



**THE USE OF MODAL VERBS IN THE
ACADEMIC WRITINGS OF IRAQI B.A.
STUDENTS AT TIKRIT UNIVERSITY**

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MASTER THESIS
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Ahmed KAREEM

Supervisor

Assoc. Prof. Dr. İrfan TOSUNCUOĞLU

**THE USE OF MODAL VERBS IN THE ACADEMIC WRITINGS OF IRAQI
B.A. STUDENTS AT TIKRIT UNIVERSITY**

Ahmed KAREEM

T.C

Karabuk University

Institute of Graduate Programs

Department of English Language and Literature

Prepared as

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Assoc. Prof. Dr. İrfan TOSUNCUOĞLU

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THESIS APPROVAL PAGE

I certify that in my opinion the thesis submitted by Ahmed Hamad Kareem KAREEM titled “THE USE OF MODAL VERBS IN THE ACADEMIC WRITINGS OF IRAQI B.A. STUDENTS AT TIKRIT UNIVERSITY” is fully adequate in scope and in quality as a thesis for the degree of Master of English Language/Applied Linguistics.

Associate Prof. Dr. İrfan TOSUNCUOĞLU

Thesis Advisor, Department of English Language and Literature

This thesis is accepted by the examining committee with a unanimous vote in the Department of English Language and Literature as a Master of Science thesis. June 22, 2021

<u>Examining Committee Members (Institutions)</u>	<u>Signature</u>
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Chairman : Assoc.Prof.Dr. İrfan TOSUNCUOĞLU (KBU)
---	-------

Member : Assoc.Prof.Dr.Özkan KIRMIZI (KBU)
--	-------

Member : Assis. Prof. Dr. Fahrettin SANAL (NEU)
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The degree of Master in English Language/ Applied Linguistics by the thesis submitted is approved by the Administrative Board of the institute of Graduate Programs, Karabuk University.

Prof. Dr. Hasan SOLMAZ

Director of the Institute of Graduate Programs

DECLARATION

I hereby declare that this thesis is the result of my own work and all information included has been obtained and expounded in accordance with the academic rules and ethical policy specified by the institute. Besides, I declare that all the statements, results, materials, not original to this thesis have been cited and referenced literally.

Without being bound by a particular time, I accept all moral and legal consequences of any detection contrary to the aforementioned statement.

Name Surname: Ahmed KAREEM

Signature :

FOREWORD

First of all, I would like to convey my gratitude and appreciation to everyone who contributed to the successful development of this study. I am grateful to Assoc. Prof. Dr. İrfan TOSUNCUOĞLU, whose counsel and assistance aided me in completing this study. I am thankful for all his outstanding efforts in writing my thesis, and also I am indebted to him for his encouragement, assistance, and recommendation. Additionally, I am grateful to Assoc. Prof. Dr. Abdulkhaliq AL-AZZAWIE instructed and assisted me during the study.

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DEDICATION

This thesis is dedicated to my father, friends, and mother.

ABSTRACT

The current study describes the use of modal auxiliary verbs in essays written by Iraqi B.A. students at Tikrit University (in Tikrit province, Iraq). The present study's main aim is to discover how participants use modal auxiliary verbs in academic essay writing to provide a detailed analysis that will assist them in improving their academic writing. 84 Iraqi B.A. students at Tikrit University participated in this study. The participants wrote Eighty-four essays; each participant wrote one essay on a different topic that was chosen. Adopting Palmer's (1990) classification, the modal auxiliary verbs used by the participants were classified into three categories; a) *Epistemic modality*; b) *Deontic modality*; c) *Dynamic modality*. The results of the current study show that the participants used 'can' (f=261) followed by 'will' (f=105), 'must' (f=86), 'may' (f=37), 'should' (f=34), and 'would' (f=28). It was concluded that the students had overused some modal auxiliary verbs. In addition, it was also determined that they had misused some modal auxiliary verbs in their essay writings. The study will shed light on the different uses and applications of modal auxiliary verbs, which may ultimately help non-native Iraqi students by presenting the proper and most suitable modal auxiliary verbs in their academic writing. The present study also concluded that students ability in using modal auxiliary verbs has to be developed to reach the proper academic level in their writing.

Keywords: Syntax, Semantics, Pragmatics, Modal Verbs, Foreign Language Academic Writings.

ÖZ

Bu çalışma, Irak' ın Tikrit şehrinde bulunan Tikrit Üniversitesi'ndeki lisans düzeyinde öğrenim gören öğrencilerin yazma becerilerinde kullandıkları modal fiillerin incelenmesi hakkındadır. Bu çalışmanın temel amacı, katılımcıların akademik yazı yazarken yardımcı fiilleri nasıl kullandıklarını saptamak ve akademik yazılarını geliştirmelerine yardımcı olacak ayrıntılı bir analizi ortaya koymaktır. Tikrit Üniversitesi'ndeki 84 öğrenci bu çalışmaya katılmıştır. Katılımcılar tarafından 84 adet makale yazılmıştır; her katılımcı seçilen farklı bir konu üzerine bir makale yazmıştır. Çalışmada Palmer'ın (1990) sınıflandırmasını benimseyen katılımcılar tarafından kullanılan modal fiiller üç kategoriye ayrıldı; a) Epistemik modalite; b) Deontikmodalite; c) Dinamik modalite. Mevcut çalışmanın sonuçları, katılımcıların 'can' (f = 261) ve ardından 'will' (f = 105), must (f = 86), 'may' (f = 37) , 'should' (f=34) 'would'(f =28),. Öğrencilerin bazı modal fiilleri aşırı kullandıkları sonucuna varıldı. Ayrıca, katılımcıların yazım faaliyetlerinde bazı modal fiilleri yanlış kullandıkları da belirlendi. Çalışma Irakta yaşayan yabancı uyruklu öğrencilerin akademik yazılarında modal fiilleri doğru ve en uygun kullanımını konusunda yardımcı olabileceği gibi, onlara modal fiillerin çeşitli kullanım ve uygulamalarına da ışık tutacaktır. Çalışmada ayrıca, öğrencilerin yazılarında uygun akademik seviyeye ulaşmak için modal fiilleri kullanma becerilerinin geliştirilmesi gerektiği sonucuna da varmıştır.

Anahtar Kelimeler : Sözdizimi, Anlambilim, Pragmatik, Modal Fiiller, Yabancı Dilde Akademik Yazı.

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ABBREVIATIONS

B.A.: Bachelor of Arts (Degree)

NNSs: Non-Native Speakers

NSs: Native Speakers

ESL: English as a Second Language

SLAW: Second Language Academic Writing

L1: First Language

L2: Second Language

F.: Frequency

SUBJECT OF THE RESEARCH

The Use of Modal Verbs in Academic Writings of Iraqi B.A. Students at Tikrit University.

PURPOSE AND IMPORTANCE OF THE RESEARCH

The present research aims to observe the use of modal verbs of Iraqi BA Students at Tikrit University in their academic writings.

METHOD OF THE RESEARCH

Palmer's (1990) classification of modal verbs is adopted in this study.

HYPOTHESIS OF THE RESEARCH / RESEARCH PROBLEM

As there are minimal studies on using modal verbs conducted on Iraqi students at Iraqi Universities, the current study will fill this gap.

POPULATION AND SAMPLE

84 BA students from three different stages (freshmen, sophomore, and senior) studying a foreign language at Tikrit University participate in this study

SCOPE AND LIMITATIONS / DIFFICULTIES

This study is limited to Palmer's (1990) classification of modal verbs. Also, there is a limited number of students who participated in this study.

CHAPTER ONE: Introduction

1.1 Background of the study

Many researchers focused on cross-cultural studies of modal verbs used in English and other languages, exploring how academic writers use different modal verbs from diverse linguistic and cultural backgrounds. Carrio-Pastor (2014) aimed to identify how language variation could be determined in Spanish and English communication when writers use modal verbs of possibility and ability with different linguistic and cultural backgrounds. Recent studies by Lee (2013), Hinkel (2013), Huschova (2015), and Yang (2018) have focused on the use of modal verbs in native speakers academic writing.

For decades, modality, which is concerned with the speakers'/writers' view and attitude toward propositional information, has focused on many studies. In academic written discourse, adept manipulation of modality markers has been explicitly recognized as a means of communicating the authors' stance, affection, or judgment toward both the propositions they make and the readers, as well as modifying their statements and avoiding the risk of face-threatening communicative activity among the potential addressees (Almeida & Pastor, 2017, p. 281).

Proper use of modality would significantly bolster the pragmatic aspect of academic writing (Hyland, 1994; Myers, 1989), aid scholars in accurately expressing their research findings (Yang, 2018), and also reflect an advanced level of linguistic and pragmatic proficiency in the written mode (Yang, 2018). (Chen, 2010).

According to Stamatovi (2016), modality is "one of the few loose concepts used in linguistics that defies any adequate formal explanation" (p. 132). Numerous

academics associate the term 'modality' with the subjective standpoint of the speaker/writer. Language, generally maintained, is employed to transmit factual information regarding the validity of a proposition in an utterance and to communicate one's attitudes, views, thoughts, and ideologies about those occurrences.

The focus of recent studies (Thompson 2001, Huschova 2015) has been on the usage of modal verbs in academic writing, where they emphasized modal verb use in thesis writing of native speakers. Modal auxiliary verbs are often used to show obligation, probability, necessity, possibility, and certainty, indicating that the writer presents something with greater or lesser modality (Leech, 2014).

Furthermore, modal auxiliary verbs are mainly classified into three groups which are modal solid verbs, moderate modal verbs, and tentative modal verbs. In this way, they are helpful because the writer can vary the strength of their claims and arguments depending on the circumstances. Ultimately, the writer's claim must follow the evidence he or she has collected. However, the kind of modal auxiliary verbs chosen to express an opinion should correspond to the level of certainty provided by the writer's evidence.

English modals auxiliary verbs refer to speakers' viewpoints and attitudes, like in the aspect of probability, necessity, and obligation (Krug & Palmer, 2012, p. 2). Every modal has multiple meanings and uses, unlike the lexical verbs, which usually do not have this characteristic (Palmer, 2014, p. 1). English language modal auxiliary verbs, such as *can*, *will*, *may*, and *must*, are not similar to the periphrastic modals or quasi-modals such as; *be able to*, *be going to*, *have to*, and *need to* (Nordstrom2010 , p. 15). Quasi-models are like modal verbs in the semantic aspect, but syntactically, they act like lexical verbs (Nordstrom2010 , p. 15). Modal verbs or quasi-modals pose a

problematic obstacle for non-native English students. It is also because the forms, uses, and implications of modal auxiliary verbs are distinctive and usually different from lexical ones (Leech, 2014, p. 72). For that reason, it is essential to make non-native English students more familiar with modal auxiliary verbs to help them in their academic writing.

Researchers, on the other hand, debated the use of modals by native speakers versus non-native speakers. The previous notions concerning using modal auxiliary verbs were explored by researchers like Carrio-Pastor (2014), Akeel (2014), Ngula (2017), and Omer (2016). On the other hand, Akeel (2014) analyzed the use of modal verbs in the English academic texts of Saudi Arabian advanced students whose native language is Arabic to develop a deeper understanding of the way modal verbs are used in academic writing when done by Saudi Arabian non-native speakers of English in comparison with British academic written English.

Vold (2006) also analyzed and compared the use of modality in different languages such as; English, French and Norwegian. Moreover, Khoshshima (2016) studied modality application in English linguistics research articles cross-culturally and cross-linguistically.

Huschova (2015) explored the frequency and use of the English modal verbs (*can* and *could*) and (*may* and *might*) that express possible meanings in the academic writings in terms of linguistics and contextual aspects determining the interpretation of these modal auxiliary verbs. In his study, Lee (2013) attempted to address an essential issue in academic writing; vis. The way teachers and professors hedge their remarks by using modal verbs. The study focused on written feedback in two Humanity

departments in a British higher education institution. The researcher categorized four uses of the modal verbs: criticism, suggestions, possibility, and necessity.

The project of studying modal verbs need background knowledge in various fields; first, the general forms and meanings of modal verbs; second, the way modal verbs are used in writing, mainly research-oriented academic writing; and third, the use of modal verbs by students whose English is their second language. However, in terms of modal verbs' syntactic and semantic aspects, many researchers and linguists are referred to in this study, such as Krug & Palmer (2012), Nordstrom (2010), Palmer (2014), and Leech (2014).

