blend of the two constituted a more formidable procedure for in-depth investigation of the topic under study.

3.4 Study Variables

The variables that were investigated included frequency of use of modal verbs, weaknesses/errors in the use of modal verbs and implications of modal verb use on patients.

3.5 Study Area / Setting

The study setting included College of Health and Well-Being located in the Kintampo North Municipality of the Bono East Region of Ghana. To situate the study setting for a vivid understanding, a background of the Kintampo North Municipality is given and ultimately narrowed down to the College of Health and Well-Being, Kintampo.

3.5.1 Background of Kintampo Municipality

The strategic location of the Kintampo Municipality plays a significant role in student enrolment into the College of Health and Well-Being as it influences their decision to attend the college. The Kintampo Municipality is located between latitudes 8º45'N and 7º45'N and Longitudes 1º20'W and 2°1'E and shares boundaries with five districts: namely; Central Gonja District to the North; Bole District to the West; East Gonja District to the North-East (all in the then Northern Region); Kintampo South District to the South; and Pru District to the South- East (all in the now Bono East Region). The Capital, Kintampo, is about 100km away by road from the regional capital, Techiman. The Municipality is strategically located as the Centre of Ghana and serves as a transit point between the northern and southern sectors of the country. The population of the Kintampo Municipality according to the 2021 population and housing census is 139,508 with 63,520 males and 69,988 females.

A map of the Kintampo Municipality is as shown in Figure 2:
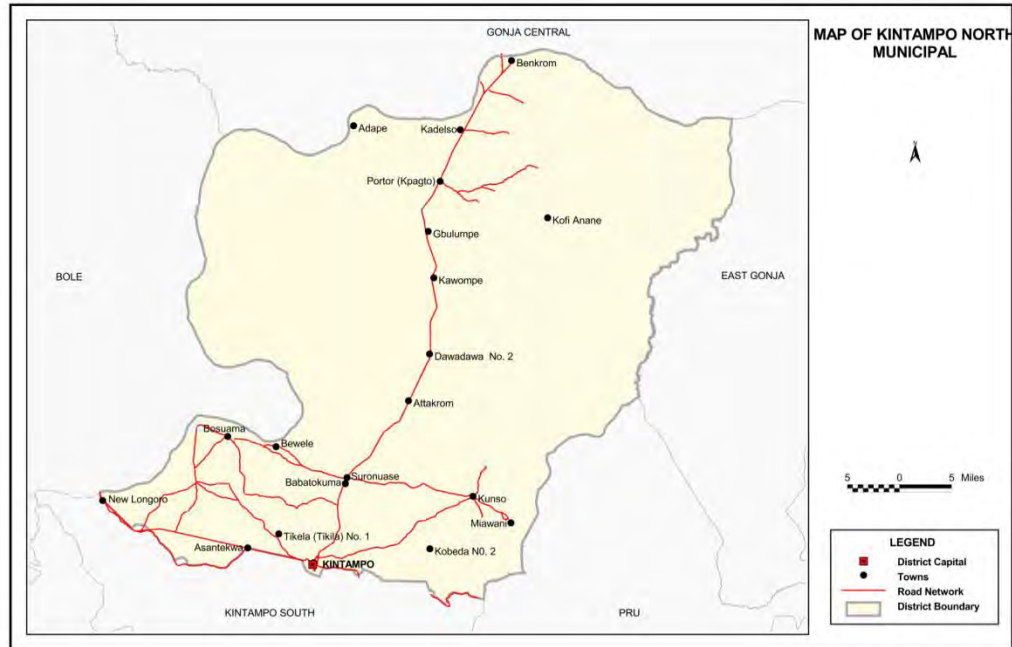
Figure 2: Map of Kintampo Municipality

The College of Health and Well-Being, which is the major tertiary educational institution in Kintampo North Municipality plays a major role in education among the populace in the municipality. The student enrolment of the College of Health and Well-Being is greatly impacted by the rapid population growth of the Kintampo Municipality.

3.5.2 Background of College of Health and Well-Being

College of Health and Well-Being, Kintampo, was chosen for this study because it is one of the popular health training institutions that have long existed and it receives students across Ghana and West Africa as a whole. The college is located in the Kintampo North Municipality of the Bono East Region of Ghana. The College of Health and Well-Being started as a rural health training school in the late 1960s with a first batch of medical assistants graduating in the year 1969. In 1976, the technical officer in nutrition programme was introduced which was followed by the technical officer in disease control in 1977. As a result of direct alignment of programmes to meet

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the growing needs of the Ministry of Health and the Ghana Health Service, the school has received the attention and patronage it deserves leading to a continuous increase in admissions and expansion in the programmes it offers. Currently, the school offers over 14 different programmes ranging from direct and post basic physician assistantship programme, community oral health programme, technical officer in disease control, health information, community mental health, medical laboratory technology, health records management and many others. The College of Health and Well-Being was recently granted accreditation to run eight (8) degree programmes and is due to become the first university in the Bono East Region. The college has a student population of over 2,240 (Hita, 2016). The college's location near the Centre of Ghana in Kintampo, and its ease of accessibility to students from both the northern and the southern sectors of the country has made it the most famous health training institution in Ghana. Due to its long existence and the programmes it offers, it is the alma-mater to thousands of health professionals serving in all the public health facilities across Ghana. It is for these reasons that the researcher deems it very imperative and appropriate to select the College of Health and Well-Being for this study.

3.6 Study Population

The study population included 150 health trainees attending College of Health and Well-Being whose academic scripts were investigated; who were also observed on their use of modal verbs both on campus and during their clinical practical training. The study population also includes 512 patients/clients at the Kintampo Municipal Hospital (KMH) at the time of this study (July 2021).

3.7 Sampling Procedure

Simple random sampling and purposive sampling techniques were adopted for this study. The College of Health and Well-Being was purposively selected for the study because it is by far the longest and largest serving training college producing health professionals in the widest scope in Ghana and West Africa at large. The simple random sampling was used to select 120 out of 150 examination scripts of students of the College of Health and Well-Being in the second semester examination in Communication Skills of the 2019/2020 academic year. The selection was done through tossing of a dice consecutively. Random numbers obtained from outcomes of the dice tossing process determined which script to select as the scripts were numbered serially. The position of a script that was selected at each toss corresponded to the number obtained from the toss of the dice. For example, the fifth script was selected at an instance for obtaining 5 from the toss of a dice. The process was repeated until the required number of scripts was obtained. It was very appropriate to apply the simple random sampling technique in this way because it helped to eliminate researcher biases in the selection of the scripts as the researcher did not predetermine which script to be eventually included in the study.

In addition, 30 patients who could read and understand the English language were selected at the Kintampo Municipal Hospital (KMH) for a cross-sectional investigation on selected modal verb uses found in the corpus analysis. These were also selected through a purposive sampling where available, willing and accessible population who could understand English were selected. It was important that the respondents for the cross-sectional investigation should be able to read and understand the English language because it was required of them to read, understand as well as describe

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precisely how the use of modal verbs for certain expressions influence their mood and conditions.

The sample size that was realized from the sampling process was determined as follows:

1) 120 students' scripts from College of Health and Well-Being, Kintampo

2) 30 patients from the Kintampo Municipal Hospital

3.8 Data Collection Instruments

3.8.1 Data Capture Form

Data from the corpus were summarized onto a data capture form for easy and meaningful processing and analysis. The data capture form was designed to align with the research questions set for the study. The data capture form summarized data regarding frequency of modal verb use, types of modal verbs used as well as modal verb use errors that were gleaned from an investigation of the scripts.
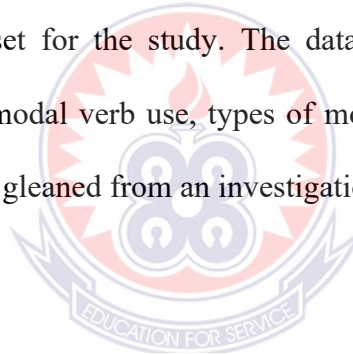
3.8.2 Observation

Furthermore, an observation was made on modality use in the conversation of the health trainees both on campus and during their clinical practice where they had engagement with patients in hospital settings. This was done to help investigate how the trainees communicate with patients especially with regard to the knowlege and competency employed in their choice of modal verbs. This became necessary on the bases of the conceptual framework calved for the study which is underscored by the fact that modal verb use influences the mood of patients.

3.8.3 Structured Interview

A structured interview guide was also designed for the cross-sectional investigation. Both close-ended and open-ended questions were included in the interview guide. The interview guide was structured in two (2) sections. Section A investigated the demographic characteristics of respondents. Section B investigated the influence of modal verb use on the conditions of patients. The interview guide was used for the study because it afforded respondents the freedom to express themselves giving as much relevant information as possible. Consequently, the interview guide was selected as a more suitable instrument so as to prevent the collection of an overload of information that could make the analysis difficult.

3.9 Pre-testing

The structured interview guide was pre-tested on five (5) patients selected at random at Jema Government Hospital. The aim of the pre-testing was to help identify ambiguities and errors in the data collection instrument and correct them before the main data collection was done.

3.10 Data Analysis and Presentation

Corpus data were summarized using thematic approach and tally. Counts were made of the modal verbs use instances and contexts in the scripts of the students selected for the study. This helped to collate the frequency of use of modal verbs which is the main aim of the first research question.

The frequency of use of modal verbs was then tallied under the following areas:

1. number of times a student used modal verbs in his/her script

2. number of times each modal verb was used

3. number of modal verbs used in a script.

Furthermore, instances of modal verb use in the scripts were analysed to ascertain whether they were being used in epistemic, deontic or dynamic modes. Each of the contexts, whether epistemic, deontic or dynamic was tallied and collated.

Moreover, the contexts of modal verb use were analysed to find out the type of functions being expressed; whether ability, permission, volition, advisability, necessity, obligation, possibility or certainty. These eight notable functions were also tallied using the data capture form and the number of instances were collated for each of the functions. The need to find out how many functions a particular modal verb was used to express was noted and tallies were done in that regard and it was observed that some modal verbs were employed to express several functions whilst others were employed in communicating just a single function. These results were presented. Also, interesting contexts of modal verbs use were extracted and filled onto the data capture form and such contexts were discussed to give support to the collated data.

With regard to the second research question which deals with an analysis of errors in the use of modal verbs, the instances of errors were noted down during the analysis of modal verbs use. Such errors were counted and subtracted from the total number of instances where students used modal verbs. This simple arithmetic helped to arrive at the number of correct uses and the number of errors and these were tabulated. The errors were also compared and tallies were made for males and females to help analyse errors of modal verb use among males and errors of use among females. The analysis revealed two categories of errors which are instances where modal verbs were used wrongly (wrong use) and instances where modal verbs were used with spelling error or tense and number indicators like – es or – s were added. Tallies were made to collate the number of each type of errors and tabulated. Furthermore, some instances of errors were

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selected under each of the modal verbs and discussed to give detail insight into how students applied the modal verbs in their scripts.

In addition, data collected during the hospital study were analysed by collating the results using tally so as to arrive at frequencies and percentages. These were also tabulated. Question-to-question order was observed in the analysis of the data collected from the patients at the hospital.

Some tables were used to generate charts using Microsoft Excel. This was done to bring emphasis and some dynamics in the analysis tools. Results presented in the tables and charts were then interpreted. Insights from the interpretation of results were then discussed by comparing them to existing literature. The key findings were then summarized and recommendations made.