Modal verbs in academic writing were also discussed by researchers like Lee (2013), Hinkel (2013) and Yang (2018), and Huschova (2015). modal auxiliary verbs have been the subject of many scholarly studies and articles that included native and non-native academic writing. In contrast, Iraqi universities' modal verbs are limited studies that discussed the Iraqi University students' use of modal verbs in their academic essays.

English modals pertain to speakers' perspectives and attitudes, such as likelihood, necessity, and obligation (Coates, 1983). Every modal has various meanings and applications, in contrast to lexical verbs, which often do not (Cook, 1989). However, Majeed and Hassoon (2016) investigated the undergraduates' ability in recognizing English modals. Consequently, the present study will explore and discuss Iraqi students' use of modal verbs in Tikrit University to provide a detailed analysis and thus may benefit them in improving their academic writing.

Tikrit University was chosen because it is the researcher's hometown, and thus it is more convenient than other Universities, especially during the time of the Covid-

19 Pandemic. The study will shed light on modal verbs' different uses and applications, which may ultimately help non-native Iraqi students by presenting the proper and most suitable modal verbs in their academic writing.

A substantial amount of the increasing research and studies about modal verbs in academic writing is related to studying students who write in English but do not have it as their mother tongue language. This emerging area of research applies syntactic and semantic explanations and techniques of modal verbs to clarify their correct use in academic writing. This study focuses on the common mistakes that non-native students make mainly because they confuse using modal verbs in their native language using English. However, some studies (e.g. Aijmer, 2002) compared English academic writing of non-native speakers of English with native English speakers and analyzed the differences to better the process of teaching modal verbs.

1.2 Statement of the problem

Since competence is the most challenging among language skills, not only for non-native but also for native speakers of the language, using modal verbs in academic writing has sparked the interest of several studies. The precise issue that the research will address is the way modal verbs are used in Iraqi students' papers of essays at Tikrit University. Since Iraqi students write in a non-native language, they face many difficulties because of the broad linguistic differences between Arabic and English. The study will analyze how the employment of modal verbs is affected by the Iraqi students' mother tongue, which is Arabic.

It is challenging because so many languages have various modal structures, or some do not have modals entirely (Leech, 2014, p. 72). In the English language, modal verbs, whether modal verbs or quasi-modals, pose a difficult obstacle for non-native

English students. This perception does not come naturally or intuitively to non-native speakers. Still, they must cope with these forms with the same or similar precision that native speakers do if their research findings are appropriately communicated.

This study proposes evaluation and solutions by deciding how modal verbs may cause difficulties in communicating non-native students' ideas. However, to help non-native students become more qualified researchers, this study explores and correct semantic and syntactic misuses of modal verbs. Modal auxiliary verbs have been the subject of numerous scholarly studies in the context of their use in academic writing, including native and non-native academic writing

However, there is a lack of serious study in Iraqi universities that examined Iraqi university students' modal verbs in academic writings. Some other studies focused on the analysis of modal verbs used in academic writing by native speakers exclusively.

On the other hand, Majeed and Hassoon (2016) investigated undergraduates' ability to recognize English modals. As a result, the current study will investigate and discuss Iraqi students' use of modal verbs at Tikrit University in order to provide a detailed analysis, which may aid them in improving their academic writing. Huschova (2015) explored the frequency and use of the English modal auxiliary verbs (*can* and *could*) and (*may* and *might*) that express possible meanings in the academic writings in terms of linguistics and contextual aspects determining the interpretation of these modal auxiliary verbs.

However, being one of the complex fields of English Syntax, Modal verbs reveal the writer's attitude, which is essential in academic writing. Consequently, it is crucial to examine how Iraqi students in Tikrit University use modal verbs. As this

study will endeavour to provide some insights into the use of modal verbs, thus it aims to inform how to teach modal verbs. The study will make recommendations and may have implications for designing courses in academic writing.

The present study suggests that non-native speaker's usage of modal verbs is affected by the pragmatic backgrounds and standards related to the student's first language environment, which may vary from those ordinarily used in English conceptual frameworks. Consequently, the study will discuss the previous notions by providing a certain number of Tikrit Iraqi students' English essays, articles and explore their use of modal auxiliary verbs in the process of writing compared to native speakers' usage. While more non-native students are required to write academic essays, and articles in English, ways to help them improve their academic writing competency has sparked widespread interest. Due to the scarcity of modal verbs among Iraqi students at Iraqi universities.

1.3 Research questions

The following research questions will be addressed in this study:

- 1-How are modal verbs employed to serve semantic and pragmatic purposes?
- 2-How do Iraqi undergraduate Students at Tikrit University use modal verbs in their academic writing?
- 3-What types of modal verbs are misused by Iraqi B.A. students, and how their L1 affect their use of modal verbs?

1.4 Aim of the Study

This research examines how modal verbs should be used properly, both syntactically and semantically, in the academic writing of B.A. non-native English

students at Tikrit University in Iraq (Students who will achieve the B.A. degree in the College of Arts). More specifically, the purpose of this study is to investigate the way students who have English as their foreign language use modal verbs such as *can*, *could*, *will*, and *would*.

Moreover, the study's objective is to specify specific patterns of misapplication of modals in non-native English academic writing to improve the students' academic writing skills and competence. It is expected that the outcomes of this study will be employed to enhance modal verbs usage in essays written by English Second Language(ESL) undergraduate students. Additionally, the research attempts to identify connections between L1 and L2 modal verb use. Finally, this study examines how Iraqi BA students at Tikrit University employ modal verbs in their academic papers.

1.5 Definition of Key Terms

Syntax: it is a system of principles, rules, and processes that regulate sentence structure and the way words are ordered and combined in a given language (Wechsler, 2015).

Semantics: it is the philosophical and linguistic study that deals with meaning in a specific language, and it is interested in the relationship between signifiers such as symbols, words, phrases, and signs and what they represent in reality, that is their implication (Hipkiss, 2014).

Modal Verbs: A modal verb offers information about the meaning of the main verb that it governs, so it is a form of the verb that functions to show modality – namely: possibility, permission, ability, capacity, request, suggestions, advice, obligation, or order (Portner , 2009).

Second Language Academic Writing (SLAW): The study of the various forms of academic writing conducted by non-native students and writers of a language considered their second or foreign language (Safa, 2018).

1.6 Hypotheses

It is hypothesized that:

- 1- Correct use of modal verbs is an essential part of academic writing regarding the writers' expressions of obligation, probability, necessity, possibility, and certainty.
- 2- Non-native students should carefully study modality to produce better quality writings.
- 3- Iraqi students majoring in English at Tikrit University face difficulties choosing the proper modal verbs in writing their essays.

1.7 Procedures of the Study

The procedures of the study will be as follows:

- 1- They are providing a comprehensive background about the syntax and semantics of modal verbs.
- 2- Discussing modal verb usage in academic writing and explore how they are appropriately employed to serve the writers' purposes.
- 3- We are selecting eighty-four samples of English literature and language essays written by Iraqi undergraduate students of Tikrit University.
- 4- We analyse the essays in terms of the students' correct modal verbs usage and show misuse patterns.
- 5- Lastly, discussing the results, forming the conclusion, recommendations, and suggestions for further studies.

1.8 Limitation of the study

The current study has dealt with modal verbs usage of Iraqi students in Tikrit University.

1. There were a limited number of students because of time constraints and the difficulty of administrating so many students.
2. There were a limited number of written assignments. The researcher would need more time and resources in case of conduction more assignments.
3. The researcher only emphasizes the classification of modal verbs proposed by Palmer (1990).
4. The researcher assigned only one topic for each level of the selected university students.
5. The current study did not focus on gender.

1.9 Methodology

The current study included 84 B.A. students. These participants were divided into two groups: (42 males and 42 females). Those students were chosen at random as volunteers for the experiment. The study was explicitly designed to investigate the use of modal auxiliary verbs in the participants' essays. Male and female participants range in age from 21 to 26 years. The participants' use of modal verbs provides strong evidence for the study.

The present study employs Palmer's (1990) classification of modal verbs and essays written by Tikrit University students as instruments. The B.A. students who took part in the study were required to write a descriptive essay. The researcher asked

the students to write about topics they were familiar with, for example, "Write about Education in your University" for freshmen, "Write about Smoking negative effects on Health" for sophomores, and "Technology effects on Society for seniors. The researcher chose to write a descriptive essay because the students were accustomed to writing descriptive college essay on various topics.

The data was gathered in three weeks. Each stage (freshman, sophomore, and senior) took one week to complete their essays. Without prior notice, students were asked to write an essay of (100-1000) words on a specific topic in two hours. The first-year students, a total of 28 (14 males and 14 females), were assigned to write about "Education in Your University." On the other hand, in the second stage, 28 students (14 males, 14 females) were assigned to submit an essay on "Smoking bad effects on Health." Moreover, 28 students (14 males, 14 females) from the third stage were asked to write about "Technology effects on Society."

The topics were chosen based on the recommendations of Tikrit University's English department professors. Furthermore, none of the selected students was advised on how to use modal verbs correctly. The researcher collected 84 essays from the students because each participant submitted one essay. The current study employs a quantitative research design to scrutinize the use of modals among Tikrit University BA students. To optimize the effectiveness of data analysis, the researcher employed AntConc, which was developed for corpus analysis (Anthony, 2004).

The software will realize the modals used by Iraqi B.A. students' writings. AntConc was created for classroom use as an open, multi-platform, multi-functional toolkit for organizational research. It encompasses a broad range of solid consonance, frequency generators for terms and keywords, cluster and lexical package analyses,

and a word distribution map. The researcher assured all students that they were aware of the study and formally agreed to participate. The students' levels of English knowledge and proficiency varied because they were chosen at random. In addition, the researcher has ensured and retained academic ethics values. The current study employs a quantitative research approach to examine modals in student essay writings.

1.10 Contribution(s) of the thesis to the literature

The researcher chooses this topic to fill the gap that minimal studies use modal verbs done on Iraqi students at Iraqi universities. Modal verbs are helpful because the writer can vary the strength of his or her claims and arguments depending on the circumstances. Ultimately, the writer's claim must follow the evidence collected. However, the kind of modal verbs used to express an opinion should correspond to the level of certainty provided by the writer's evidence. Iraqi University English majors are continually being asked to produce essays as an essential requirement in English departments.

Consequently, enhancing the quality of academic writing is an essential subject that needs to be deeply studied and considered. Therefore, this study may add to the understanding of modal verbs usage through Iraqi students affected by their linguistic and cultural backgrounds when they try to express their ideas in their academic writing of essays and theses. In summary, modal verbs are frequently used to convey semantic meanings that cannot be articulated using the sentence's main auxiliary verb. In general, English modals refer to the perspectives and behaviors of speakers, such as in the contexts of probability, necessity, and obligation. Modal verbs are a difficult barrier for non-native English speakers to overcome. Most importantly, this study will

attempt to fill the gap of the need to investigate the Iraqi undergraduate students' modal verbs usage compared to its original use by native speakers.

CHAPTER TWO: Literature Review

The Syntactic and Semantic Functions of Modal Verbs

2.1 Introduction

This chapter will focus on two main aspects of modal verbs in English. The first part of the chapter will discuss the grammatical functions and forms of modal verbs. In other words, it will emphasize the syntactic and morphological characteristics of modal verbs. Also, it will show the way modal verbs affect and interact with other components of the sentence. The second part of the chapter will discuss modal verbs in terms of semantics and pragmatics, and Modal verbs will also be studied in terms of their meanings and uses according to certain situations. However, this chapter will attempt to present the significant features and structures of modal verbs and their occurrences in different contexts.

In general, modal verbs show how the meaning of a specific sentence is employed to express the speaker's degree of the probability conveyed in the sentence. Modals have many semantic implications, such as necessity, permission, certainty, and obligation. One can use many different devices in the English language to express modality through their speech. One could use nouns like the words (anticipation, determination, and hope). Also, adjectives could describe modality like the words (unsure, possible, guaranteed, and probable).

Moreover, verbs could be used to convey modality just as (belief, suppose and expect). In addition, adverbs are used to convey modality, such as (barely, maybe,

probably, and obviously). However, modality is most regularly conveyed through the use of modal verbs.