3.11 Ethical Considerations

A letter of introduction from the University of Education, Winneba, was submitted to the Director of the College of Health and Well-Being. Copies of the introductory letter were also submitted to the administrators of Kintampo Municipal and Jema Government Hospitals. When permission was granted, data collection then commenced. The purpose of the study was explained to the respondents and their consent sought before the data collection was done. The respondents were also assured of confidentiality of the information they shall provide.

3.12 Chapter Summary

This study aims at investigating the use of modal verbs among health trainees and prospective implications on healthcare communication with patients. The research approach adopted for the study was the qualitative approach and the study design used

was a composite of corpus and cross-sectional designs. The sample size included 120 college students and 30 Out-Patient and Inpatient Departments (OPIPD) patients. The patients were investigated using a pretested interview guide whilst the college students were investigated through an analysis of their examination scripts through tallying onto a data capture form. The students were also observed during their clinical practicum exercise and data duly gathered on their use of modal verbs in health communication. Data were analysed using a qualitative approach. Ethical issues such as permission, consent and confidentiality were duly addressed in order to ensure that the results reflected the true situation among the respondents investigated.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results from the analysis of data collected from respondents. It also presents the discussion of the results. The results and discussion of the study are presented under each of the research questions. Results regarding the demographic characteristics of the respondents are presented first, followed by results of the research questions.

One hundred and twenty (120) scripts of students of College of Health and Well-Being, Kintampo, were examined. The students were also observed on modal verbs use both in school and during their clinical practice sessions. Thirty (30) patients were also selected and studied at Kintampo Municipal Hospital and response rate was 100%.

4.2 Results and Discussion

4.2.1 Demographic Characteristics of Respondents

Table 1: Gender of Student Respondents

Gender	Frequency (f)	Percentage (%)
Male	72	60.0
Female	48	40.0
Total	**120**	**100.0**

Source: Field Survey, December, 2021.

These percentages were arrived at as a result of the sampling technique (Simple Random Sampling) that was used to select the first part of the study population at the study's setting, that is, College of Health and Well-Being, Kintampo.

From table 1, majority, 72 (60.0%) of the students whose scripts were examined were males whilst 48 (40.0%) of them were females. This implies a feministic minority which is in consonance with the idea that many females do not make it to the tertiary level of education due to marital demands, unintended pregnancy and inability to make the grades for tertiary education (The Pew Research Centre of USA, 2021). The Pew Research Centre of USA (2021) also discovered financial constraints among 42% of females as a hindrance to their tertiary educational attainment and that more females (44%) than males (39%) reported financial constraints as a hindrance to their tertiary education.

On the contrary, Parker (2021) noted that the trend of females not attaining tertiary level education is changing rapidly such that more females are getting access to tertiary education compared to their male counterparts. However, the finding of this current study contradicts the notion that the health profession is female dominant (Budu, Abalo, & Peprah, 2019). This current study indicates that more males are patronizing the health profession in recent times (Budu et al, 2019).

Table 2: Background of Patients

Demographic Characteristics	Frequency (f)	Percentage (%)
Gender:		
Male	13	43.3
Female	17	56.7
Age		
Below 20 years	4	13.3
20-29 years	11	36.7
30-39 years	12	40.0
40-49 years	2	6.7
50-59 years	1	3.3
Religious Affiliation		
Christianity	24	80.0
Islam	6	20.0
Formal Educational Attainment		
SHS	7	23.3
Tertiary	23	76.7
Marital Status		
Single	12	40.0
Married	15	50.0
Divorce/Separated	1	3.3
Cohabiting	2	6.7
Employment Status		
Unemployed	14	46.7
Government Employed	6	20.0
Employed in a private institution	3	10.0
Self Employed	7	23.3
Total	**30**	**100.0**

Source: Field Survey, December, 2021.

Table 2 reveals that a larger proportion, 17 (56.7%) of the patients were females whilst 13 (43.3%) of them were males. A greater number, 12 (40.0%) of the patients were between 30 – 39 years of age whilst a marginal number of 1 (3.3%) of them was between 50-59 years of age. Quite a huge number, 24 (80.0%) of the respondents were Christians whilst 6 (20.0%) were Muslims. This Christian dominance points to the large Christian population in Ghana (GSS, 2021). A proportionally great number, 23 (76.7%) of the respondents had tertiary education whilst a marginal number of 7 (23.3%) of them attained SHS level of education. This implies that more and more Ghanaians are getting access to tertiary education. It also implies that since the majority of patients interviewed were intellectuals, they could understand English language use implications. An average number of 15 (50.0%) of the respondents were married whilst 1 (3.3%) of them was divorced/separated.

A great number, 14 (46.7%) of the respondents were unemployed in the government sector whilst 3 (10.0%) were employed in the private sector. This implies a very high rate of unemployment among the respondents which is not different from the general situation of high unemployment in Ghana. This finding is similar to that of a study conducted by O'Neill (2022) who discovered an increasing trend of unemployment among the labour force in Ghana between the years 2019 and 2020 with estimated rates of 4.12% and 4.53% respectively. Similarly, the World Bank (2020) reported that Ghana is battling with 12% youth unemployment and over 50% of underemployment which needs an urgent action.

Table 3: Type of Patients and Health Conditions in November, 2021

Patient Characteristics	Frequency (f)	Percentage (%)
Type of Patient		
Out-Patient	23	76.7
In-Patient	7	23.3
Total	30	100.0
Disease Condition		
Typhoid and Enteric Fever	3	10.0
Pneumonia	1	3.3
Malaria	7	23.3
Urinary Tract Infection	1	3.3
Eye and Ear Problems	5	16.7
Stroke	1	3.3
Asthma	2	6.7
Respiratory Tract Infection	1	3.3
Stomach Problems	3	10.0
Antenatal Patients	2	6.7
Others such as Cut/Wound, Skin problems, Dysentery and High Blood Pressure	4	13.3
Total	**30**	**100.0**

Source: Field Survey, December, 2021.

Table 3 shows that majority, 23 (76.7%) of the respondents were out-patients whilst 7 (23.3%) of them were in-patients. This indicates that a greater proportion of respondents were out patients.

Besides, the patients were suffering from various health conditions such as malaria, 7 (23.3%); eye and ear problems, 5 (16.7%); typhoid and enteric fever, 3 (10.0%); and stomach problems, 3 (3.3%). The finding that a greater proportion of the patients were suffering from malaria implies that malaria must be a pressing health condition in Kintampo and its environs. This finding confirms recent growing concern in current research which points to the fact that malaria is a most common disease in Ghana and the most common cause of death among all ages.

Similarly, the Centre for Disease Control and Prevention (CDCP) conducted a survey in 2018 and ranked the top 10 causes of death in Ghana and it was discovered that malaria came first in the ranking, followed by lower respiratory tract infection. In the Kintampo Municipality, 6,983 malaria cases were recorded in 2015; 2,199 in 2016, and 1,619 in 2017 (Kintampo Municipal Hospital Statistics Department, 2018). Thus, much attention need to be paid to malaria prevention and control in Kintampo and its environs.

4.2.2 Research Question 1:

What is the frequency and dynamics of modality use in college students'

academic writings?

The first research question is concerned with investigating the frequency and the dynamics (respondents' ability to change between several modal verbs) of use of modal verbs among respondents. This was done by investigating variables such as number of times students employed the use of modal verbs in their examination scripts, number of times college students used each of the modal verbs that exist, modal verb use and gender, number of modal verbs students used and functions of the modal verbs used. The results are as follows:

Table 4: Number of times students used modal verbs in their examination scripts

Count	No. of Scripts	%
1-10 times	43	35.8
11-20 times	67	55.8
21-30 times	10	8.3
Total	**120**	**100.0**

Source: Field Survey, December, 2021.

Table 4 indicates that 43 (35.8%) of the students used modal verbs between 1-10 times: a greater number, 67 (55.8%) of the college students used modal verbs between 11-20 times whilst 10 (8.3%) used modal verbs between 21-30 times. This finding indicates that the frequency of modal verb use among the college students was not very encouraging since many 43 (35.8%) of them could not use modal verbs more than 10 times and only 10 (8.3%) of them used the modal verbs more than 20 times in their examination scripts. This finding indicates a modal verb use deficit among the college students.

This finding points to the fact that instructional attention paid to the concept of modal verbs at College of Health and Well-Being has not been adequate and hence needs extra efforts and attention to encourage the use of modal verbs among the trainees. This has become even more important because health related communications must pay much regard to mood. Thus, grammatical structures that communicate mood such as modal verbs must be of much importance to health trainees who are prospective health professionals.

Moreover, it is also necessary to mention that a significant proportion of health trainees that are enrolled in College of Health and Well-Being are already on the job and have come for further studies. This is even more pronounced among the sandwich category of students who are working whilst schooling. In this way, it was expected that their language reflects the importance they attach to communicating issues relating to mood and emotions. However, it is surprising to discover from their language use that little attention is paid to mood expressing elements of the English language, especially modal verbs. This omission, if neglected for a long time, can lead to a negative implication on healthcare communication across the country owing to the fact that College of Health and Well-Being is a major health training institution producing health professionals for all sectors and specializations in the health profession (Hita, 2016).

Table 5: Number of times students used each of the modal verbs in their exam scripts

Modal Verb	No. of Use	%
Ought to	10	0.7
Must	122	8.0
May	43	2.8
Should	312	20.5
Can	382	25.1
Need to	19	1.2
Might	38	2.5
Could	46	3.0
Shall	9	0.6
Will	362	23.8
Would	178	11.7
Total	**1521**	**100.0**

Source: Field Survey, December, 2021.

Table 5 shows that the modal verbs mostly used by the college students were *can,* 382 (25.1%), *will,* 362 (23.8%) and should, 312 (20.5%) whilst the least used modal verbs were: *shall,* 9 (0.6%), *ought to*, 10 (0.7%) and *need to*, 19 (1.2%). This finding implies low competence in the use of the modal verbs *shall, ought to* and *need to* among the students as against the modal verbs; *can, will* and *should*. This finding is similar to that of Abdul-Majeed and Hassoon (2016) who also discovered that college students were less competent in the use of modal verbs such as *ought to* and *need to.*

However, the finding also shows encouraging use frequencies for the modal verbs *can, will* and *should* that need commendation. This implies that the health trainees are very proficient at the use of modal verbs such as *can, will*, and s*hould*. However, this frequent use does not guarantee whether they use them correctly or wrongly as these needs further investigation to ascertain the reality. Fortunately, this issue is addressed in research question two.
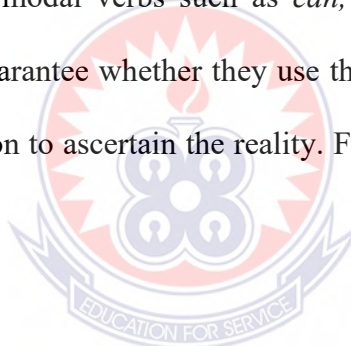
Frequency of use of modal verbs in oral expressions of trainees

To further solidify the findings, some observations were made of the health trainees both in the classroom and on the field during their clinical practice and it was discovered that modal verbs such as *should, can,* and *will* were frequently used in their expressions. For example, after lectures, a student who wanted to inform his friend of the hope to meet him in the next day's lecture said: "We will crush at the lecture tomorrow." Another student said to a group of her friends who were going to the hostel to take a rest after lectures:

"I will not go to the hostel. I will wait for the next lecture. I will be reading something as I wait". The student in this instance employed the modal verb *will* in each of the short

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statements she made to her friends and this clearly does not portray dynamism in the use of modal verbs. The fact is that the idea could be expressed in another way without the repeated use of the modal verb *will*. For example: the student could say: "I <u>will</u> be reading something as I wait for the next lecture, rather than go to the hostel". This form could forestall the repeated use of *will* and the monotony that comes with it.

Another student in her bid to communicate the deadline given for submission of a project work said: "*The supervisor said we <u>should</u> submit the project work tomorrow*". This is a very appropriate use of the modal verb *should* to express necessity in that context.

Further, during a clinical practice a health trainee intending to express the idea of permitting a client to go for a laboratory test said: "You will go to the lab for the test". The use of *will* in this context was supposed to express permission but it rather expresses a future certainty which is not appropriate. Alternative modal verbs for this context could be *may* or *can.* So, the trainee should have said: "You may go to the lab for the test". Or: "You can go to the lab for the test". Either of the two modal verbs in the sentences above would have been more appropriate than the use of *will*.

These observations of the trainees' expressions, therefore, lends evidence to the fact that the modal verbs *can*, *will* and *should* are frequently employed in their spoken English.

Table 6: Number of modal verbs used in College Students' Scripts

Number of Modal Verbs used in a single work	No. of Students	%
Use of 1 modal verb in a script	5	3.3
Use of 2 modal verbs in a script	10	6.7
Use of 3 modal verbs in a script	29	19.3
Use of 4 modal verbs in a script	19	12.7
Use of 5 modal verbs in a script	46	30.7
Use of 6 modal verbs in a script	12	8.0
Total	**120**	**100.0**

Source: Field Survey, December, 2021.

Table 6 indicates that a greater number, 46 (30.7%) of the college students adopted five (5) modal verbs each in their examination whilst 3.3% of them used only one modal verb each in their examination. The highest number of modal verbs employed in the exam was six (6), and this was used by 12 (8.0%) of the college students. This is also represented in Figure 3.
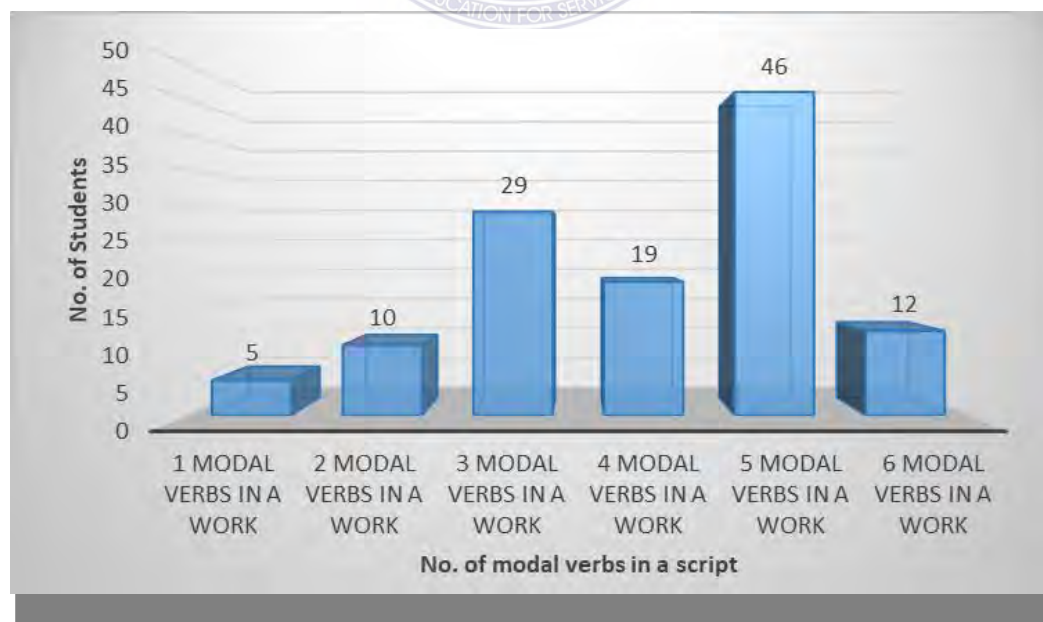
Source: Field Survey, December, 2021.

Figure 3: Number of modal verbs used by students in their scripts

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This finding, that students used between 1 and 6 modal verbs in their scripts, when compared to the number of times students used modal verbs in all, (1521) implies a high repeatability of the modal verbs. Stated differently, if students used few modal verbs (between 1 and 6), that is, 1521 times, then it implies that the students repeated some of the modal verbs so many times. This repetition points to two basic inferences; either the students were not dynamic enough in changing between modal verbs leading to repeating the same modals or that the students were able to use a single modal verb to express several functions.

Table 7: Classification of the modal verbs used

Modal Verb	No. of use	%
Deontic	505	33.2
Epistemic	1014	66.7
Dynamic	2	0.1
Total	**1521**	**100.0**

Source: Field Survey, December, 2021.

Table 7 reveals that a majority, 1014 (66.7%) of modal verbs were epistemic, whilst only 2 (0.1%) instances were dynamic. This is represented in Figure 4 below.
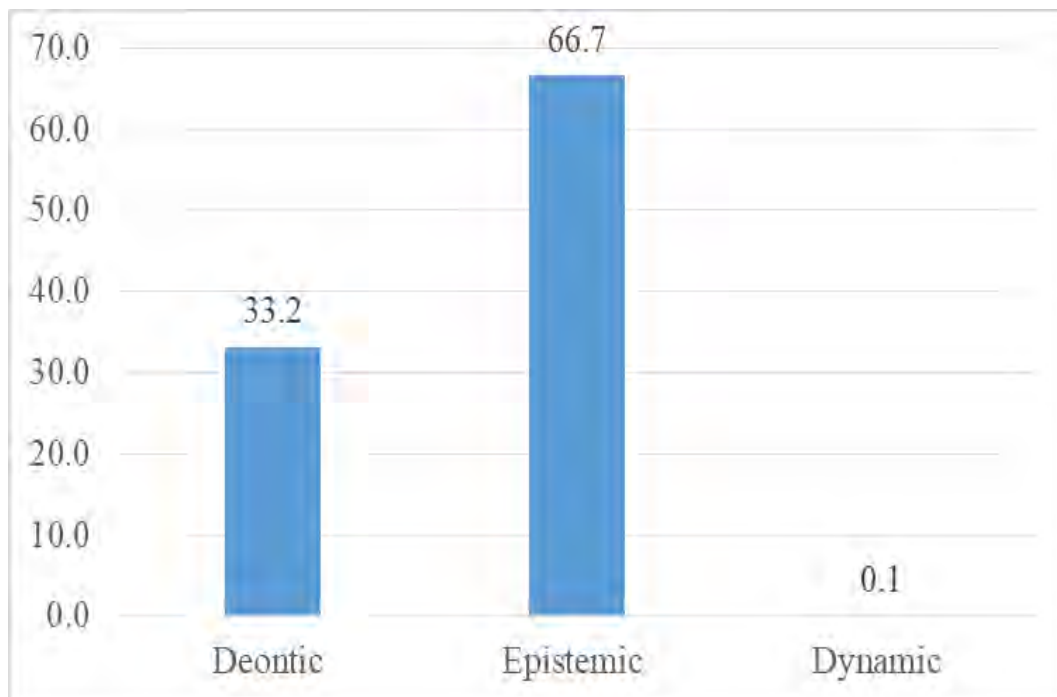
Source: Field Survey, December, 2021.

Figure 4: Classification of the modal verbs used

It is very conspicuous from the diagram that epistemic modality dominated the modality use culture of the health trainees. Similarly, Brogaard and Gatzia (2017) found out that epistemic modal verbs were employed to express necessity and possibility in a particular context. Comparing Brogaard and Gatzia's (2017) argument with the epistemic majority in the use of modal verbs as found in this current study implies that the students of College of Health and Well-Being employ modal verbs to express necessity, possibility and relativism.

For example, some students used epistemic modal verbs to express the necessity of taking a particular medication or intervention practices as shown in the example below:

Breast milk is the most important thing for children in the first six months. Children cannot do without it. Mothers <u>*should*</u> *make sure that newborns are breastfed adequately.*

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In the instance above, *should* was not used in an advisability sense. It was rather used to express a high sense of necessity.

Modality use to express contextual functions is further analysed and reported in Table 8.

Table 8: Use of modal verbs to express known functions

Modal Verb	Possibility/ Probability	Ability	Permission	Volition	Advisability	Necessity	Obligation	Certainty	Total
Ought-to	0	0	0	0	3	2	5	0	10
Must	4	0	0	0	0	85	20	13	122
May	15	0	13	10	5	0	0	0	43
Should	0	16	72	39	106	9	49	21	312
Can	70	238	38	11	15	0	0	10	382
Need-to	0	0	0	0	1	14	4	0	19
Might	38	0	0	0	0	0	0	0	38
Could	27	13	2	4	0	0	0	0	46
Shall	0	0	1	0	0	1	2	5	9
Will	0	69	103	176	0	1	6	7	362
Would	0	22	42	73	11	0	0	30	178
Total	**148**	**360**	**269**	**291**	**164**	**120**	**115**	**54**	**1521**

Source: Field Survey, December, 2021.

Table 8 reveals that the modal verb *ought to,* was used in ten instances. In a majority (5) of instances, *ought to,* was used to express obligation whilst in 2 instances, it was used to express necessity.

An example of the use of *ought to* in students' scripts is as follows:

*Parents **ought to** take good care of their children.*

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In the example above, one may be torn between whether *ought to* is being used to express advisability or an obligation. Meanwhile, an analysis of the statement indicates that the modal verb *ought to* is used to express obligation. This is because the sentence communicates the obligation of parents to take good care of their children. In other words, it is more an obligation than advice for parents to take good care of their children. So, the sentence could as well be written as "Parents **must** take good care of their children".

Besides, one hundred and twenty-two (122) instances of the use of *must* were recorded. Eighty-five (85) of the instances were used to express necessity whilst only four instances were used to express possibility/probability.

For example, a student wrote:

*When people get sick, they **must** go to hospital early, but many of them delay until the situation is worse.*

In this instance, *must* is used to express the necessity of attending hospital early when one is sick.

Moreover, forty-three instances of the use of *may* were recorded. In 15 instances, *may* was used to express possibility/probability whilst only 5 instances of the use of the modal verb *may* were used to express advisability.

For example, a student wrote:

*Many patients don't have good health seeking attitude. Some may stop going to the hospital when they are not through with care. Some **may** resort to herbalists and drug stores.*

This instance of the use of *may* communicates possibility/probability since the writer was not certain whether the patients who stop coming to the hospital actually visited herbalists or drug stores. The writer was therefore insinuating the possibility of the patients resorting to herbal treatment or drug store as an alternative care leading to his failure to attend the hospital for further treatment.

Three hundred and twelve (312) instances of the use of the modal verb *should* were recorded. A majority (106) of the instances of the use of *should* expressed advisability and only 9 instances were used to express necessity.

The following example was found in a student's script:

*One **should** not breastfeed a baby with dirty nipples. The breast **should** be washed or cleaned if possible.*

In this instance, two cases of *should* were used, both of which expressed advisability.

Three hundred and eighty-two (382) instances of the use of the modal verb *can* were recorded. In a majority (238) of instances, *can* was used to express ability whilst 10 instances of the use of *can* expressed certainty.