Another important aspect will be explored in the present chapter: how modal verbs are best employed in academic writing. They are used because they can achieve many significant functions in literary texts. Modal verbs can be used as qualifying statements, demonstrate what results can be anticipated, and argue other expectations in the readers. In addition, they can express hedging in academic discourse. By thoroughly discussing the different modality functions in the present chapter, the study can better understand the various uses of modal verbs in literary texts.

2.2 Syntactic Aspects of Modal Verbs

Typically, modal auxiliaries have different functions and forms from lexical and *talk*, *run*, and *open*. Furthermore, even though semi-modal verbs act like modal verbs in semantic aspects, many semi-modal verbs act differently from modal verbs in syntactic elements. Consequently, many grammatical rules for lexical verbs and semi-modal verbs cannot be applied to modal verbs and semi-modal verbs like *ought to*.

The auxiliary verbs mainly represent modality *can*, *could*, *may*, *might*, *must*, *shall*, *should*, *will*, and *would*. Modal verbs have distinct features that are not shared with lexical verbs. The first characteristic is that the additions -ing, to, -ed are not attached to any modal verbs (Hykes, 2000, p. 7).

Secondly, there is no need to use the "to do" or "to be" formula in making questions or interrogative forms when using modal verbs (Hykes, 2000, p. 7). Another characteristic is that a modal verb can be used independently without the need of a lexical verb when there are two equivalent clauses, as in: "She can run. So can he." It means that the second (*can*) is used to replace the lexical verb (*run*). Moreover, modal

verbs do not need a third person singular -s: *"He coulds". Also, modal verbs do not come in the imperative form, and they do not come together in the same sentence (Hykes, 2000, p. 8).

Even though modal verbs have the above-mentioned indistinct features, the process of differentiation between lexical verbs and modal verbs is not apparent (Biber, 1998, p. 15). In few cases, lexical verbs may also be considered modal verbs, at least in spoken situations. However, there are two types of these verbs. The first type is the marginal auxiliary verbs (*need to*, *dare to*, and *used to*). The marginal auxiliary verbs have characteristics similar to modal verbs since they have the same negative and interrogative formulas: (*used not to*, *need not*, *dare we?*).

According to Palmer (2001) and Hykes (2000), the verb (*ought to*) can also be considered as part of the marginal auxiliary verbs. On the other hand, there are quasi-modals or better known as semi-modals which consist of auxiliary verbs plus the preposition (*to*), such as the verbs: *have to*, (*had*) *better*, *be supposed to*, (*have*) *got to*, and *be going to*. These colloquial semi-modals function similarly as modal verbs do (Palmer, 2001, p. 219). However, nine verbs were recognized in earlier grammar books as essential modal verbs (*may*, *might*, *will*, *would*, *shall*, *should*, *can*, *could*, and *must*).

These verbs are different from other auxiliary verbs because modals do not change their spelling or form in all the clauses and do not have infinitive and participle forms. Otherwise, these verbs are auxiliary verbs, indicating that they change the meaning of another verb in the sentence. Other verbs that are sometimes, but not always, referred to as modal verbs include *ought*, *had better*, and, in some cases, *dare* and *need*.

Many critics say that modal verbs do not conform to past, present, and future tense forms. Nevertheless, modal verbs indicate past tense according to most grammarians, e.g., the past tense of will. As a result, it created so much confusion in most English language teaching courses for those who do not have English as their first language. Even though modal verbs may be considered a present or past form, it has a significant meaning different from that of lexical verbs. When occurring in the past tense forms, modal verbs do not at all times indicate the past time but occasionally convey apprehensiveness or politeness in the present tense (Hykes, 2000, p. 9). For example:

1. Could you close the door, please?
2. That would be a bad idea.
3. She should meet her mother next Monday.

Although *could*, *would*, and *should* previously be mentioned above come in the past forms, they are not meant to convey past tense. These modal verbs represent the states of apprehensiveness or politeness, or obligation in the present time. Consequently, the tense forms of modal verbs regularly convey different meanings from those expressed by lexical verbs on many occasions, which are predicated on the speaker's objective and purpose behind the use of modals (Hykes, 2000, p. 9).

However, employing the perfect form of modal verbs (modal verb + have + past participle) can be considered an alternative technique for expressing the past. For example, when the speaker uses the modal verb *must*, which initially conveys likelihood; it will express past tense when it comes in the perfective form, consisting of "have + past participle". Joshi (2014) gives an example:

"John must have been tired last week" (Joshi 2014, p. 12).

The sentence refers to the past tense since that it informs that John was tired last week. On the other hand, the past tense reference could not be the only implication expressed when using the perfective modal since it occasionally changes the meaning of the whole sentence, as in the following example:

1. "Sarah should have let him go to the match" (Joshi, 2014, p.12)

2. "Sarah should let him go to the match." (Joshi, 2014, p.12)

These two sentences have the modal verb *should*; however, the two sentences convey entirely dissimilar implications due to using the modal perfect (modal verb + have + past participle) structure in the first sentence. The two sentences essentially say that Sarah is required to let him go to the match. Nevertheless, the second sentence refers to the fact that she did not let him go to the match.

2.3 Semantic Aspects of Modal Verbs

Modal verbs are mainly inserted in sentences to express meanings that are not described using the main auxiliary verb. Modals generally convey probability, intention, obligation, permission, and necessity, For instance:

1. "John must travel to Mexico today."

2. "John travels to Mexico today" (Joshi, 2014, p.12).

The first sentence shows that "John" is obliged to travel to Mexico. Moreover, in the second sentence, "John" is not compelled to travel to Mexico, but he does anyway. Even though the central indication of the first and second sentence is the same, "travels to Mexico today," the modal verb 'must', gives semantic information,

that is to say, obligation in the first sentence. However, all modal verbs have two characteristics: epistemic implications -common-sense probability- and root - related to social interaction situations- implications (Yamamoto, 1999, p. 12).

The epistemic implications refer to the meanings of prediction or inference; the root implications are generally used in social interaction situations between two speech participants (Yamamoto, 1999, p. 12). For example, "should" regularly conveys probability in epistemic aspects but advisability when used in the interactional situation.

1. "It should rain this evening." (Joshi, 2014, p.13).

2. "You should make peace with him." (Joshi, 2014, p.13).

In the first sentence above, which has "should" in epistemic implication, the speaker expresses a common-sense probability about the weather and uses the modal verb should without its root meaning. On the other hand, the second sentence has "should" in its root implication; the speaker advises the other speech participant. Additionally, the second sentence has some social power over how the interaction occurs between the two speeches participants.

As a result, the speaker has authority over the speech participant since the speaker chooses "should" instead of "might" and "could" that convey a lesser source. Regardless of whether using the modals in the epistemic or the root aspect, it can generally be decided by considering the context of that particular sentence, the implication of the statement, and the conditions of the speech or conversation. However, modal verbs are mainly determined through considering the context as shown in the following examples:

1. "You may borrow the guitar next Sunday."
2. "John is looking for the pen that you needed for you now".
3. You may take the pen two hours later." (Joshi, 2014, p.14)
4. "I need my car to go to the market today. You may take the car today."

In the first sentence above, the modal verb "*may*" can be taken to mean either in a likelihood aspect (epistemic implication) or in a permissive factor (root implication). If the reader does not know the context of the sentence, it is not easy to decide which importance of the modal the speaker means. In addition, the modal verb "*may*" in the second sentence *can* be taken to mean probability (epistemic implication) because there is another sentence that followed that determined the context.

The second sentence can be restated as "John is looking for the pen now, so there is a possibility that you will take it two hours later." However, the modal verb "*may*" in the third sentence above, conversely, is taken to mean permission "root implication" as the sentence can be paraphrased into "the car belongs to me, and I allow you to take it today after I did with shopping in the market."

Moreover, there is a significant characteristic of modals: modal verbs such as *can*, *could*, *may*, *might*, *should*, and *would* in their epistemic or root implication are taken to give theoretical implications, known as irrealis mood (Yamamoto, 1999, p. 14). Irrealis attitude relates to the modal verbs in the epistemic aspects (likelihood, possibility, and necessity) that do not usually include speakers' judgment of what is or is not expected to occur.

In addition, Irrealis can be defined as: Statements in which irrealis occur (sometimes referred to as "irreal" or "irrealized utterances") are often regarded non-

factive by grammarians; that is, they do not commit the speaker to the proposition's truth or falsehood. (Gaik, 1992). For that reason, the statement: "Mike could travel to Boston last night" could be interpreted as a simple past tense statement or as an irrealis mood. The sentence indicates that Mike could travel in the first case, and he did it last night. The second case would suggest that Mike could travel, but he preferred not to do it. Also, there is an additional meaning of the theoretical implication of modals, which can be observed in conditional sentences which sometimes contain "if" and sometimes not. For examples:

1. "If you play the guitar, he should play the violin."
2. "If I had arrived sooner, I would have played cards with my friends."
3. "I would not dance in this way."
4. "It could be wonderful." (Joshi, 2014, p.15)

Conditional sentences are typically made up of compound phrases like the first and second sentence above, even though there are some of those conditional sentences which are made up of one word, for example, in the third sentence, "I would not dance in this way" which means "if I were you." Also, the fourth sentence, "It could be wonderful", contains the meaning "if it were so". As already discussed, modal verbs can convey meanings that are not expressed by lexical verbs. However, the study will examine epistemic and root implications of modal verbs.

Each modal has two separate meanings: epistemic (or logical probability) meanings and root (or deontic or social interactional) meanings (Celce-Murcia & Larsen-Freeman, 1999; Cook, 1978; Croefsema, 1995; Greenbaum, 1996; Palmer, 1983). The modals' epistemic implications are often involved with the modal user

making a prediction or conclusion. In contrast, the modals' root meanings are often concerned with social interaction between the speaker and the hearer.

2.3.1 The Uses and Meanings of Modals

The definitions and uses of modals in this research study allude to their semantic and pragmatic aspects. Modals are primarily employed in English to provide semantic information that the sentence's main verbs do not offer. Modals are widely used to describe duty, probability, and advisability, among other concepts. For instance: (Azar 1989; Celce-Murcia & Larsen-Freeman, 1999; Greenbaum, 1996).

1. I must go to London today.

2. I go to London today.

Because the modal *must* frequently imply responsibility in its root meaning, sentence 1 indicates that the speaker is obligated to go to London today. In sentence 2, on the other hand, the speaker is not obliged to go to London today, but she does so anyhow. Although the central meaning of both sentences is the same, the modal *must* in "going to London today" provides semantic information, particularly obligation in 1. The modal, for example, should frequently represent probability in its epistemic meaning and advisability in its root meaning.

3. It should snow tomorrow. (Epistemic)

4. You should contact her again. (Root)

In sentence 3, which includes the modal *should work* in an epistemic sense, the speaker makes a logical weather prediction and chooses the modal *should* with little effect from social engagement with the listener. In sentence 4, which uses the exact modal but has a different root meaning, the speaker guides the listener. In the case of

social contact between the speaker and the hearer, there is "some human control over the situation" (Greenbaum, 1996).

The speaker in this statement should be authoritative. Because the speaker chooses the modal *should* over the modals that *might* or *could*, which communicate less authority, the speaker has an advantage over the listener. The context of the sentence, the meaning of the speech, and the interaction conditions usually decide whether the modal is employed in its epistemic or root significance. Modal meanings are frequently modified by context. As shown in the examples given:

5. You may have the car tomorrow.

6. The librarian is searching for the notes book that you wanted for you now.

You may have the notes tomorrow.

7. I need my notes book to finish my exam paper tonight. You may have the notes book tomorrow.

In sentence 5, the modal *may* be understood as an indication of likelihood (epistemic meaning) or permission (root meaning). It is difficult to establish which interpretation of the modal the speaker intends in the absence of context. In contrast, the modal *may* in sentence 6 communicates probability in its epistemic meaning. The cluster of the sentence in 7 can be interpreted as "the librarian is looking for the notes book right now, so you could have it tomorrow." In contrast, the modal *may* in sentence 7 indicates permission in its root sense, since the sentence can be interpreted as "the notes book belongs to me, and I permit you to take it tomorrow after I finish my term paper tonight." Another essential feature of modals is that the modals *can*, *could*, *may*, *might*, and *should* express hypothetical meanings, known as irrealis, in their epistemic or root significance.