For example, a student wrote the following:

*Health professionals **can** only manage a patient's condition well when the patient is open and follows the doctor's prescriptions.*

In the example above, *can* was used to express the ability of health professionals to manage patient's condition. However, this ability can function effectively only when a patient is open and adheres to prescriptions.

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Furthermore, the modal verb *need to* was used in 19 instances. A greater number (14) of the instances of the use of *need to* expressed necessity whilst only one (1) instance expressed advisability.

For instance, the following was observed in a student's script:

*The absence of these basic drugs also comes with many consequences and this **needs to** be checked.*

In this case, *needs to* was used to express the necessity of making sure that basic drugs are always available.

The modal verb *might* was found to have expressed possibility/probability in 38 occurrences.

For example, a student wrote the following:

*We are all hoping that, Covid-19 **might** be eliminated in the next two years.*

The use of *might* in this instance expresses possibility of eradicating Covid-19 in the very near future. This is because the incidence of the pandemic was perceived to be too pronounced that the writer was not sure if it could ever be eradicated, yet the writer had a sense of possibility of its eradication.

The modal verb *could* was used in 46 instances of which 27 of the instances were used to express possibility/probability whilst 2 instances expressed permission.

For example, the following was observed from a student's script:

The shortage of drugs could be solved if government adds value to some local herbs, process and preserve them.

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This example of the use of *could* expressed possibility of addressing drug shortage problem through processing and preserving local herbal drugs.

Moreover, the modal verb *shall* was used in only 9 occurrences. In five of the occurrences, it was used to express certainty whilst in 1 instance, *shall* was used to express permission.

For example, a student wrote the following:

It shall be a nuisance if too much noise is entertained in the hospital.

In the context above, the writer expressed how certain it was to cause nuisance if too much noise was entertained in the hospital. Here, the writer reserved no doubt that it would be a nuisance if noise was entertained in the hospital's settings. In order words, the writer was absolutely certain that, a nuisance would result if noise was not controlled at the hospital's settings.

The modal verb *will* was used in 362 occasions. In a majority (176) of the occasions where *will* was used, it functioned as volition, followed by permission (103) whilst only 1 occasion of the use of *will* expressed necessity.

The following observation was made from a student's statement:

*When I was at the hospital during the last clinicals I **will** [would] stay and assist even when time was up for me to leave to the house because there was much pressure on the staff.*

In this instance, the speaker expressed volition as an indication of her willingness to work over time when there was pressure on staff. It must be noted that in this context,

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the speaker was clear that she was not under obligation to stay and that it was appropriate for her to leave for the house when her scheduled period was over.

Finally, the modal verb *would* was also used 178 times. *Would* was mostly used to express volition (73instances) but was also used to express advisability in 11 instances.

For example, a student wrote:

*...and I asked the patient, **would** you like to go home? She accepted to go home so I discharged her.*

In this instance, the modal verb *would* was used to indicate that the patient could choose to stay or go home. Thus, whatever action could result depended upon the patient's volition and not the writer's compulsion and hence the context expresses volition.

Altogether, modal verbs were used to express ability in most (360) instances whilst few (54) instances of modal verb use expressed certainty.

This finding points to the fact that the use of the modal verbs *can, will, should, would,* and *must* were very common among the health trainees and that the modal verbs were mostly used to express the functions of ability, permission and volition with certainty being the least expressed function.

In totality, eight (8) functions were recorded in the scripts investigated. The diversities of functions each modal verb was used to express were summarized in Table 9.

Table 9: Modal Verbs and Number of Functions Expressed

Modal Verb	Number of Functions	%
Ought to	3	37.5
Must	4	50.0
May	4	50.0
Should	7	87.5
Can	6	75.0
Need to	3	37.5
Might	1	12.5
Could	4	50.0
Shall	4	50.0
Will	5	62.5
Would	5	62.5
Total	**46**	**100.0**

Source: Field Survey, December, 2021.

Table 9 indicates that the modal verb *should* was used to express 7 (87.5) of the 8 functions, followed by *can*, 6 (75.0); *will*, 5 (62.5%); *would*, 5 (62.5%); *must*, 4 (50.0%); *may*, 4 (50.0%); *could*, 4 (50.0%); *shall*, 4 (50.0%); *ought to*, 3 (37.5%); *need to*, 3 (37.5%); with the least being *might* which expressed only 1 (12.5%) of the 8 functions. This is represented pictorially in Figure 5.
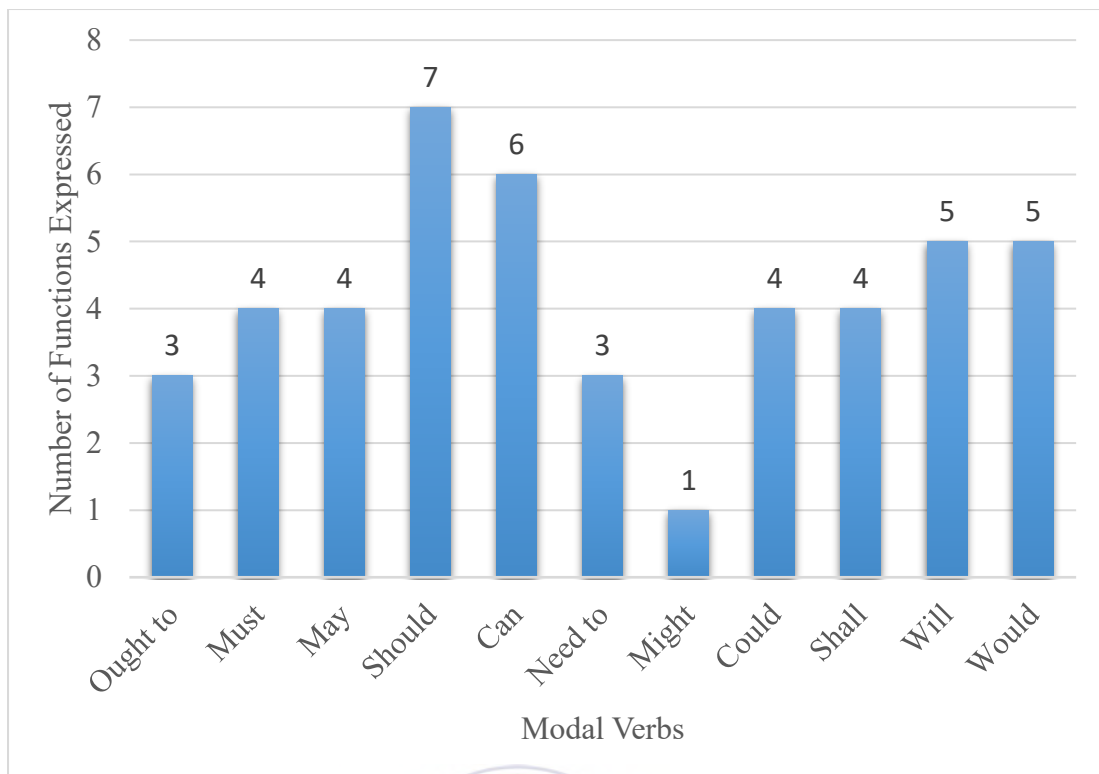
Source: Field Survey, December, 2021.

Figure 5: Diversity of functions expressed using modal verbs

This result implies that students used the modal verbs *should and can* 'in more dynamic ways compared to the rest of the modal verbs as they could use them to express varied functions in different contexts.

In summation, it has come to light with regard to modal verb use frequency among the health trainees that, majority of them used modal verbs between 11-20 times in their script. The modal verbs commonly used among the respondents were *can, will* and *should* whilst the least used modal verbs were*: shall, ought to,* and *need to*. This was also verifiable from the oral conversation of the health trainees. Most frequently, males used the modal verb *should* whilst females used *will* most frequently. Generally, students used the modal verbs *should and can* more dynamically compared to the rest of the modal verbs.

Summary on Research Question 1

Generally, the results on the first research question established that while some of the students used modal verbs frequently, modality use needs improvement among the health trainees. The modal verbs *shall, ought to* and *need to* were not used extensively. This could be an indication that the health trainees may not be conversant with such modal verbs.

4.2.3 Research Question 2:

What are the modality errors among college students?

Research question 2 focused on investigating errors in the use of modal verbs in college students' writings as well as their oral expressions. In the first place, correct and incorrect use of modal verbs were estimated in the trainees' scripts. The results are distributed in Table 10.

Table 10: Correct and Incorrect Use of Modal Verbs

Use Status	Frequency	%
Correct	1,432	94.1
Error	89	5.9
Total	**1,521**	**100.0**

Source: Field Survey, December, 2021.

Table 10 reveals that 1,432 (94.1%) of correct uses of modal verbs were recorded whilst errors/incorrect use constituted 89 (5.9%). Thus, almost 6% of use of modal verbs were in error – either used in a wrong context or constructed wrongly.

Thus, the findings show that modal verb use errors were noted among some of the college students. This finding is similar to that of Chele (2015) who explored errors in

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subject verb agreements among students of the National University of Lesotho (NUL) after giving the students some tests in their fields of study and then analyzing the scripts. It was discovered that subject verb agreement errors were common among National University of Lesotho students as fifteen (15) performance errors and thirteen (13) competence errors were found among 36 students.

Moreover, the errors recorded were classified into two, namely: error of use and error of concord. Error of use refers to instances where the wrong modal verb was employed resulting in an inappropriate function whilst error of concord refers to instances where there is spelling error or the addition of the tense marker –s such as needs to instead of *need to, oughts to* instead of *ought to*.

The classification of errors in the use of the modal verbs among the health trainees is distributed in Table 11.

Table 11: Classification of Modal Verb Use Errors

Type of Errors	Frequency	Percentages
Error of Use	79	88.8
Error of Concord	10	11.2
Total	**89**	**100.0**

Source: Field Survey, December, 2021.

Table 11 indicates that 79 (88.8%) of use errors were documented whilst wording errors were 10 (11.2%).

The finding in this current study that modal verb errors occurred frequently in the writings of college students is a confirmation of an earlier study conducted by Amiri, Alami, Matlabi and Shomoossi (2019) who investigated errors in healthcare journals.

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Descriptive study approach was used to investigate fifty (50) original articles on healthcare that were selected from five health journals publication firms and it was much surprising to find that over 4,322 errors occurred in the 50 articles. The errors were then classified into grammatical errors, punctuation errors and errors in using modal and auxiliary verbs.

Table 12: Types of modal verbs and errors committed in their use

Modal Verb	Correct use	%	Wrong Use	%	Total Use	%
Ought to	10	0.7	0	0.0	10	0.7
Must	120	8.4	2	2.2	122	8.0
May	41	2.9	2	2.2	43	2.8
Should	309	21.6	3	3.4	312	20.5
Can	379	26.5	3	3.4	382	25.1
Need to	12	0.8	7	7.9	19	1.2
Might	38	2.7	0	0.0	38	2.5
Could	46	3.2	0	0.0	46	3.0
Shall	9	0.6	0	0.0	9	0.6
Will	317	22.1	45	50.6	362	23.8
Would	151	10.5	27	30.3	178	11.7
Total	**1432**	**100.0**	**89**	**100.0**	**1521**	**100.0**

Source: Field Survey, December, 2021.

Table 14 portrays that most errors of modal verb use occurred in the use of *will*, 45 (50.6%) and *would*, 27 (30.3%) followed by *need to,* 7 (7.9%); *should*, 3 (3.4%); *can*,

3 (3.4%); *mus*t, 2 (2.2%) and *may* 2 (2.2%). However, no errors were documented in the use of the modal verbs *ought to, might, could,* and *shall*.

Instances of modal verb errors

Some of the errors of interest were reported as follows:

1) **Error of "should"**

a) ***Redundant use of should***

Furthermore, anytime you are doing some work and your baby is crying, make sure that you <u>should</u> *wash your hands and your breast before you breastfeed the baby. Script 19*

Considering the context above carefully, the modal verb *should* as used in the expression was not necessary. This is because the use of the clause "make sure" already expresses the sense of advisability that *should* also expresses in the sentence. The instance rather sounds like a command because of the addition of *should* to the phrase, *make sure*. The writer could, however, let *should* function as a modifier to the main verb *make*.

Without the modal verb *should*, the expression could be correctly written as:

Furthermore, anytime you are doing some work and your baby is crying, make sure that you wash your hands and your breast before you breastfeed the baby.

The use of *make sure* without *should* is appropriate because it gives the sense of advisability to breastfeeding mothers.

2) **Errors of "would"**

a) ***Redundant use of would***

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Another student wrote the following sentence:

The putting up of industries to make drugs will increase the quantity of drugs we <u>would</u> have in the country. Script 4

Apparently, the modal verb *would* as used in the expression was not necessary. The use of *would* by the writer expressed a future probability or possibility but since the writer referred to a system that already has drugs, it makes the use of *would* redundant in the context.

Without the modal verb *would,* the expression could be correctly written as:

The putting up of industries to make drugs will increase the quantity of drugs we have in the country.

b) Misapplication of "would"

A sample from a student:

An infected mother <u>would</u> pass the virus to the unborn baby. Script 119

The context was obviously meant to express the probability of an infected mother transferring a virus to her unborn baby. However, a high level of certainty was rather expressed in the context due to the wrong use of the modal verb *would*. The appropriate modal verb to use in this context should have been *may or might*, because the fact that a mother is infected with a virus does not mean that she will automatically transfer it to her unborn baby.

Thus, the context should appropriately read:

An infected mother <u>may/might</u> pass the virus to the unborn baby.

3) **Errors of "will"**

    a) **Misapplication of "will"**

A student wrote the following sentence:

I therefore suggest that all communication networks linking to each facility <u>will</u> be improved and the bad roads <u>would</u> be constructed. Script 50

The context used *will* and *would* both of which expressed some level of certainty instead of advisability. The modal verb *should* is more appropriate in the context where *will* and *would* were used, since the writer is merely expressing his opinion about a situation and offering a piece of advice.

The context should read as:

I therefore suggest that all communication networks linking each facility <u>should</u> be improved and the bad roads <u>should</u> be constructed.

Another illustration from a student is as follows:

I suggest that sanctions <u>will</u> be given to health workers who engage themselves in stealing drugs. Script 13

The context above is a piece of advice or a recommendation, therefore, an advisability modal such as *should* is more appropriate.

I suggest that sanctions <u>should</u> be given to health workers who engage themselves in stealing drugs.

Better still, the modal could be left out because of the clause "I suggest that", so that the context be written as:

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I suggest that sanctions be given to health workers who engage themselves in stealing drugs.

A sample from a student's script is as follows:

I therefore suggest that the prices of the drugs <u>will</u> be reduced or if possible made free for patients. Script 44

A careful analysis of the context above indicates that the writer was recommending or advising on what to do in order to improve the health conditions of patients. Therefore, the writer needed a modal verb that expresses advisability. The modal verb *should* is rather appropriate for the context.

The appropriate expression should have been:

I therefore suggest that the prices of the drugs <u>should</u> be reduced or if possible, made free for patients.

Moreover, analyzing the context from a different point of view, the use of the modal verb in that context could be avoided altogether. A modal verb is not necessary in that context because of the clause "I therefore suggest that". The sentence could have been:

I therefore suggest that the prices of the drugs be reduced or if possible, made free for patients.

b) Repetition/redundancy of "will". ("Modal Splice")

A student wrote as follows:

It <u>will</u> be of great importance if you <u>will</u> put my suggestions into consideration. Script 113

The second *will* used in that context is a redundancy or better still, a more appropriate and polite modal verb such as *could* could have been used in the context. The sentence could thus be written as:

It <u>will</u> be of great importance if you put my suggestions into consideration.

c) Errors of need to

A student wrote the following sentence:

The absence of these basic drugs also comes with a lot of consequences and therefore, there is the need to check this. Script 10

Service modal verbs such as *need to* and *ought to* are not main verbs, they do not take –s at their end to mark singular subject verb agreement. In the context above, the writer added –s to the modal need to, and that is inappropriate. The context should be written as:
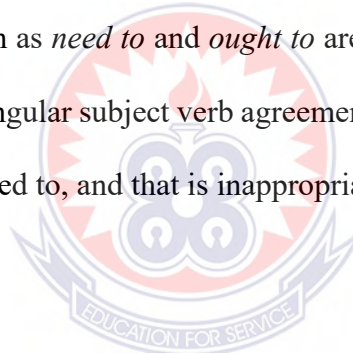
The absence of these basic drugs also comes with lots of consequences and therefore, there is the need to check it.

The error of adding – s to *need to* as found in this current study is similar to that of the findings in a study conducted by Abdul-Majeed and Hassoon (2016) who discovered that students were having problems with modals in a sense that some treated modal verbs as main verbs and added an –s or –es. For example, some of the students in Abdul-Majeed and Hassoon's study used expressions like: 'she cans', 'he needs to' and 'he mights go'.

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The finding that the respondents in this current study added – s to some modal verbs to change their tense form is also similar to that of Verbling (2018) who explored major errors that are frequently made in the use of modal verbs among college and university students in Spain and noted that participants attempted to switch modal verbs from tense to tense. Some also added – s to some of the modal verbs such as *can* (written as "cans") and *need to* (written as "needs to"). This modality confusion is ungrammatical and calls for a redress. This finding of the addition of – s to the modal verbs points to the fact that most students are ignorant of the tenet that modal verbs do not have different forms like some regular and irregular verbs do.

It has therefore been established regarding research question two, that modal verb use errors were common among the health trainees as a good number of errors, 89 (5.9%) were detected in their scripts. These errors were most common among males than females. This fact of modal verb use error disparity was not only detected in the scripts (writings) of the trainees but also in their oral conversations both on campus and during their clinical practice as females were observed to have been more careful with their choice of modal verbs in their conversations compared to their male counterparts. Most errors of modal verb use occurred in the use of *will, would, need to, should, can* and *must*. Some of the trainees engaged in redundant use of *should,* and *would*; misapplication of *would,* and *will*; repetition/redundancy of *will*; and "modal splice" and addition of –s (like needs to) due to misconception of singular subject verb agreement.

Summary on Research Question 2

Research question two established that there were a number of errors in the use of modal verbs among the college students. More males committed modal verb use errors than

females. Errors mostly occurred in the use of the modal verbs *will, would* and *need to*. Some of the modal verbs were misapplied by the users who ended up not achieving their intended meanings.

4.2.4 Research Question 3: What are the gender differentials in the use of modal verbs among the health trainees?

To investigate this research question, a comparison was made between the use of modal verbs among female health trainees and their male counterparts. The comparisons were made regarding the types of modals and the errors that occurred by their use of same.

Table 13: Modal Verb Use and Gender

Modal Verb	Male	%	Female	%
Ought to	5	0.6	5	0.8
Must	81	9.2	41	6.4
May	17	1.9	26	4.0
Should	228	25.9	84	13.1
Can	216	24.6	166	25.9
Need to	12	1.4	7	1.1
Might	21	2.4	17	2.6
Could	32	3.6	14	2.2
Shall	7	0.8	2	0.3
Will	180	20.5	182	28.3
Would	80	9.1	98	15.3
Total	**879**	**100.0**	**642**	**100.0**

Source: Field Survey, December, 2021.

Table 13 indicates that the modal verb most frequently used among males was *should*, 228 (25.9%) whilst the most frequently used modal verb among females was *will*, 182 (28.3%). Thus, more males (25.9%) than females (13.1%) used the modal verb *should*. However, the least used modal verb among males was *ought to*, 5 (0.6%) whilst the least used modal verb among females was *shall*, 2 (0.3%). More males, 81 (9.2%) than females, 41 (6.4%) used the modal verb *must*. More females, 26 (4.0%) than males, 17 (1.9%) used the modal verb *may*. More males, 228 (25.9%) than females, 84 (13.2%)

used the modal verb *should*. More proportion of females (25.9%) than males (24.6%) used the modal verb *can*. More males, 12 (1.4%) than females, 7 (1.1%) used *need to*. A higher proportion of females (2.6%) compared to males (2.4%) used the modal verb *might*. More males, 32 (3.6%) than females, 14 (2.2%) used the modal verb *could*. More males, 7 (0.8%) than females, 2 (0.3%) used *shall*. More females, 182 (28.3%) used *will* compared to males, 180 (20.5%) and more females, 98 (15.3%) compared to males, 80 (9.1%) used *would*.

The finding that the modal verb most frequently used among males was *should*, 228 (25.9%) whilst the most frequently used modal verb among females was *will*, 182 (28.3%), implies a departure from some popular findings in existing literature which say that the modal verb *should* mostly expresses feminism and hence, is most popular among women. For instance, the finding of this current study contradicts a study conducted by Nwabueze (2018) to investigate the concept of modality and its use among women for feminine self-expression in Nigeria. The study found that women used the modal verb *should* to show politeness compared to their male counterparts and this implies that women themselves perceived how society classifies them and consent to their feminist position through their use of language. The point is that women use *should* in most of their language use to show politeness and feminism.

The findings in this current study also indicate that the modal verb *should* was used more frequently (312 times) than *ought to* (10 times) even though they may both carry the same sense in certain contexts. This finding is similar to that of a study conducted by Danquah (2017), who also found that the modal verb, *should*, was used more frequently in the British National Corpus relative to *ought to*. The frequent use of the modal verb *should* is also a confirmation of an analysis of the British National Corpus

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(BNC) that the more frequent use of *should* was found compared with *ought to*. The BNC analysis revealed that 111,237 of *should* was used in Britain in 2017 compared to only 5,979 use of *ought to*. The comparison therefore shows that *should* had been used over 19 times as used *ought to* in the BNC (Danquah, 2017).

The finding, that *should* was used more frequently than *ought to*, in this current study is also similar to a study conducted by Akeel (2020) who also found that the modal verb, *should*, was used more frequently relative to *ought to* even though they both carry the same sense. Similarly, an analysis of the British National Corpus (BNC) confirmed the fact of a more frequent use of *should* when compared with other modal verbs. The BNC analysis revealed that there was as much as 111,237 frequency of use of *should* compared to only 5,979 use of *ought to* which showed that *should* had been used over 19 times as used *ought to* (Danquah, 2017). Akeel (2020) again confirmed among Saudi English users that all other modal verbs were underused, except *should*.

The issue of modal verb use differentials between male and females was also investigated by Wesseldijk and Eugenie (2020). Wesseldijk and Eugenie (2020) looked at modal verb use in the 19th Century focusing on representation of women. After reviewing existing collocations, clusters and concordance lists using corpus tool, it was found that there were significant differences in the use of modals among females and their male counterparts. These differentials are in two major ways: one, it was established that, deontic modality is associated with female characters than their male counterparts; and two, female authors use more permissive modals such as should, can, could and may compared to their male counterparts.