2.3.2 Epistemic Implications of Modal verbs

Epistemic associations of modal verbs are fundamentally recognized because they express prediction, necessity, and possibility. Even though all of the epistemic modal verbs have comparable implications, they -to some extent- do not represent the same degree of probability or certainty. Moreover, *must*, *have to*, *will*, *would*, and *should* have high certainty or possibility, whereas *may*, *could* and *might* have low assurance and possible meanings. The speaker expresses his confidence in his statement by using modal verbs. Epistemic modality, according to (Coates 1983, p. 18), " is concerned with the speaker's beliefs or appraisal of possibilities and, in most circumstances, it expresses the speaker's trust (or lack of confidence) in the veracity of the presented claim ".

Consequently, the modal verbs that express high certainty or possibility can convey that the speaker is confident concerning what he or she is saying. In contrast, the modal verbs with low certainty and possibility convey a lack of confidence in the speakers' statement. The modal verbs which describe the same degrees of possibility and certainty are compatible with each other. Nevertheless, the compatibility between one modal verb and another regularly needs specific settings. For example, the modal verbs *must* and *should* be interchangeable with a slight modification of meaning, but some particular situations like the time of the happening can limit their interchangeability. For example: (Riviere, 1981, p. 183)

1. "Mary works on the farm; you must/should be acquainted with Mr. James then."
2. "She is clever; she *must/should know the answer to the teacher's question."

In the first sentence above, the two modal verbs *should* and *must* are suitable and switchable with a minor modification of meaning (varying degrees of certainty).

Conversely, the modal verb "must" in the second sentence is not suitable, whereas *should* is suitable. Why *must* is not acceptable is "This seems to be impossible since the occurrence occurred before the time of speaking." (Riviere, 1981, p. 183).

2.3.3 Root Meanings of Modals

Contrary to the epistemic meanings of modal verbs, root meanings associate speakers with events and social implications. That is to say, root meanings of modal verbs convey obligation, desirability, permission, and request. Furthermore, the impacts of obligation or advice are expressed through using (*will/be going to, must/have to, should could/might*). In contrast, the meaning of permission is described by using (*may/might can/could*). In addition, to express the importance of the request, the speaker may employ (*will/would can/could*).

1. "You may take the keys now."
2. "Would you open the door?"
3. "You must pass the exam tomorrow."
4. "You might pass the exam tomorrow." (Joshi, 2014, p.54)

The first sentence has the meaning of permission, and it could be rephrased as "you are permitted to take the keys now." However, the second sentence conveys a request with a sense of politeness in the present tense structure. Similar to the modal verbs in their epistemic implications (compasses knowledge, opinion, or credibility in a proposal), their root implications are substitutable with slight variations of meaning. In addition, these modal verbs have no recognizable semantic alterations in meaning such as *must*. In the third and fourth sentences, they might convey advisability and are substitutable with a slight alteration of the meaning: *must* communicate the utterer's

strong confidence or determination, whereas might communicate the utterer's weak conviction or judgment. The third and fourth sentences above can be respectively rephrased as "you are compellingly advised to pass the exam by tomorrow" and "you are advised to pass the exam by tomorrow".

As a second language, students need to be conscious of the numerous implications of different modal verbs and their correct use. All of these models could convey more than one meaning concerning epistemic and root meanings. Consequently, the semantic dissimilarities among the modal verbs with the same purposes are quite frequently hard to grasp. Therefore, using one modal over another is related to the social circumstances and the speaker's objective and assertiveness, that is to say pragmatic aspects. These pragmatic characteristics of modal verbs are discussed thus:

The pragmatic element of language meaning is defined here as all the factors selected by an addressee from a speech context to process linguistic semantic information necessary to come at the communicative significance intended by the speaker when he made his speech. (Kline, 1993).

The difficulty does not lie in how modal verbs are positioned in their diverse meanings but in using the proper modal that expresses the correct sense. For example, "*will*" and "*be going to*" are used to convey the meaning of future tense. Stafford (1975) investigates the uses of the models mentioned above:

While revisiting the future tense in the thirty-three courses I taught last year, I discovered that I could not sufficiently differentiate the two forms for my learners. What is going on in the native speaker's head that compels him to use one form over the other? Is "will + inf." really interchangeable with "be + going to + inf."? At the

moment, I confess, I was unable to respond to these queries. Stafford explored how native students create the modal verbs "will" and "be going to" in writing and speech and why they choose one over the other. She noticed that the term "will" is used in all instances to exclude ongoing actions and also to refer to yes/no queries in which the speaker desires knowledge rather than requests it. Additionally, she observed that native speakers use "will" more often in informal circumstances and that it may be substituted for "be going to" with little change in meaning.

Consequently, *will* and *will be* are used differently in a semantic aspect but with a pragmatic difference. Another critic, Haegeman (1989), indicates: It has often been said that the usage of *be going to/will* in English presents significant difficulties for foreign language learners. A fascinating feature of this issue is that improper use of *be going to/will* cannot typically be claimed to result in ungrammaticality; instead, as most writers imply, it results in a certain un-Englishness, often seen as indicating a lack of axiomaticity.

Haegeman indicates that speakers use "be going to" and "will" in a comparable manner, but their meaning is different in some situations. As an example, she concludes that "be going to" makes the sentence in a present tense or places it in the current viewpoint, whereas "will", on the other hand, is future-directed. For instance:

1. "I am going to fall asleep."

2. "I will fall asleep."

In the first sentence, the activity of "fall asleep" starts in the present tense or is instantaneously about to happen, whereas the action in the second sentence does not seem to begin in the present tense or be about to happen instantly.

Many ESL learners often do not know why native speakers use one modal verb instead of another when they are told that both "*be going to*" and "*will*" is appropriate. As an example, many Asian ESL students face this difficulty:

When I was in junior high school in Japan, I discovered that there were two ways to represent my future in English: "*will*" and "*be going to*." I used to believe that there were only two ways to communicate with my future. I asked my instructor about the differences between the words "*will*" and "*be going to*." "On the other hand, the instructor could not provide me with any clear answers or reasonable reasons. As a result, when the phone rings, I sometimes answer, "I will get it," but other times, I say, "I am going to get it," which causes complete confusion and reluctance. Is this, however, acceptable? (Shirono, 1994)

Since there are different uses of modals, distinctive grammatical structures, and implications, it is comprehensible that ESL learners' modal verb usage could in many times, be other than native speakers. Nevertheless, these unique modal features do not merely influence ESL learners' modal verb usage. ESL learners' using modal verbs in many cases mirror their mother tongue language background and social standards and values. For the most part, it is clear when ESL learners employ modal verbs in communicative situations.

Hinkel (1995), for example, states the way the usage of the root modals *must*, *have to*, *should*, *ought to*, and *need to* in native speakers and non-native English speakers writing appears to be culture and context-dependent. In her studies, she concludes that ESL learners from different cultures in china often use the modal verbs "*must*, *have to*, and *should*" once they start talking about family and companionships as they have a cultural link between strong obligation and the family and friends. Native

speakers, on the contrary, barely implement "*must, have to, and should*" when they talk about family and friends because they do not have the same cultural standards.

To exemplify, Hinkel (1995) provides speech samples taken from Asian scholarly papers. A Chinese scholar, as an instance, states, If a colleague loses his wallet, you must give him money until his parents give him more; if they lack a driver's license, you must train him to drive. Considering her study results, Hinkel states: the pragmatic structures and norms relevant to the learner's L1 context are reflected in the NNSs use of Modal verbs, which may vary from those anticipated in L2 conceptual designs.

2.3.4 Modal verbs in Academic Writing

Modal verb use is one of the most confusing aspects of English grammar. Modal verbs have several meanings and may be used in a variety of ways. Furthermore, the implications of modal verbs may be articulated in a variety of ways incorporating other grammatical and lexical aspects.

Modal verbs play an essential role in academic writing by performing a variety of functions in texts. In addition to their deontic, epistemic, and dynamic meanings, they will be used to perform some academic writing functions. Thompson (2001) suggests a list of modal verb functions in academic writing, which will be discussed further below. Hedging is one of the essential aspects of modality in academic writing. Hyland (1994) researched this function in English for specific purposes and English for educational purposes textbooks. He discovered modal verbs are the most common means of expressing epistemic alleviation in and textbooks, out of five different hedging devices (including modal verbs, lexical verbs, modal adverbs, modal adjectives, and modal nouns). However, he claims that the range of models in these

textbooks is insufficient, and those activities, in most cases, fail to emphasize the importance or function of the modal verbs. Huddleston (1971) and Ewer (1973) are two early studies that focused on the tasks of a variety of modal verbs (1979). Whereas Huddleston quantified the modal verbs' uses in various contexts, Ewer classified the modals' meanings into primary and secondary importance. Huddleston (1971) investigated the use of modal auxiliaries in scientific texts and summed up the modal implications as follows:

- *May, might, can, and could* indicate the meanings of uncertainty, legitimacy, ability, possibility, suitable generalization, and concession.
- *Will* indicates the meaning of futurity, induction, deduction.
- *Would* indicate tentativeness and prediction.
- *Should* and *must* mean obligation and logical necessity.

Ewer (1979) explored the use of modal auxiliaries in academic writing and identified various meanings. He identified sixteen primary meanings of the modals: capability; possibility; probability; impossibility; choices / alternatives; concession; condition; prediction / expectation; inference / deduction; requirement / necessity; arrangement / intention; willingness; permission / enablement; directive / attention pointing; and counter-prediction. Most of these primary meanings, he claims, involve two sub-meanings: realizable and hypothetical, distinctions that highlight the difference between sentences that define what is achievable, and sentences that include hypotheses.

Butler (1990) conducted a study that compared the frequencies of modal verbs in a corpus of 12 texts, such as textbooks and journal articles, to Huddleston's findings. In his assessment, he used the same classification as Huddleston and discovered some variation in the number of occurrences of the modals between his corpus and

Huddleston's texts. Thompson (2001) investigated modal verbs in two sets of PhD theses in a more recent study. He has identified eleven functional categories of modal verbs based on quantitative analysis of various sections of the theses:

1. Describing properties of research subjects: indicating what is typical of a phenomenon or a subject. The modals *may* and *will* are used in this function.
2. When a writer considers different strategies, he or she is said to be considering alternatives. The most common models for this function are *will*, *can*, and *may*.
3. Hedging is the process of mitigating the writer's proposition. The modals *may*, *might*, *could*, and *would* signify this.
4. Metadiscoursal: directing and instructing the reader's attention throughout the text. The models *will*, *can* and *should* demonstrate this function.
5. What is possible or necessary in particular circumstances: ascertaining what inferences or outcomes are likely to occur. The most common models in this category are *can* and *would*.
6. They are indicating legitimacy: implying claims based on reasonable argument. The typical models for such use are *may*, *might*, *can*, and *could*.
7. Expression of enabling functions: trying to express what is or is not possible. The models *can* and *could* indicate this.
8. Referring to necessary actions or conditions: the modals *should* and *must* suggest required actions or conditions.
9. Making predictions and asserting expectations: The words *will*, *would*, *should*, and *may* are used to make predictions.
10. Suggesting the possibility: indicating potential advantages and limitations. *Can* and *could* are familiar modals for this function.
11. Principle expression: to express principles using the modals *will* and *would*.

Thompson's classification is unique to academic essays and offers a functional description of the modals. As a result, this classification will serve as the framework for the analysis in this study. This available structure will be used when assigning functions to the modals in both corpora.

The research on the differences between English native and non-native speakers has primarily focused on general English learners by contrasting samples of students' essays (e.g. Aijmer 2002; Kasper 1979; Vethamani et al. 2008; and Hyland and Milton 1997). Moreover, studies on the use of modal auxiliaries have focused mainly on their application in teaching materials or academic writing (e.g., Römer 2004; Hyland 1994; Thompson 2001 and 2002).

These studies, however, did not compare the use of modal verbs by natives and non-natives. So far, there has been little debate about the significant variations in modal verb usage between native and non-native English speakers across genres. The present study will look at the differences between advanced English learners from Saudi Arabia whose mother tongue is Arabic and native British English speakers. The use of modal verbs in the genre of MA thesis is the primary concern in this study.

2.3.5 Forms and Meanings of Modal Verbs in English

This research will focus on one aspect of modality: modal auxiliary verbs. A helping verb that comes before the main verb and qualifies its meaning is an auxiliary verb (Biber et al., 2002: 103). Modal verbs have the following essential characteristics:

- They do not show tense.
- They do not show subject-verb agreement.

- The verb after them is always infinitive.
- They express stance.

The vast majority of scholars concur that each modal verb has two distinct meanings (Palmer 1990; Greenbaum and Quirk 1990; and Biber et al. 2002). The first type is deontic (or intrinsic), while the second is known as epistemic (or irrelevant). The speaker's involvement through permission, obligation, and volition is referred to as deontic modality. It entails some inherent human control over events. One's level of certainty about the world is expressed through epistemic modality. It involves human assessment of what is or is not likely to occur. For example, it must be used to indicate a deontic obligation (you must be cautious) or an epistemic necessity (you must be knowledgeable) (you must be careless, said after noticing irresponsible behaviour). He describes epistemic modality as "concerning matters of knowledge or belief" (1977: 793).

However, some of the meanings that modal verbs have conveyed can and will be neither deontic nor epistemic (Palmer 1990). For example, the 'ability' meaning expressed by the modal verb can and the 'volition' meaning conveyed by the modal will is not purely modal but rather a feature of the sentence's subject. Furthermore, the modal verb will sometimes be used to allude to future events due to tense rather than modality. As a result, the third type of modality, dynamic modality, is identified.

According to Palmer (1990), the future will is generally associated with some element of conditionality (she will be twenty on my forty-sixth birthday). In addition, he indicates that choice is used in statements where "there is a reference to a general envisaged, planned, intended, hoped for, etc. state of affairs, as opposed to a statement that a specific event or events will take place; it indicates a 'modal' rather than a real ('tense') future" (Palmer, 1990: 140).

As a result, all nine modal verbs are used to assert modality, including *will* as a future tense marker, *can* for ability, and *will* for volition. Biber et al. (2002) categorize modal verbs into three groups based on their intrinsic or extrinsic meaning (the first meaning in each of the following pairs is intrinsic, and the second is extrinsic):

- i. The modals *can*, *could*, *may*, and *might* are used in permission/possibility.
- ii. Obligation/necessity includes the words *must* and *should*; and
- iii. *Will*, *would*, and *shall* are all involved in volition/prediction.

As previously stated, the majority of modal verbs have multiple meanings. Table 2.1 summarizes the various implications that each modal verb can express and provides examples of each importance (the classification of meanings here are based on (Greenbaum and Quirk, 1999)).

Table 2.1 Meanings of Modal Verbs in English

Modal Verbs	Meaning	Example
Can	a) Possibility b) Ability c) Permission	a) It can be possible. b) Ali can ride a horse. c) Can I come tomorrow?
Could	a) Possibility b) Ability c) Permission	a) It could be peter. b) John could come yesterday. c) Could I open the gate?
May	a) Possibility b) Permission	a) He may come with us. b) May I come in.
Might	a) Possibility	a) I might go.

	b) permission	b) Might I talk to you.
Must	a) Necessity b) Obligation	a) Look out the snow. It must be cold outside. b) You must be back at 9 o'clock.
Shall	a) prediction b) volition	a) He shall know the grades next week. b) I shall transfer the money today.
Should	obligation	You should see the teacher.
Will	a) prediction b) volition	a) The journey will take a long time. b) Will you help me with this?
Would	a) prediction b) volition	a) I think this would help. b) He would like to attend the conference.

As can be seen, the English modal verb system is quite complex, as most modal verbs have more than one meaning. Because they are polysemous verbs, they can pose a significant challenge to non-native English speakers. The use of modal verbs by English native speakers and non-native speakers with Arabic as a mother tongue will be compared in this study. As a result, it is critical to demonstrate how modality is expressed in Arabic. The system of modal verbs in Arabic is described in the following section.

For example, Dafouz et al. (2007) examined a corpus of academic lectures from a Spanish institution. They investigated the cluster of personal pronouns (I, we, and you) with modals and semi-modals. They discovered that can and have the most often employed verbs by Spanish English learners and are used to reduce the speaker's authority when utilized in a problem-solving setting.

Modal verbs tend to be more regularly employed in the spoken register than the written register (Keck and Biber, 2004). Biber et al. observe this variety as well, stating that "modals and semi-models are most frequent in conversation and least frequent in news and academic literature" (2002:177). This suggests that, as Aijmer's (2002) study showed, the misuse of modals in written language is a feature of nonnatives' writing.

2.3.6 Modal verbs in classic Arabic Language

It is worth noting that there are no direct Arabic equivalents to English modal verbs. There are, however, some verbs and phrases that are semantically equivalent to English modal verbs (Mitchell and El-Hasan, 1994).

Modal verbs in English involve can, could, may, might, must, shall, should, will, and would. Although these verbs do not have exact counterparts in classical Arabic, the table below shows how the meanings of English modal verbs are demonstrated in Arabic:

Table 2 Modal Verbs in Classic Arabic Language

English modal verb	Arabic expression	Transcription
Can	يمكن ان / يستطيع ان	Yumkin Ann / Yestatia Ann
Could	يمكن ان / يستطيع ان	Yumkin Ann / Yestatia Ann
May	يمكن ان / قد	Yumkin Ann / Qadd

Might	يمكن ان / قد	Yumkin Ann / Qadd
Must	يجب ان	Yajjib Ann
Shall	سوف	Sawfa
Should	ينبغي ان	Yanbaghi Ann
Will	سوف	Sawfa
Would	سوف	Sawfa

Some modal verbs with multiple meanings in English have only one meaning in Arabic, as shown in table 2.2. For example, *can*, *could*, *may*, and *might* all have the exact Arabic equivalent (Yumkin Ann), which has the same epistemic meaning of possibility as the modal can. The same is true for shall, will, and would, which all have the same meaning in Arabic (Sawfa) and are closest to the modal will in their epistemic meaning of prediction. It is worth noting that not all of the Arabic words are verbs. Some are particles, such as sawfa and qadd, while others are verbs (Yumkin, Yastatia, Yajib, and Yanbaghi). Consider the following sentence to see how modal verbs are used in Arabic: For instance:

In Arabic. 'Yajib Ann tastayqeth bakeran',

In English, 'you must get up early,'

In most cases, the accusative particle Ann, similar to the English preposition to, follows the modal verb in Arabic. The Arabic particle Ann is often followed by the verb's infinitive, which is also true of the English preposition. As a result, the insertion of *to* after the modal verb may result in a potential error caused by L1 negative transfer (you *must* wake up early). To study and compare the use of modal verbs by Arabic speakers and English native speakers, it is necessary to observe how

English learners from other mother tongue backgrounds use them to determine whether or not a variation exists among all ESL learners.

2.4 Modal Verbs

Modality and modal verbs in English have intrigued theorists from different disciplines, including philosophy, logic, grammar, historical linguistics, semantics, pragmatics, discourse analysis, computational linguistics, etc. This interest stems from their central position in English grammar. Among other linguistic means, modal verbs help express the individuals' representation of reality and how they want this reality (Coates & Leech, 1980, p.25). With the advent of corpus linguistics, increasing attention has been directed to modal verbs in native and learner English alike. In native English, many corpus studies of modal verbs in American and British English have been conducted. (e.g. Coates, 1983; Coats & Leech, 1980; Leech, 2004; Leech et al., 2009; Mair & Leech, 2006; Barber, 2002).

Likewise, various cross-linguistic corpus-based studies of learner modal verbs have been carried out. Chief among them are Römer (2004) on German Learners, Viana (2006) and Tenuta, Oliveira & Orfanó (2015) on Brazilian learner English, Hsieh (2005), Chen (2010) and Hu & Li (2015) on Chinese learner modal verbs, Khojasteh & Reinders (2013) and Khojasteh, Shokrpour & Rafatbakhsh (2014) on Malaysian students' modals, Orta (2010) and Carrió-Pastor (2014) on modal verbs used by Spanish learners, Wilson (2009) on written Indian English, Collins, et al. (2012) on Philippine English modal verbs, Back (2012) on the use of hedges by Korean learners, Hinkel (1995) on modal verbs in Asian learner corpora, Torabiardakani, Khojasteh & Shokrpour (2015) on Iranian learners', among others. The main objective of most studies is to have a close look at how modals behave in learner English compared to authentic 'real' rather than school English. The attention

paid to modality in general and modal verbs stems from their pragmatic importance in successful communication. In L2 English, they have gained particular interest due to the tremendous difficulties in teaching and learning.

Little corpus work has been conducted on modal verbs in Egyptian learner/speaker English. Smith (2001) points out the non-existence of modal verbs in Arabic. Instead, modality is expressed "by normal verbs, often impersonal, or prepositions followed by a subjunctive (present) tense" (p.204). No specific structures are used as models. The result, Smith notes, is that Arab learners of English have a tough time learning modal verbs. Accordingly, distinguishing among the broad range of modal meanings in English could be a significant problem for Egyptians. The current corpus-based study is an attempt to explore how modal verbs feature and function in Egyptian learner English compared to native English. The study would fill a gap in the corpus research on the Egyptian EFL modal system.

Though diverse, most definitions of modality generally describe it as a semantic construct used to express speaker's attitudes/stances (to the truth of a proposition and the hearer), opinions, beliefs, intentions, desires, etc. (Lyons, 1977; Quirk, Greenbaum, Leech & Svartvik 1985; Orta, 2010; among others). Formally, modality manifests itself in various forms such as modal verbs, modal lexical verbs, modal adjectives and modal adverbs. Modality is also realized by employing intonation patterns. The meanings of possibility, obligation, prediction, etc., such devices convey, simultaneously entail pragmatic aspects such as (im)politeness, sarcasm, seriousness, social involvement/detachment, doubt, conviction, etc. (Leech, 1971).

Various and controversial taxonomies of modal verbs have been proposed by some theorists (e.g. Palmer, 2001; Leech, 1971). In some taxonomies, modal verbs

fall into three types: 1- deontic modals (those expressing obligation, allowance, permission, suggestions, desire, etc., in different degrees of certainty), 2- epistemic modals(those expressing speculations, deductions, inferences, assertions, etc. also in various degrees of confidence and possibility), and 3- dynamic modals (those conveying factual propositions of ability, volition, etc.) (Hsieh, 2005; Abdul-Fattah, 2011). However, most studies prefer a two-type classification: epistemic and deontic, as there has been no consensus on the dynamic function (Leech et al., 2009). Modal verbs are further grouped under various semantic and discourse-oriented classifications such as speaker-oriented, subject-oriented, and discourse-oriented (Hsieh, 2005), intrinsic (deontic), and extrinsic (epistemic) (Biber et al. 1999, cited in Orta, 2010, p.80). Further, Hacquard & Wellwood (2012, p.1) argue that "the question of whether epistemic modals contribute to the truth conditions of the sentences they appear in is a matter of active debate in the literature". The result is that modality, and modal verbs continue to be a crucial and controversial issue in linguistic theory.

The diverse forms of epistemic modals make them challenging to use in L2. Epistemic modals generally fall into many forms, with each having different degrees of certainty and possibility. Palmer (2001, p.22) suggests three forms: speculative (may), deductive (must), and presumptive (will). The latter form is the strongest in assertions. Some lexical items expressing modality, called boosters and down toners, either enhance or mitigate the core epistemic meaning of the verbs (Chen, 2010). There has been a relatively common consensus among grammarians and semantics on designating several semantic senses for each modal verb. Can expresses ability, general possibility, suggestions, offers, and permissions, all of which are deontic except for ability (dynamic/deontic) and possibility (epistemic). Could acts similarly,

yet in the past, present, and future events. Must communicate senses of necessity, lack of necessity, obligation, prohibition, etc. Will and shall convey such meanings as prediction, in various degrees, volition (intention, desire, willingness), offer, instant decisions, promises, etc. Will "means that something is certainly true, even though we cannot see it true" (Eastwood, 2002,p.121). Would give similar meanings in addition to hypothetical meaning, future time reference, habitual action in the past, wishes, polite requests, permission, determination, etc. May and might denote possibility, permission, requests, optative (for May). Should expresses possibility, necessity, and obligation.

2.5 Research Questions

This study aims to answer the three following questions:

- 1- How are modal verbs employed to serve semantic and pragmatic purposes?
- 2- How do Iraqi undergraduate Students at Tikrit University use modal verbs in their academic writing?
- 3- What types of modal verbs are misused by Iraqi B.A. students, and how their L1 affect their use of modal verbs?