To further solidify the issue of gender differentials in the use of modal verbs, Ayhan (2020) also confirmed the idea of modality use differences when he explored gender

differences in the use of modal adverbs as hedges in response to claims made by Robin Lakoff regarding women's language: that women use hedges more than men. After the investigation and analysis, the results showed that women truly use more hedges than men.

Further investigation in this study was conducted on modal verb use errors and gender. Data regarding this investigation were analyzed and the results represented in Table 14.

Table 14: Modal Verb Use Error and Gender

Error and Gender	Frequency	%
Male		
Correct	824	93.7
Error	55	6.3
Total	879	100.0
Female		
Correct	608	94.7
Error	34	5.3
Total	**642**	**100.0**

Source: Field Survey, December, 2021.

Table 14 shows that 824 (93.7%) of correct use and 55 (6.3%) of incorrect use of modal verbs were recorded among male students whilst 608 (94.7%) of correct use and 34 (5.3%) of incorrect use were also documented among females. Thus, the proportion of errors noted among males (6.3%) was more as noted among females (5.3%). This finding implies that females are more careful in using modal verbs in their writings compared to their male counterparts. Besides, the finding may probably indicate that more females are competent in the use of modal verbs in their writings compared to their male counterparts.

With regard to observations made regarding modal verb use in oral expressions of the trainees, it was gleaned that females were more careful in the use of modal verbs than males. Females by nature express politeness both in oral language and gestures during their clinical practice. Their quest to demonstrate the most appreciable level of civility helps females to avoid the misuse and overuse of modal verbs and hence incur lesser frequency of errors than males.

Similarly, Furtina, Fata and Fitrisia (2016) discovered in their study conducted in Indonesia to investigate grammatical errors in writing tasks among males and females that males and females differ in their carefulness index when writing. Their investigation further established that while 35 errors constituting 3.5% were identified among females, 43 grammatical errors constituting 4.3% were found among males. Consequently, Furtina, Fata and Fitrisia (2016) concluded that females are more careful writers than males which is in line with the revelation from the analysis of the scripts of students of College of Health and Well-Being, Kintampo.
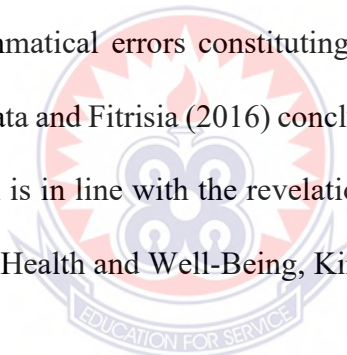
4.2.5 Research Question 4:

What implications does the use of modality have on health service communications?

The fourth research question focused on investigating implications or effects of modal verb use in health service communications. The aim here was to ascertain whether the use of modal verbs has peculiar implications on patients as principal clients of health professionals.

i. *Modal verb use preferences among patients*

In another breath, modal verb use preferences among patients were also investigated. Three cases of modal verb use in health service communications were investigated.

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Three scenarios were presented to the patients. The scenarios came with modal verb use options for patients to indicate their choices of modal verbs they prefer nurses to use in communicating their response in each of the scenarios. The results were analysed and insights drawn from them. The cases and the results are presented as follow:

Case 1:

Fancy that you were admitted to hospital for several months and your condition got deteriorated beyond what the hospital could do. There seemed to be no hope of survival for you. A nurse wanted to express the situation to your family. How would you expect the nurse to communicate this to your family?

In response to the scenario above, the respondents indicated how they would expect a nurse to communicate it to them.

Table 15 below presents the results regarding the respondents' preferences of how the nurse should express the situation.
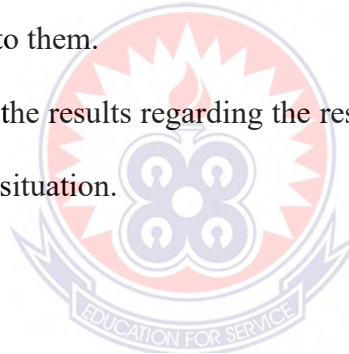
Table 15: Modal Verb Use Preferences of Patients about a Deteriorated Condition

Case 1: The nurse should say:	Frequency (f)	Percentage (%)
a. I'm afraid he cannot survive.	0	0.0
b. I'm afraid he may not survive.	13	43.3
c. I'm afraid he might not survive.	17	56.7
Total	**30**	**100.0**

Source: Field Survey, December, 2021.

Table 15 shows that a majority (17) of respondents, constituting 56.7% preferred that the nurse expressed the situation in case 1 as: "I'm afraid he might not survive" whilst 13 respondents, constituting 43.3% preferred that the nurse expressed the situation in case 1 as: "I'm afraid he may not survive". Interestingly, none of the respondents preferred that the nurse expressed the situation in case 1 as: "I'm afraid he cannot survive". The analysis implies that respondents preferred the nurse to use the modal verbs *might* and *may* to express the worsening condition of the patient. The respondents preferred the use of *may* or *might* in that context because they indicate some level of uncertainty (or just a possibility) instead of *cannot* which indicates a high level of certainty.

This finding implies that patients may not be pleased with an emphatic declaration of their worsening conditions. They expect that health professionals communicate even the most hopeless health condition with some amount of hope. Consequently, patients are not pleased when health professionals use modal verbs to express certainty regarding hopeless health conditions. This is similar to the finding of Mensah (2013) who argued that health professionals must be tactful in expressing hopeless health conditions so as to create a sense of hope in patients since the quality of patients' care depends on the quality of health communication.

Case 2:

Assuming your family members visited you at the hospital during visiting hours. After engaging you in a conversation for a while it was time for the nurse to attend to you. The nurse entered the ward and found that your family members were still around. If the nurse wanted your family members to leave, how would you expect her to say it?

The respondents were made to indicate their preferences regarding scenario 2 above. Table 16 below shows a distribution of respondents' preferences on how a nurse should express the situation in case 2.

Table 16: Modal verb Use Preferences of Respondents on the Need for a Patient's Family to leave immediately.

Case 2: The nurse should say:	Frequency (f)	Percentage (%)
a. Please, you must leave.	1	3.3
b. Please, you may leave.	7	23.3
c. Please, you should leave.	1	3.3
d. Please, you can leave.	2	6.7
e. Please, you ought to leave.	2	6.7
f. Please, you need to leave.	17	56.7
Total	**30**	**100.0**

Source: Field Survey, December, 2021.

Table 16 shows that a majority (17) of the respondents, constituting 56.7% preferred that the nurse expressed the need for the patient's family to leave as: "Please, you need to leave" and 7 respondents, constituting 13.3% preferred the nurse to say: "Please, you may leave". However, only 1 respondent, constituting 3.3% preferred the nurse to say: "Please, you must leave". It was also interesting to find that only 1 respondent preferred the nurse to say, "Please, you should leave". This result indicates that patients who visit the hospital do not prefer the use of modal verbs such as *must* that indicates authoritarian expressions. The fact that more than half (56.7%) of the respondents preferred the expression "Please, you need to leave" implies that patients want health professionals to communicate how needful it is for them to comply with a particular situation (to leave the ward as in this case) but not to be commanded by health professionals.

Case 3:

You have been treated and discharged from hospital. However, you were required to come for a review the next day at 9:00 am. Which of the following will you prefer that the health worker uses to convey this information to you?

The results on how the respondents preferred the health professional to convey that information to them in scenario 3 are illustrated in Table 17.

Table 17: Respondents' Preferences on how a Health Professional should express the Need to come back to the Hospital at 9:00 am the next day.

Case 3: The health professional should say:	Frequency (f)	Percentage (%)
a. Please, you should be here at 9:00 am tomorrow.	7	23.3
b. Please, you must be here at 9:00 am tomorrow.	5	16.7
c. Please, you may be here at 9:00 am tomorrow.	6	20.0
d. Please, you need to be here at 9:00 am tomorrow.	12	40.0
Total	**30**	**100.0**

Source: Field Survey, December, 2021.

Table 17 reveals that an average number (12) of the respondents, constituting 40.0% preferred the health professional to express the need to report back to the hospital at 9:00 the next day as: "Please, you need to be here at 9:00 am tomorrow", whilst few (5) respondents preferred the health professional to say: "Please, you must be here at 9:00 am tomorrow." The fact that more (40%) of the respondents wished the situation of a revisit to the hospital be communicated as "Please, you need to be here at 9:00 am tomorrow" confirms the insight drawn from the analysis in case 2. The preference of *need to* in this context also indicates that respondents prefer health professionals to communicate just the need or the necessity to fulfill a condition rather than communicate in an obligatory or commanding manner such as the use of *must* as

selected by a few of the respondents, thus 5 (16.7%) in the expression: "Please, you must be here at 9:00 am tomorrow."

The respondents were further investigated on whether modal verbs such as *may, must, can, might, should, will, ought to* and *need to* use in sentences mean anything to them or not. The results are distributed in Table 18.

Table 18: Presents Results on whether Modal Verb Use in Sentences means anything to Respondents or not.

Do modal verbs such as may, must, can, might, should, will, ought to and need to in sentences mean anything to you?	Frequency (f)	Percentage (%)
Yes	30	100.0
No	0	0.0
Total	**30**	**100.0**

Source: Field Survey, December, 2021.

Table 18 shows that all 30 (100%) of the respondents investigated indicated that modal verb use in sentences meant something significant to them.

The respondents were further investigated on which of the modal verbs they thought showed more politeness when used in an expression. The results are shown in Table 19.

Table 19: Respondents' View on Modal Verbs that show Politeness in Sentences.

Modal verbs that show more politeness	Frequency (f)	Percentage (%)
May	13	43.3
Must	0	0.0
can	3	10.0
might	1	3.3
should	4	13.3
Will	0	0.0
Ought to	1	3.3
Need to	6	20.0
could	2	6.7
Total	**30**	**100.0**

Source: Field Survey, December, 2021.

Table 19 shows that most (13) of the respondents, constituting 43.3% indicated that the modal verb *may* shows the most politeness in sentences followed by *need to*, 6 (20.0%) and *should*, 4 (13.3%) whilst none of the respondents indicated that *mus*t and *will* show politeness in sentences. This finding implies that *must* and *will* were not perceived by the respondents as modal verbs that could communicate politeness.

Respondents' Experiences on use of Modal Verbs by Health Workers

The respondents were further investigated as to whether any health professional ever used modal verbs in a way that negatively affected them. The results are shown in Figure 6.

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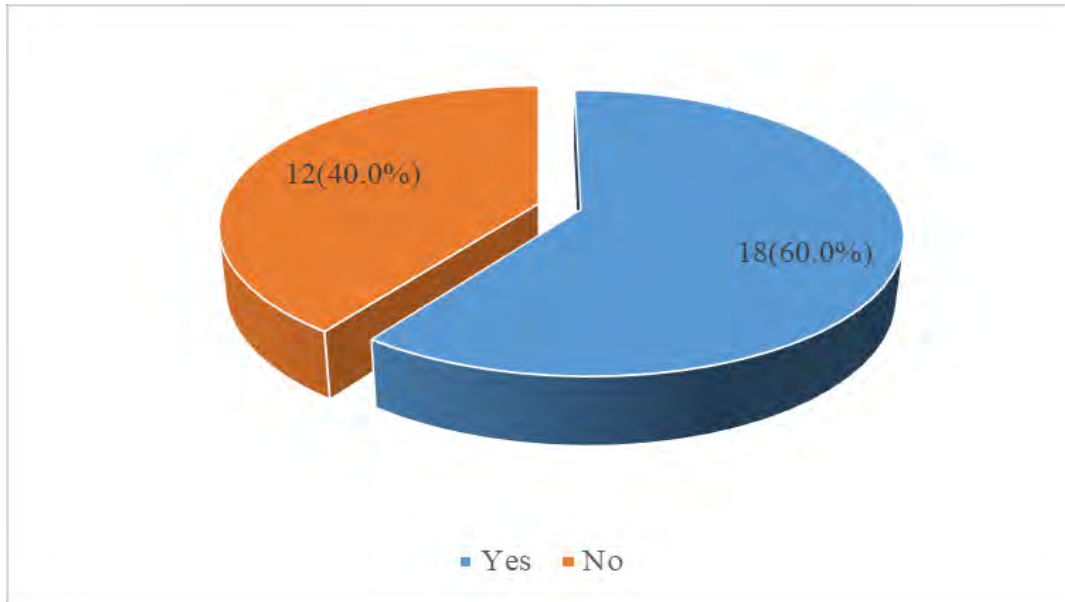
Source: Field Survey, December, 2021.