2.6 Summary of the chapter

One of the key challenges in learning English as a foreign language is the difficulty of the structure and meaning of modal verbs. In regular formal English, the same models articulate various notions, varying from likelihood to authorization. Modal verbs are not only grammatical auxiliaries; they also tend to relate to the semantics of daily interaction. Since communicating is an essential part of the culture and the essential medium of human contact is language, language dynamics must be grasped to promote communication. This requires an understanding of grammar since

communication would collapse as the form will be incomplete. This chapter has focused on two significant facets of modal verbs in English.

The first section of the chapter has addressed the grammatical roles and types of modal verbs. In other words, it focused on the syntactic and morphological features of modal verbs, and it also showed how modal verbs affect other elements of the sentence. The second section of the chapter addressed modal verbs in terms of semantics and pragmatics. The key features and structures of modal verbs and their appearances in various contexts have been discussed in this chapter. This research will make use of the semantic and syntactic properties of modal verbs. First, the use of English modal verbs is explored, and then the knowledge is applied to the use of modality in academic writings by non-natives. As a result, the modal verbs used by Tikrit University students in their academic papers will be illustrated and evaluated.

The chapter concludes with three research questions that this study will attempt to answer. First, in English, modality refers to the opinions and attitudes of speakers (Lyons, 1977: 452). It is concerned with conveying the message in terms of subjective meaning, and it could be done in a variety of linguistic ways. For example, it can be demonstrated using adjectives like possible or likely, adverbs like perhaps, or verbs like believe and think. Second, complete verbs, modal auxiliary verbs, and semi-modal verbs are all part of the verb category. In English, there are nine modal auxiliaries: can, could, may, might, must, shall, should, will, and would. Third, modality can also be expressed using semi-modals, which perform the same functions as modal verbs. These are: have to, (have) got to, (had) better, ought to, be supposed to, be going to, and used to (Biber et al., 2002). For this paper, I will look into one type of modal expression: modal auxiliary verbs.

The literature on the use of modal verbs in academic writing by native and non-native English speakers will be divided into four categories: the forms and meanings expressed by modal auxiliaries, modal verbs in Arabic, the variation in writing between native and non-native speakers, and the functions of modal verbs in academic essays. This research aims to understand better how non-native English speakers use modal verbs in academic writing than native speakers. The paper under consideration is a corpus compiled of BA of English department essays and academic writing.

Chapter Three: Methodology

3.1 Introduction

This study is intended to respond to the need to analyse Iraqi English learners' use of modal auxiliary verbs based on a corpus approach. Taking into account the previous chapter, the syntactical roles and structures (syntactic and morphological structures) and the representations and purposes (semantics and pragmatics) of modal auxiliary verbs are equally significant in the second language lessons and lectures and should be understood and considered appropriately. In this chapter, the procedural considerations of the current study are described.

This chapter's primary purpose is to analyze the use of modal auxiliary verbs in the Iraqi Tikrit University students' essays, recognizing that they belong to a group with shared characteristics. Choosing Tikrit University is because it is the researcher's Hometown University where he had his B.A, and it is considered one of the best universities in Iraq. On the other hand, the student samples chosen for the study are the typical Iraqi non-native English learners, which make them suitable for the task.

After that, the researcher will explain the data used in the study and how they were gathered. The last part describes the researcher's approach to evaluate the data and arrive at the conclusions provided in chapters five and six. While the study itself is quantitative, it has been complemented by the computational methods mentioned in the Appendix. Computerized mathematical processing made it easier for the researcher to analyze a more comprehensive dataset than would otherwise have been done using traditional approaches. However, the first part of the research will include the background of the study, statement of the problem, research questions, and aim of the

study, hypotheses, and procedures of the study, limitation of the study, methodology, and contribution of the thesis to the literature.

The second part will be concerned with the first question of the research and try to answer it by talking about modal verbs semantically and syntactically. Furthermore, the research will deal with the second question of the study and apply the theories of modal verbs in academic writing on the chosen samples. In addition, the research will be concerned with the third question and try to answer it by talking about the (L1) of the undergraduate students' effect (L2) and makes students misuse the modal verbs in the context of the sentence. Lastly, there will be a conclusion and discussion of results to review how they answered its three research questions.

3.2 Participants

The present study was conducted with 84 B.A. students studying the English language at Tikrit University. These participants were divided into two groups: 42 males and 42 females. Those students were volunteers for the experiment, and they were chosen randomly. The study was conducted specifically to explore the use of modal auxiliary verbs in the participant's essays. The researcher assured that all students had knowledge about this analysis and officially decided to participate. However, the levels of knowledge and proficiency of English of the students were variant as they were chosen randomly. The students that participated in this study are from three different stages (first, second, third years). The researcher asked the students to write descriptive essays on different topics. The students from three stages wrote their essays inside the classroom. Each stage took one week to submit their essays because of pandemic COVID 19. The stages that the researcher has taken are freshman, sophomore, and Senior. Since the students are learning English as a foreign

language, students have passed specific courses in writing. The freshmen students have passed basic writing and grammar writing. Sophomore students have passed a course of writing and intermediate essay writing. Finally, senior students have passed a course in advance writing. The participants were divided into three groups; as mentioned before, the participants' study English as a foreign language at Tikrit University (42 males and 42 females) from P1 to P.14 are first stage males and from P.15 to P.28 are first stage males females. In addition, from P.29 to P42 are second stage males and from P.43 to P.57 are second stage females. Moreover, from P.58 to P.70 are third stage males and from P.71 to P.84 are third stage females.

In addition, the researcher has ensured and maintained the values of academic writing ethics. They all study English as a foreign language at Tikrit University. Since these students learn English as a foreign language, they have completed specialized writing classes. Additionally, the participants passed elemental composition and grammar writing. Additionally, sophomore participants completed the writing course and the intermediate report of papers. Senior students also completed an article writing and essay writing course. The males and females participants are aged between 21 and 26 years. The participants' way of using modal auxiliary verbs supplied the study paper with compelling evidence. The current study mainly concerns exploring the modal verbs used by Iraqi BA students in essay writings and finding out how to use Modal Verbs within L1 and L2. Therefore, the study's primary focus is not on gender because the survey will be very detailed. Moreover, the research of Modal Verbs usually focuses on the number and use excluding gender as a primary factor within the analysis.

3.3 Instrument

The present study uses Palmer's (1990) classification of modal verbs and the essays of Tikrit university students as instruments. The B.A. students who participated in the study were assigned to write a descriptive essay. The researcher asked the students on topics that they were familiar with ("Write about Education in your University" for freshman students, "Write about Smoking negative effects on Health " for sophomore, "Write about (Technology effects on Society)" for senior students. The explanation for the researcher's choice to write a descriptive essay was because the students were used to writing descriptive college essays.

Palmer's (1990) views about the modal auxiliary verbs will be applied to mark and assess the modal auxiliary verbs used in selected students' essays. He suggests that the modals more commonly used in English are *may, might, will, would, shall, should, can, could, and must*. However, other modals used less frequently are *had better, have to, need, and dare*.

Palmer (1990) differentiates between epistemic, deontic, and dynamic types of modal verb types. According to him, epistemic modality requires judgment on an argument based on facts and information by the speaker. Epistemic modality thus ultimately includes the assessment, points, and indices of the speaker. The deontic modality, on the other hand, involves what is compulsory, allowed, or prohibited. Epistemic and deontic modalities should also be viewed as reflecting the speaker's attitudes towards ideas and activities. Finally, according to Palmer, dynamic modality concerns the potential and commitment of the sentence subject.

3.4 Palmer's classification of modal verbs

A- Epistemic Modals

1. Modals of possibility: (can, could, may, might).
2. Modals of deduction: (could, may, must).
3. Modals of expectation: (shall, should, will, would).

B- Deontic Modals

1. Modals of permission: (can, could, may, might).
2. Modals of obligation: (must, shall, should, will).

C- Dynamic Modals

1. Modals of ability: (Can, could).
2. Modals of habit: (might, would).

3.5 Procedures

Within three weeks, the data were collected. It took one week for each stage (fresh, sophomore, and senior) to do their essays. Students were asked without previous notification to compose an essay of (100-1000) words on a single subject within two hours. For example, the first level students, 28 (14 males, 14 females), were instructed to write on "Education in your University". On the other hand, in the second stage, which was 28 (14 males, 14 females), students were assigned to submit a topic on "Smoking negative effects on Health".

Moreover, the third stage, which was 28 (14 males, 14 females) students, was asked to write about "Technology effects on Society." The topics were chosen based on the recommendations of the English department professors of Tikrit University. Moreover, all the selected students received no suggestions about how they should use modal auxiliary verbs correctly. As all participants submitted one essay, the researcher

collected 84 essays from the students. A quantitative research design is used in the present study to investigate the use of modals by the students in the B. A. program in English at Tikrit University. There is more than one reason why the researcher chose Tikrit University in his study. First of all, it has very cooperative teachers and helped him a lot within the data gathering. The students there are as cooperative as the teachers, and this facilitates the work. Moreover, the University itself is an excellent environment for conducting academic activities and studies since it supports and encourages the process of doing a research or study. The University is well equipped with labs, libraries, and different classes.

The present study incorporates a quantitative research approach to analyze modals in student's essay writing. The researcher uses AntConc, which was intended for corpus analysis to improve the efficiency of the data analysis (Anthony, 2004). In addition, the software will recognize the models used in the writings of Iraqi B.A. students. AntConc has been developed for use in the classroom as an open, multi-platform multifunctional toolkit for organizational research. It provides a wide variety of resources, including strong concordance, frequency generators for terms and keywords, analyses of clusters and lexical packages, and a word distribution map.

Chapter Four: Findings of the study

4.1 Introduction

The current research aims to observe the use of modal verbs of Iraqi BA Students at Tikrit University in their academic writing. To this end, Palmer's (1990) views about the classification of modal verbs and their meanings were employed in the study. Furthermore, the data were computed using the modal auxiliary verbs presented by Palmer (1990). In this chapter, the results of data analysis are reported. First, a preliminary analysis is presented, then a frequency of use is given. In addition, tables and figures are presented to provide detailed descriptions of the findings.

The purpose of this paper is to look into how students who speak English as a foreign language use modal verbs like *can*, *could*, *will*, and *would*. In addition, the study's value is to explore specific patterns of modal misapplication in non-native English academic writing to improve students' academic writing skills and competence. Finally, the findings of this study are expected to be used to enhance the use of modal verbs in essays written by ESL undergraduate students.

4.2 Results

4.2.1 Preliminary Analysis

Tables (1), (2), and (3) show how many times and the frequency of the three categories of modal verbs used by the students of each stage. The program produced the following results:

- A- Out of the three stages selected for the study, the first stage used 216 modal verbs in total.
- B- The second stage was the highest, using 267 modal verbs.

C- The third stage with 105 modal verbs being used.

According to the analysis above and to the percentage of using modal verbs shown in figure (1), it is established that the second stage has the highest numbers of modal verbs used. Thus, the researcher concludes that the second stage used a high rate of modal verbs. However, the outcome of the analysis that the program obtained is detailed in the following tables. The current study adopts this model to be followed by the researcher while analyzing the data because it fits the analysis procedures of this study. In addition, it intends to explain different types of modal verbs used by Iraqi BA students in essay writings, their features, functions, and the relation between them. Also, these different types of models were selected as a cover term to avoid confusion with the diversity in the terminology used by the researchers in the sources of Modal verbs in general.

4.2.2 Frequency of Modal Verbs Uses

The number of times each participant used a particular auxiliary modal verb is calculated using a computerized analysis of the essays in table (4) below. The total essays that were entered in the program, AntConc, were 84 (42 males and 42 females). The program revealed the following results:

- A. Out of the eighty-four essays of the three stages, the total rating of the words was 40000 to 44000 words.
- B. The total number of modal auxiliary verbs is 588 used in 84 essays.
- C. *Can* is the most used modal auxiliary verb in the analyzed essays (261), and *will* is in the second place (105), as shown in figure (1).

4.3 Research Question 1

How are modal verbs employed to serve semantic and pragmatic purposes?

Table (1): the Frequency of Epistemic Modals according to their Functions

Epistemic Modals	
Modals of Possibility	Frequency
Can	113
Could	9
May	21
Might	7
Modals of Deduction	Frequency
Could	2
May	9
Must	55
Modals of Expectation	Frequency
Shall	3
Should	18
Will	70
Would	17

This table shows the use of modal verbs according to their function; as shown in this table, participants used a high rate of the *can* (F=113) as modals of possibility in writing their essays, followed by *may* (F=21) as modals of possibility in writing their essays. In addition, the participants used modal verbs as modals of deduction, such as *must* (F=55). Moreover, the participants used modal verbs as modals of expectation, such as *will* (F=70).

Table (2) the Frequency of Deontic Modals according to their Functions

Deontic Modals	
Modals of Permission	Frequency
May	14
Might	3
Can	84
Could	6
Modals of Obligation	Frequency
Must	33
Shall	2
Should	5
Will	36

This table shows the use of modal verbs according to their function; as shown in this table, participants used a high rate of the *can* (F=84) as modals of permission in their essays, followed by *may* (F=14) as modals of permission in writing their essay. In addition, the participants used modal verbs as modals of obligation, such as *will* (F=36) followed by *must* (F=33) as modals of obligation in writing their essays.

Table (3) The Frequency of Dynamic Modals according to their Function

Dynamic Modals	
Modals of Ability	Frequency
Can	64
Could	3
Modals of Habit	Frequency
Might	2
Would	12

This table shows the use of modal verbs according to their function as can be seen; this table shows that participants used a high rate of the *can* (F=64) as modals of ability in their essays, followed by *could* (F=3) as modals of ability in their essays. In addition, the participants used modal verbs as modals of habit, such as *would* (F=12) followed by *might* (F=2) as modals of habit in their essays.

4.4 Research Question 2

How do Iraqi undergraduate Students at Tikrit University use modal verbs in their academic writing?

Table (4): The Number of Times Each Modal Auxiliary Verb is used by Each Participant

participants	May	Might	Will	Would	Shall	Should	Can	Could	Must
P: 01	1	0	1	0	0	2	9	0	1
P: 02	1	0	4	0	0	0	3	0	0
P: 03	3	0	6	1	0	0	2	0	0
P: 04	0	0	0	0	0	1	1	0	0
P: 05	1	0	0	0	0	0	0	0	0
P: 06	0	0	1	0	0	0	1	0	0
P: 07	0	0	0	0	0	0	3	0	1
P: 08	0	0	0	0	0	0	0	0	0
P: 09	0	0	0	0	0	0	1	0	0
P: 10	1	0	0	0	0	0	4	0	0
P: 11	0	0	0	0	0	0	3	0	0
P: 12	0	0	0	0	0	0	1	0	0
P: 13	0	0	0	0	0	0	7	0	3
P: 14	0	0	0	0	0	0	2	0	0
P: 15	0	0	1	0	0	0	3	0	0
P: 16	0	0	1	0	0	2	12	0	0
P: 17	0	0	1	0	0	2	11	0	0
P: 18	0	0	0	0	0	0	1	0	0
P: 19	0	0	1	0	0	2	11	0	0
P: 20	1	0	0	0	0	0	0	0	0
P: 21	0	0	0	0	0	0	2	0	0
P: 22	2	0	0	0	0	0	1	0	1

P: 23	1	0	1	0	0	2	11	0	1
P: 24	0	0	0	0	0	0	1	0	0
P: 25	0	0	1	0	0	2	12	0	0
P: 26	1	0	3	0	0	0	1	0	0
P: 27	0	0	1	0	0	0	5	0	1
P: 28	12	0	5	4	0	2	17	1	1
P: 29	0	0	0	0	0	0	11	0	0
P: 30	1	0	1	0	0	0	5	1	1
P: 31	0	0	0	0	0	0	2	0	0
P: 32	0	0	0	2	0	0	0	1	1
P: 33	0	0	0	0	0	0	0	0	1
P: 34	0	1	5	4	0	13	9	5	4
P: 35	0	0	0	1	0	0	1	2	7
P: 36	0	0	1	0	0	1	5	2	1
P: 37	0	2	3	0	0	0	1	0	1
P: 38	0	2	4	0	0	0	2	0	1
P: 39	0	0	2	1	0	0	3	0	2
P: 40	0	0	1	0	0	0	6	0	3
P: 41	2	0	0	0	0	0	3	0	1
P: 42	0	0	2	0	0	0	1	0	3
P: 43	0	0	3	2	0	0	3	3	0
P: 44	0	0	2	2	0	2	6	0	2
P: 45	2	0	2	0	0	1	4	0	4
P: 46	0	0	1	0	0	1	2	0	1
P: 47	0	1	4	0	0	1	2	0	10
P: 48	0	0	0	0	0	4	0	0	0
P: 49	1	0	0	0	0	1	14	1	0
P: 50	0	0	2	0	0	0	3	0	3
P: 51	0	0	0	0	0	0	1	0	2
P: 52	1	0	1	0	0	0	5	1	1
P: 53	1	0	0	0	0	0	0	0	0
P: 54	0	0	2	0	0	3	2	0	1

P: 55	0	0	0	0	0	0	2	0	1
P: 56	0	2	5	0	0	1	4	0	12
P: 57	0	0	1	0	0	0	2	0	0
P: 58	0	2	4	0	0	0	2	0	1
P: 59	2	0	1	0	2	0	1	0	1
P: 60	1	0	0	0	0	0	1	0	3
P: 61	0	0	0	0	0	0	2	0	0
P: 62	0	0	2	0	0	0	0	0	1
P: 63	0	0	0	2	0	0	0	0	2
P: 64	0	0	0	1	0	0	0	0	1
P: 65	0	0	1	0	0	0	0	0	0
P: 66	0	0	0	0	0	0	3	1	0
P: 67	0	0	0	0	0	0	0	0	0
P: 68	2	0	0	0	0	0	0	0	1
P: 69	0	0	0	0	0	0	0	0	1
P: 70	0	0	3	0	0	0	7	0	2
P: 71	0	0	0	0	0	0	5	0	1
P: 72	0	0	0	0	0	0	3	0	1
P: 73	1	0	1	0	0	0	0	0	0
P: 74	0	0	0	0	0	0	0	0	0
P: 75	0	0	0	0	0	0	1	0	0
P: 76	0	0	13	3	3	1	2	2	2
P: 77	0	0	1	0	0	0	0	0	1
P: 78	0	2	2	3	0	0	0	0	0
P: 79	0	0	2	0	0	0	0	0	0
P: 80	0	0	1	0	0	0	0	0	0
P: 81	0	0	0	1	0	0	0	0	0
P: 82	0	0	3	0	0	0	0	0	0
P: 83	0	0	0	0	0	0	0	0	0
P: 84	0	0	1	0	0	0	0	0	0

Note: - (P) stand for participant

Table 1 shows the frequency of modal auxiliary verbs used by all participants from P1 to P84; as we can see, some students use a high rate of modal verbs; some modal verbs are rarely used.

Table (5): The Frequency of Epistemic Modal Verbs used by Male and Female Students

Epistemic Modal Verbs			
Modal verbs	Male	Female	Both
Can	40	74	114
Could	7	4	11
May	7	19	26
Might	2	5	7
Shall	0	3	3
Should	9	13	22
Will	25	45	70
Would	10	6	16
Must	20	35	55

This table shows the use of epistemic modal verbs that male and female students use. As can be seen, male and female students used a high rate of the *can*. Males students used *can* (F=40) and female students used *can* (F=74) followed by *will*. Male students used *will* (F=25), and female students used *will* (F=45). Moreover, some

epistemic modal verbs were rarely used by the participants, such as *Might*. Male students used *Might* (F= 2), and female students used *Might* (F=5). In addition, a modal verb like *shall* was not used by male students at all.

Table (6): The Frequency of Deontic Modal Verbs used by Male and Female Students

Deontic modality			
Modal verbs	Male	Female	Both
Can	34	49	83
Could	4	2	6
May	7	4	11
Might	1	2	3
Shall	0	2	2
Should	5	7	12
Will	13	22	35
Must	12	19	31

This table shows the use of deontic modal verbs that male and female students use. As can be seen, male and female students used a high rate of the *can*. Male students used *can* (F=34) and female students used *can* (F=49) followed by *will*. Male students used *will* (F=13), and female students used *will* (F=22). Moreover, some deontic modal verbs were rarely used by the participants, such as *might*. Male students

used *might* (F= 1), and female students used *might* (F=2). In addition, a modal verb like *shall* was not used at all by male students.

Table (7): The Frequency of Dynamic Modal Verbs used by Male and Female Students

Dynamic modality			
Modal verbs	Male	Female	Both
Can	18	46	64
Could	2	1	3
Might	0	2	2
Would	8	4	12

This table shows the use of dynamic modal verbs that male and female students use. As can be seen, male and female students used a high rate of the *can*. Male students used *can* (F=18) and female students used *can* (F=46) followed by *would*. Male students used *would* (F=8), and female students used *would* (F=4). Moreover, some dynamic modal verbs were rarely used by the participants, such as: *could*. Male students used *could* (F= 2), and female students used *could* (F=1). In addition, a modal verb like *might* was not used at all by male students.

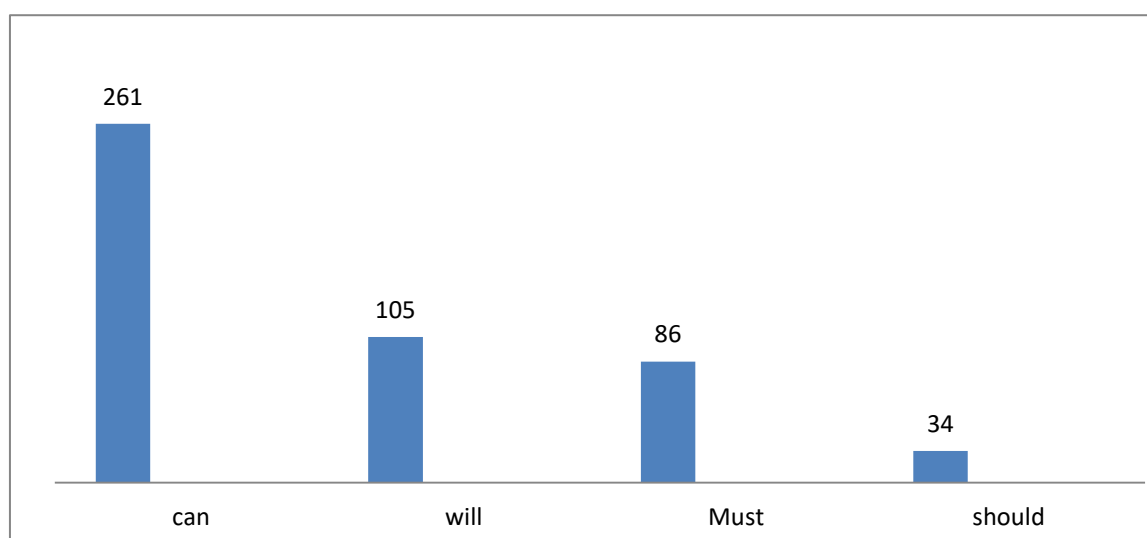
Table (8) The Use of Modal Verbs by Each Stage

Modal Verbs	First stage	Second stage	Third stage	Total
May	23	10	4	37

Might	0	10	2	12
Will	30	45	30	105
Would	5	10	13	28
Shall	0	2	3	5
Should	10	23	1	34
Can	132	93	36	261
Could	2	15	3	20
Must	14	59	13	86

This table shows the use of modal verbs by each stage; the students used a high rate of *can* followed by *will*. For example, first stage, students used *can* (F=132) and *will* (F=30). In the second stage, students used *can* (F=93) and *will* (F=45). Third stage students used *can* (F=36) and *will* (F=30). Moreover, three-stage students rarely used modal verbs such as *shall* (F=5) followed by *might* (F=12).

Figure (1) Most Common Modal Verbs that the participants used



This figure shows the most common modal verbs used by the participants in all stages; as can be seen in this figure, the students used *can* (f=261), *will* (f=105), *must* (f=86), and *should* (f=34).