Figure 6: Respondents' experiences of negative effects of wrong use of modal verbs by health professionals.

Figure 6 indicates that a majority, 18 (60%) of the respondents indicated that they had experienced health workers use modal verbs in a way that negatively affected them.

Instances of modal verb use by health professionals that negatively affected respondents

Instances of modal verb use by health professionals that negatively affected respondent were further investigated. Five instances gleaned from the results are as presented beneath:

1) A respondent narrated an experience as follows.

I ever encountered a situation where my mother was admitted at the hospital and the nurse shouted at me saying: 'You must not enter the ward' *when I wanted to enter the ward to give some food to my mother.*

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The scenario above reveals that the respondent wanted to enter the ward with the motive of giving her mother some food. Probably, it was not appropriate for the respondent to enter the ward at that moment. The nurse then advised the participant not to enter the ward. Therefore, the nurse should have employed an advisability modal verb like *should* instead of *must* as used in the narration. The use of must was interpreted by the hearer as being too harsh and therefore, she became offended. This is a situation of inappropriateness of the modal verb *must*. The posture and the tone of the nurse might also have contributed to the offense since the narrator claimed that the nurse shouted at her ("…and the nurse shouted at me…").

2) Another respondent narrated his experience as follows:

*One faithful morning I visited a patient who was on admission at the hospital. Prior to the coming of the doctor on routine ward rounds, a female nurse came in and shouted at me saying: "*You must leave here*" without even explaining to me why I must leave.*

In the above scenario, the victim became offended because of the use of *must* which expressed a high level of obligation. However, it would have been more appropriate and professional for the nurse to use a polite tone to entreat but not to command the victim. The nurse could have said in a politer tone: *please you should leave.*

3) Another respondent narrated her encounter as follows:

I *was admitted at the hospital and my friend came to visit me. The nurse on duty came to attend to me and shouted at my friend saying:* "you must leave immediately. Who asked you to come inside?"

This situation is similar to the ones earlier discussed (case 1 and 2). The use of the modal verb *must* sounds offensive because of the high level of obligation or command it expressed in those contexts. It is more advisable in light of the professional standards of nursing, for nurses to always treat their clients with dignity regardless of the clients' condition, level of education, tribe and social class. Therefore, the nurse should have adopted an advisability modal verb such as *should* in her expression so as to hedge the offensive implications of the statement.

4) Another respondent who was a nurse but admitted to the hospital due to ill-health narrated his encounter as follows:

I was taking blood sample on a patient without saying sorry or using please or asking permission such as: "May I take your sample?" *It affected me because the patient slapped me. Hence, my polite words, I never joke with it.*

The narrator of the above situation, though a patient and respondent in this study, shared his professional experience on the importance or the effect of adopting the appropriate language in the respective situations. In light of the narration, it is clear that the words "sorry", "please" and the modal verb *may* are adopted by health professionals to express permission to carry out activities on patients. Failure to apply such words appropriately or a total avoidance of them could lead to ill-mood that could cause patients to react angrily if they lose control of their mood. Thus, the modal verb *may* plays a significant role in the communication of the nursing profession and must be applied appropriately to achieve desired communicative purposes.

5) Another respondent reported her story as follows:

I was admitted to Kintampo Municipal Hospital to deliver. My mother wanted to be with me because my condition was critical but the nurse said: "Maame, you must go out of here' in a high tone which negatively affected me."

The above scenario also confirms another instance of the misapplication of the modal verb *must* which expressed a very high level of obligation or compulsion in that context instead of an advisability modal. The modal verb *should* and a politer tone could have prevented the offense.

These instances of the over application of *must* is similar to a qualitative study conducted in Ghana by Mensah (2013) who found that one challenge reported by patients in healthcare settings was authoritarian nursing. According to Mensah (2013), authoritarian nurses use language that indicates their total control and authority on patients. The patients who were participants in the study reported that the nurses used their power to dictate to them disregarding the right of the patients to be involved in issues concerning their care. It was found that such authoritarian nurses were depicted to have frequently used *must* dominant expressions.

Regarding the use of *must,* Cox (2020) also conducted an interesting study which enlightened on communication errors that health college students make in the use of *must*. According to Cox, errors regarding the use of *must* are very prominent among health college students. Cox discovered that many of the students used the phrase *must to,* and some used *must* instead of *have to.*

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It is therefore suggested after analyzing Cox's finding that health workers should learn to use *have to* in place of *must* if the situation demands that they exercise high level of control over patients.

Finally, the findings in this current study are similar to the outcomes of a study conducted by Neville et al. (2012) who discovered that effective communication was an important tool for good interaction between health workers and patients. Effective nurse-patient communication was perceived to be the most important aspect of the role of health workers. Furthermore, proper communication has impact on how patients and their families perceive nursing care.

The results regarding research question 4 indicate that generally, patients require health workers to demonstrate high level of politeness and respect in their choice of words. The patients prefer expressions that portray some level of hope even in hopeless situations. For example, "I'm afraid, he might not survive" instead of being emphatic that there is no hope for the patient to survive. Patients also prefer that health workers express just the need for patients or their families to comply with nursing regulations instead of compelling or commanding them to do so. Instances such as: "Please, you need to leave" instead of "Please, you must leave"; "Please, you need to be here at 9:00 am tomorrow" instead of "Please, you must be here at 9:00 am tomorrow" are better expressions that ensure good nurse-patient rapport. In most instances, too, the misapplication of the modal verb *must* which expresses a high level of obligation or command coupled with loud tones make patients feel offended.

Summary on Research Question 4

Findings on the fourth research question largely established that most patients preferred that the modal verbs *might* and *may* be used by health workers to express hopeless health conditions rather than the modal verb *must*. Besides, patients preferred that health workers communicate just the need or necessity to undertake an action required rather than express the action as obligatory to the audience (patients).

4.3 Chapter Summary

A rigorous process of analysis was adopted to make sense of data collected through observation, corpus data and a structured interview guide. After exploring the research questions, the results revealed interesting insights. It has been established that modal verb use among the health trainees was average with modal verbs such as *can, will* and *should* being the most frequently used. This was also verifiable from the oral conversations of the health trainees. Most frequently, males used the modal verb *should* whilst females used *will* most frequently. Generally, the trainees used the modal verbs *should* and *can* more frequently and dynamically compared to the rest of the modal verbs.

The findings also showed that modal verb use errors were common among the health trainees as many errors or wrong use 89 (5.9%) were detected in their scripts. These errors were most common among males than females both in their writings and oral conversations. Besides, females were observed to have been more careful with their choice of modal verbs in their conversations compared to their male counterparts. Most errors of modal verb use occurred in the use of *will, would, need to, should, can* and *must.*

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Generally, patients require health workers to demonstrate high level of politeness and respect for them in their choice of words. The patients prefer expressions that portray some level of hope even in hopeless situations. Patients also prefer that health workers express just the need for them or their family members to comply with regulations instead of compelling or commanding them to do so. In most instances, too, misapplication of the modal verb *must* which expresses a high level of obligation or command coupled with loud tones offends patients.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of key findings from the analysis and conclusions and recommendations of the study.

5.2 Summary of Key Findings

What is the frequency and dynamism of modality use in college students' academic writings?

It was revealed from the study that a majority, 67 (55.8%) of the college students used modal verbs between 11-20 times whilst 10 (8.3%) used modal verbs between 21-30 times. The modal verbs mostly used by the college students were *can*, 382 (25.1%); *will*, 362 (23.8%); and *should*, 312 (20.5%) whilst the least used modal verbs were: *shall*, 9 (0.6%); *ought to*, 10 (0.7%), and *need to*, 19 (1.2%). A greater number, 46 (30.7%), of the college students adopted 5 modal verbs in their exams whilst 5 (3.3%) of them also used only one modal verb each in their exam. A majority, 1014 (66.7%), of the modal verbs used were epistemic, whilst only 2 (0.1%) instances were dynamic. Altogether, the modal verb *should* was used to express most functions up to 7 (87.5) of the 8 functions recorded, followed by *can* 6 (75.0); with *ought to* 3 (37.5%); *need to* 3 (37.5%); and *might* 1 (12.5%) being the least diversely used. That is, students used the modal verbs *should* and *can* in more dynamic ways compared to the rest of the modal verbs as they could use them to express varied functions in different contexts.

What are the modality errors in college students' academic writings?

The result revealed that 1,432 (94.1%) of correct uses of modal verbs were recorded whilst errors/incorrect uses constituted 89 (5.9%). Most errors of modal verb use occurred in the use of *will* 45 (50.6%); and *would* 27 (30.3%); followed by *need to* 7 (7.9%); *should* 3 (3.4%); *can* 3 (3.4%); *must* 2 (2.2%) and *may* 2 (2.2%). Some of the errors of interest were redundant use of *should*, redundant use of *would,* misapplication of *would*, misapplication of *will*, repetition/redundancy of *will*. ("Modal Splice") and addition of –s (such as *needs to*) due to wrong concept of singular subject verb agreement.

What are the gender differentials in the use of modal verbs among the health trainees?

The modal verb most frequently used among males was *should* 228 (25.9%) whilst the most frequently used modal verb among females was *will* 182 (28.3%). However, the least used modal verb among males was *ought to* 5 (0.6%) whilst the least used modal verb among females was *shall* 2 (0.3%). More males, 81 (9.2%) than females, 41 (6.4%), used the modal verb *must*. More females, 26 (4.0%), than males, 17 (1.9%), used the modal verb *may*.

Besides, 824 (93.7%) of correct uses and 55 (6.3%) of incorrect uses of modal verbs were recorded among male students whilst 608 (94.7%) of correct uses and 34 (5.3%) of incorrect uses were also recorded among females. Thus, the proportion of errors recorded among males (6.3%) was more than as recorded among females (5.3%).

What implications does the use of modalities have on health service communications?

It was revealed that an average number (17) of the respondents/patients constituting 56.7% preferred that a nurse expressed a patient's hopeless condition as, "I'm afraid, he might not survive" whilst 13 respondents/patients constituting 43.3% preferred that the nurse expressed the situation as, "I'm afraid, he may not survive". Interestingly, none of the patients preferred that the nurse expressed the situation as, "I'm afraid, he cannot survive".

The findings further showed that a majority, (17) of the respondents/patients, constituting 56.7%, preferred a nurse to express the need for a patient's family to leave the hospital ward as, "Please, you need to leave" and 7 patients/respondents, constituting 13.3% preferred the nurse to say, "Please, you may leave". However, only 1 respondent/patient, constituting 3.3% preferred the nurse to say, "Please, you must leave". It was also interesting to find that only 1 respondent/patient preferred the nurse to say, "Please, you should leave".

The findings of the study further indicate that a greater number, (12) of the respondents/patients, constituting 40.0%, preferred a health professional to express the need to report at the hospital at 9:00 am the next day as, "Please, you need to be here at 9:00 am tomorrow" whilst few, (5) respondents/patients preferred the health professional to say, "Please, you must be here at 9:00 am tomorrow".

All 30 (100%) of the respondents/patients investigated indicated that modal verb use in sentences meant something significant to them. A good number (13) of the respondents constituting, 43.3% indicated that the modal verb *may* shows the most politeness in

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sentences followed by *need to* 6 (20.0%); and *should* 4 (13.3%) whilst none of the respondents/patients indicated that *must* and *will* show politeness in sentences.

A majority, 18 (60%), of the respondents indicated that they had experienced health workers use modal verbs in a way that negatively affected them. The most offensive instances reported by most of the respondents/patients were the misapplication of the modal verb *must* which indicated a high level of obligation or command and the offence worsened by loud tones and avoidance of the use of *may* to show permission and politeness.

5.3 Conclusion

This study explored modal verb use among health trainees and potential effect on health service communication. This was done by exploring research questions such as frequency of modal verb use, modal verb use errors, modal verbs use between gender as well as preferences of patients regarding the use of modal verbs among health workers. After exploring literature available, it has become apparent that current literature suggests a general relationship between language use and effectiveness in healthcare communication. However, no specific study exists which explored modal verb misuse and how it can influence the mood of patients. After using corpus data, observation and structured interview to investigate this gap in line with the research questions, it was concluded that modal verb use frequency among college students was encouraging as many of them adopted modal verbs to express functions and mood. However, use errors in the application of modal verbs to express ideas appropriately in contexts was very significant. A majority of them misapplied modal verbs or used them unnecessarily (redundant use). Some also added –s in the use of *need to,* to express singular subject verb agreement which is an inappropriate feature in modal verb use. It

was further found that the modal verbs *will* and *can* were mostly misapplied among the college students.

Finally, the study also established that wrong modal verb use in health service communication could have negative effects on the moods and conditions of patients as many patients were offended by the use of the modal verb *must* and the avoidance of the modal verb *may*. The negativity of the effect of using the modal verb, *must* was exacerbated by complementary loud tones often used by some health professionals thereby making them sound extremely authoritative.

5.4 Recommendations

1) The Academic Affairs Office of the College of Health and Well-Being, Kintampo, in collaboration with the department that runs the Communication Skills course should broaden the curriculum for teaching Communication Skills to include a comprehensive topic on modal verbs.

2) Tutors who teach the course should place more emphasis and focus on the appropriate use of *will, can, may, must* and *need to* so as to correct the misuse of these modal verbs by the trainees.

3) Moreover, the National Nursing and Midwifery Council (NNMC) should organize biannual training for health workers on appropriate standards for health communication with particular emphasis on the proper application of the modal verbs *may* and *must* so as to forestall their misapplication by health workers.

4) The Ghana Health Service should institute a pre-job orientation for all health professionals on standard health service communication and its importance before posting them to respective health facilities so as to mitigate offensive communications in the health profession.

5.5 Contribution to Existing Knowledge

This research has contributed significantly to existing literature as it identified a major gap in existing studies and has explored such gap extensively, throwing more light on the use of modal verbs among health trainees, which is an area rarely explored by existing studies on modal verbs use. Specifically, the study, first of all, has enlightened that it is very imperative to make modal verb use an integral part of the Communication Skills curriculum for health trainees as this could do them much good by enriching their manner of communication towards effective mood management when giving care to patients. Secondly, the study has added to existing knowledge on modal verb use by bringing to the fore or uncovering, the peculiar modal verb errors prevalent among health trainees. Moreover, the study has revealed the link between modality use and caregiving which has been scarcely explored in existing literature. The study has revealed the fact that any use of modal verbs, or the use of modality in general affects the mood of the clients of health professionals thereby influencing their healing process. These areas of addition to knowledge on modality makes this study a reference material for further studies by future researchers on issues relating to modality in the healthcare ambiance.

5.6 Recommendations for Further Research

This study could not explore factors that determine the choice of modal verbs among health trainees as well as health professionals in their communication. A further study

is required to investigate and understand factors that influence the choice of modal verbs among health trainees/professionals. This will guide health trainers to teach the trainees to be able to make the right choices of modal verbs in their communication.

Finally, it is also recommended that further research be conducted to explore how demographic characteristics such as age group, religion, type of programme of study, and mother tongue do influence the choice of modal verb use among health trainees.

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APPENDICES

Appendix A: Data Capture Form on Modal Verbs Use among College Students

SECTION A: FREQUENCY OF USE OF MODAL VERBS

i.   Number of times students used modal verbs

Count	No. of Students
Nil	
1-10 times	
11-20 times	
21-30 times	
31-40 times	
41-50 times	
More than 50 times	
TOTAL	

ii.   Number of times the stated modal verbs were used altogether

Modal Verb	No. of Use
Ought-to	
Must	
May	
Should	
Can	
Need-to	
Might	
Could	
Shall	
Others	

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iii.   Modal verbs use and gender

Modal Verb	Male	Female
Ought-to		
Must		
May		
Should		
Can		
Need-to		
Might		
Could		
Shall		
Others		

iv.   Frequency of the types or classifications of modal verbs used

Modal Verb	No. of use
Deontic	
Epistemic	
Dynamic	
Total	

SECTION B: COMPETENCE OF USE OF THE MODAL VERBS

i.   Students' ability to use several modal verbs in a particular work

Number of Modal Verbs in a single work	No. People
Use of no modal verb in a work	
Use of 1 modal verb in a work	
Use of 2 modal verbs in a work	

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Use of 3 modal verbs in a work	
Use of 4 modal verbs in a work	
Use of 5 modal verbs in a work	
Use of 6 modal verbs in a work	
Use of 7 modal verbs in a work	
Use of 8 modal verbs in a work	
Use of more than 8 modal verbs in a work	
Total	

ii.   Students' ability to use modal verbs to express well known functions

Modal Verb	Possibility	Ability	Permission
Ought-to			
Must			
May			
Should			
Can			
Need-to			
Might			
Could			
Shall			
Others			

iii.   Examples expressing use functions

Possibility
Eg 1
Eg 2
Eg 3

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Eg 4
Ability
Eg 1
Eg 2
Eg 3
Eg 4
Permission
Eg 1
Eg 2
Eg 3
Eg 4
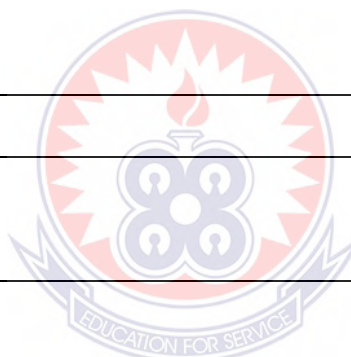
SECTION C: MODALITY ERRORS

i.   Correct and wrong use

Modal Verb	Total Use	Correct use	Wrong Use
Ought-to			
Must			
May			
Should			
Can			
Need-to			

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Might			
Could			
Shall			
Others			

ii.   Errors identified

	Error	Number of people	Example
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			

14			
15			
16			
17			
18			
19			
20			

Appendix B: Structured Interview for Patients

UNIVERSITY OF EDUCATION, WINNEBA (UEW)

STRUCTURED INTERVIEW FOR PATIENTS

INTRODUCTION

I am a student of the University of Education, Winneba, conducting a research to examine use of modal verbs by health professionals and effects that the use has on health conditions of patients. The study will be beneficial to you as it will enlighten on the need for health workers to use modal verbs appropriately in order to avoid adverse effects on the mood and health conditions of patients.

For the success of the study, I implore you to respond to the following questions to the best of your knowledge. Please, you are not obliged to take part in this study but I will be glad if you choose to take part. The information you provide will be treated confidential. It will not be disclosed to any other person. Therefore, feel free to provide accurate and true information as much as possible.

INSTRUCTION

Please, respond to the following questions to the best of your knowledge

SECTION A: DEMOGRAPHIC CHARACTERISTICS
1. Gender:
   Male [ ]
   Female [ ]
2. What is your actual age?
   Below 20 years [ ]
   20-29 years [ ]
   30-39 years [ ]
   40-49 years [ ]
   50-59 years [ ]
   60 years and above [ ]

3. What is your religious affiliation?

   Christianity [ ]

   Islam [ ]

   Traditional African Religion [ ]

   Others (please specify)…………………………………………………

4. What is your formal educational level?

   SHS [ ]

   Tertiary [ ]

5. What is your marital status?

   Single [ ]

   Married [ ]

   Divorce/Separated [ ]

   Cohabiting [ ]

   Widowed [ ]

   Other (specify)………………………………………………………….

6. What is your employment status?

   Unemployed [ ]

   Government employed [ ]

   Employed in a private institution [ ]

   Self Employed [ ]

7. Which type of patient are you?

   Out-Patient [ ]   In-Patient [ ]

8. What disease condition are you suffering

   from? ....

SECTION B: EFFECT OF MODAL VERB USE ON PATIENTS'

MOOD/CONDITIONS

> ii. *Modal verb use preferences among patients*
>
> 1. **Case 1: Please consider the following case and what your   preference**
>
>   **would be**.

A man has been admitted to a hospital for several months. His condition got worse and

beyond what the hospital can handle. It seems there is no hope of survival. A nurse

wants to express the situation to the patient and his family. Which of the following ways

would you prefer the nurse to express the situation?

a. I'm afraid, he cannot survive [ ]

b. I'm afraid, he may not survive [ ]

c. I'm afraid, he might not survive[ ]

2. **Case 2: Please consider the following case and what your   preference would be**.

Assuming you were on admission at a hospital and your family members visited you during visiting hours. After engaging you in a conversation for a while it was time for the nurse to attend to you. The nurse entered the ward and found that your family members were still around. If the nurse wanted your family members to leave, what would you expect her/him to say?

a. Please, you must leave[ ]

b. Please, you may leave[ ]

c. Please, you should leave[ ]

d. Please, you can leave[ ]

e. Please, you ought-to leave [ ]

f. Please, you need to leave [ ]

3. **Case 3: Please consider the following case and what your   preference would be**.

You have just been treated and discharged from the hospital. However, you were required to come for a checkup the next day at 9:00 am. Which of the following will you prefer that the health worker tells you?

a. Please, you should be here at 9:00 am tomorrow [ ]

b. Please, you must be here at 9:00 am tomorrow [ ]

c. Please, you may be here at 9:00 am tomorrow [ ]

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d. Please, you need to be here at 9:00 am tomorrow [ ]

e. Please, you ought to be here at 9:00 am tomorrow [ ]

iii. *Perception about modal verbs*

4. Do modal verbs such as *may, must, can, might, should, will, ought-to* and need-to in sentences mean anything to you?

> Yes [ ]
>
> No [ ]

5. Which of the following modal verbs do you think shows more politeness?

> May [ ]   must [ ]   can [ ]   might [ ]   should [ ]
>
> Will [ ]   ought-to [ ] need-to [ ] could [ ]

iv. *Patients' experiences on use of modal verbs by health workers*

6. Have you had any experience of any health professional using modal verbs in a way that negatively affected you?

> Yes [ ]
>
> No [ ]

7. If yes, can you narrate the situation and what the health worker said?