Figure (2) The Percentage of Each Category that the Iraqi B.A. Students used

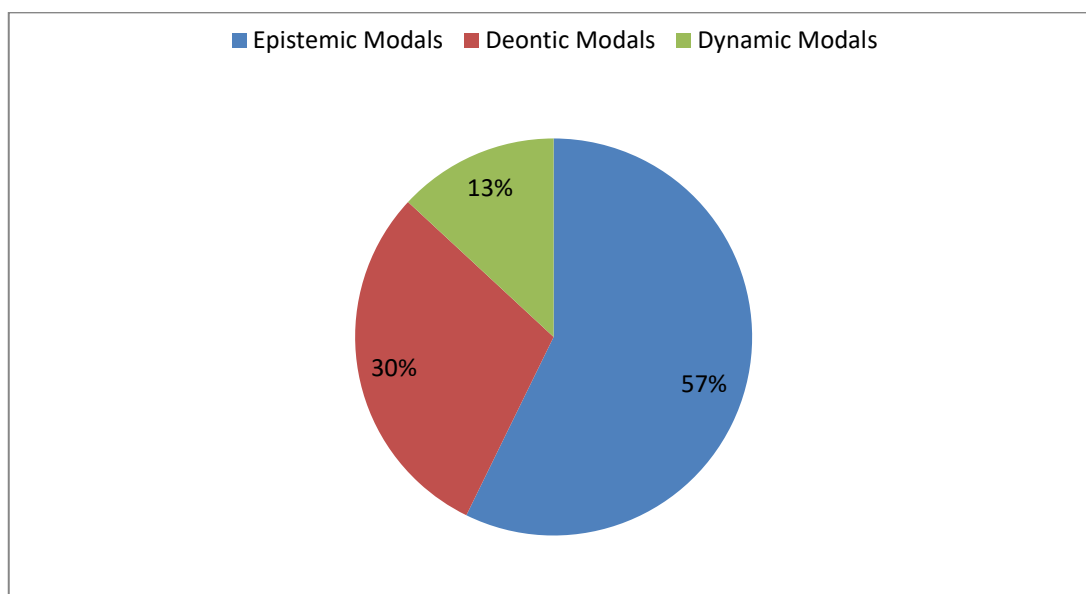


Figure (2) shows the percentage of modal verbs from each category that were used by the Iraqi B.A. students, as indicated by the categories of modal verbs utilized. Students utilized 57% Epistemic Modals, 30% Deontic Modals, and 13% Dynamic Modals, according to the conclusions of the data analysis performed using AntConc. Epistemic Modals have the most significant frequency of modal verbs.

Table (9) The Use of Each Category of Modal Verbs.

Modal Verbs		
Epistemic Modals	Deontic Modals	Dynamic Modals
324	183	81

This table shows all categories used by the participants as can be seen that students used Epistemic Modals (F=324), Deontic Modals (F=183), and, Dynamic Modals (F=81).

4.5 Research Question 3 What types of modal verbs are misused by Iraqi B.A. students, and how their L1 affect their use of modal verbs?

Table (10) Modal Verbs that are misused by the three stages participants

Freshmen	<p><i>P.1</i> Education has a critical role to play in forming effective individuals. It <u>must</u> gives us the opportunit to become a productive member of a civilized society through the learning of all the requisite skills. We <u>will</u> learn how to face the difficulties and overcome the barriers. We <u>may</u> learn how to become an integrated individual and to sustain the perpetuation of our society.</p>
Sophomore	<p><i>P.46</i> Today, everything we <u>should</u> use in our daily life is a gift of technology and without which we will not imagine our lives. This technology <u>must</u> organize engineering and manufacturing technology for the manufacture of machines. This would also make the manufacturing process simpler and more convenient. Also, we can not refuse the facts that it has caused severe damage to our surroundings.</p>
Senior	<p><i>P.76</i> Over the years smoking has proven harm for our society and one such harm is at psychological level. Smoking <u>can</u> seem to take control of our mind and make us do illogical things. Some strong smoking people are increasing becoming threat for their families and a burden on the society. on the other side, those who might accept that smoking must be prohibited in public places argue that it is not always possible to walk away from smokers.</p>

Table (10) shows the modal verbs misused by the students at the three stages; as can be seen, the freshmen also made some grammatical and spelling mistakes with

modal verbs and semantics and pragmatics. In this table, as can be seen, p.1 misused the modal verb *will*; he has to use the modal verb to make his sentence correct. The student also misused the modal verb *may*. The student has to use the right and understandable sentence. In addition, the students used the modal *must* incorrectly because there is no modal in this sentence. Also, participant p.46 made mistakes using modal verbs such as *should*, which made his sentence weak rather than strong and effective; he used *used* to make his sentence strong and correct. The participant also misused the modal *must*; he has to use *will* to complete his sentence strong and accurately.

However, the senior students made fewer mistakes in using modal verbs, such as the participant p.76 use the modal *can* in incorrect use, and this makes his sentence weak. The students of all the stages were the reasons behind these mistakes were the students, first of all, did not use the English language outside the classroom. In addition, when Arab students write essays or articles, they think first in Arabic; after that, they translate their thought to English and put them on paper, So the translation from L1 to L2 causes these mistakes because of the differences in the structure of English and Arabic language.

4.6 Summary

The main aim of this chapter was to look at how Iraqi BA Students at Tikrit University use modal verbs in their academic essay writing. Out of eighty-four essays of the three stages, the total rating of the words was 40000 to 44000 words. Palmer's (1990) views on the classification of modal auxiliary verbs and their meanings were used in the study to achieve this goal. Furthermore, the data were calculated using

Palmer's modal verbs (1990). Finally, the findings of the data analysis were presented in this chapter. In the three stages, participants employed a total of 588 modal verbs.

A preliminary analysis is presented first, followed by a frequency of use analysis. Tables and figures are also included to provide more in-depth descriptions of the findings. Besides that, non-native speakers majoring in English have difficulty knowing the implications of words due to the difference in language context structural and contextual differences between Arabic and English. In terms of the nature of meaning and communicating and understanding ideas, the researcher observed that the structure of the Arabic language is entirely different from the structure of the English language. As a result, the researcher concludes that second stage students used a high rate of modal verbs, and they are more likely to use modal verbs in their writing.

In conclusion, Table (4) shows the number of times males and females use each modal verb to illustrate the disparity in their use of modal auxiliary verbs. According to the findings, female students are more likely to use modal verbs (364) than male students (224). *Can* is the most used modal verb in the analyzed essays (261) and *will* in the second place (105). This difference in usage between males and females can be attributed to their different ways of expressing their thoughts and feelings through vocabulary. The study did not focus on gender because the current research mainly concerns exploring the modal verbs used by Iraqi BA students in essay writings and finding out how to use Modal Verbs within L1 and L2. Therefore, the study's primary focus is not on gender because the survey will be very detailed. Moreover, the research of Modal Verbs usually focuses on the number and use excluding gender as a primary factor within the analysis.

CHAPTER FIVE: Discussion of the Results

5.1 Discussion

The current chapter will discuss the Modal Verbs used by Iraqi B.A. students in their academic assigned essays. The analysis will be centered on the research questions that the study has highlighted earlier in chapter one. The findings of the current study, which discussed the non-native usage of modal verbs in their academic writing (considering the first research question), are similar to other studies done by some researchers such as Carrió-Pastor (2014), Khoshsima (2016), Saleh Akeel (2014), Yang (2018) and Majeed & Hassoon, (2016). In all the above studies, non-native speakers have specific difficulties employing modal verbs appropriately in their academic writings. Thus, students face numerous challenges and problems when it comes to academic writing. One of these challenges is accurately conveying meaning with modal verbs. Modal auxiliaries qualify the meaning of the main verb (Biber et al. 2002), and the correct use of modal verbs is crucial in academic writing.

The first research question is concerned with how modal verbs are employed to serve semantic and pragmatic purposes. As shown in the previous chapters, modal verbs usage in academic writing is often used to indicate obligation, probability, necessity, possibility, and certainty, which means that the writer presents something as having greater or lesser modality implication. They are helpful because the writer may adjust the intensity of his or her assertions and points based on the situation. Then, the writer's argument must be supported by the facts he or she has gathered. The type of modal verbs he or she uses to convey his or her view, on the other hand, should conform to the degree of certainty offered by the writer's proof. Modal verbs are often

used in sentences to convey semantic meanings that cannot be articulated using the sentence's main auxiliary verb. English modals, in general, relate to speakers' perspectives and behaviors, such as in the contexts of probability, necessity, and obligation. Thus, modal verbs in the English language are a formidable barrier for non-native English speakers to overcome.

The pragmatic backgrounds and expectations applied to the student's first language environment, distinct from those ordinarily found in English conceptual constructs, influence non-native speakers' use of modal verbs. It is not easy when so many languages have various modal systems, and others do not have any. That was also because modal verbs had distinct types and meanings from lexical verbs. As a result, it is essential to familiarize non-native English students with modal verbs in order to aid them in their academic writing.

It is the use of modal verbs by the speaker to demonstrate his faith in his argument. Moreover, epistemic modality "concerns the speakers' conclusions or assessments of possibilities, and, in certain situations, it shows the speaker's belief (or lack of confidence) in the validity of the proposition articulated. As a result, modal verbs with high certainty or possibility meanings convey the speaker's trust in what they are doing. In contrast, modal verbs with low certainty or possibility meanings express the speaker's lack of confidence in their argument.

One of the most challenging aspects of learning English as a foreign language is understanding the structures and interpretation of modal auxiliary verbs. The same models express different notions in standard structured English, ranging from probability to authorization meanings. Modal verbs are grammatical auxiliaries but often provide a strong connection to the semantics of everyday interaction. Since

communication is an essential aspect of society, and language is the most important means of human interaction, language dynamics must understand how they facilitate communication. This necessitates grammatical knowledge since dialogue would be hindered if the form is incomplete.

When native English speakers consider appropriate expressions to formulate, they have more linguistic choices than non-native English speakers. Native speakers are naturally aware that modal verbs perform a variety of functions and purposes in scholarly literature. They recognize that many forms, such as permission, ability or possibility, obligation or necessity, volition or prediction, have several roles and definitions. They will use the more appropriate types until they understand which meanings are more appropriate in which context. This comprehension does not fall naturally or intuitively to non-native speakers; therefore, if they expect their scientific findings to be conveyed perfectly, they must work with these ways with the same precision as native-speaking researchers. This thesis aimed to suggest evaluation and strategies by assessing if modal verbs could be creating difficulties in expressing non-native students' ideas.

Moreover, the second question concerns how Iraqi undergraduate Students at Tikrit University use modal verbs in their academic writing. According to the analysis chapter, it was concluded that the first stage chosen for the analysis used a total of 216 modal verbs. In contrast, the second stage used 267 modal and the most significant number of modal verbs used, and the third stage comes up with 105. The researcher can conclude that there is a correlational relationship between the level of the student and the number of modal verbs he or she can employ in his or her essay. The more experienced the student, the more he or she can use multiple modal verbs with various

meanings. In addition, the researcher noticed those female students have more tendencies to use modal verbs than male students. This variation of use between males and females can be attributed to their different vocabulary styles to express their thoughts and feelings.

The third research question is concerned with how (L1) of undergraduate students affect (L2) and makes students misuse the modal verbs in the context of the sentence in their academic essay writing. Understanding the structures and interpretation of modal auxiliary verbs is one of the most challenging aspects of learning English as a foreign language. In standard structured English, the same models express various concepts varying from probability to authorization.

Modal verbs are linguistic auxiliaries with a strong link to the semantics of everyday interaction. Language characteristics must be comprehended to understand how they facilitate communication because the interaction is essential in society, and language is necessary for human contact. Since dialogue would be hampered if the form was incomplete, this necessitates grammatical awareness. Also, there is a difficulty for non-native English speakers' language students in understanding the meaning of words due to the difference in the language context for students who speak the English language as native speakers.

The researcher discovered that the structure of the Arabic language is entirely different from the structure of the English language in terms of the nature of meaning and communicating and understanding ideas. This difference made the use of bachelors' students at Tikrit University in writing academic articles somewhat questionable. This is not commensurate with the student's second language structure, as the meaning will be ambiguous or will not be adequately communicated to the recipient. On the other hand, it was concluded that male and female students could

have the most uses. It was due to the simple function of the modal verb *can*, which signifies ability. Finally, There is misuse and overuse of modal verbs in the essays that the students wrote. The current study has found that the misuse and overuse of modal verbs negatively affect the students' message in their essays.

CHAPTER SIX: Conclusion

6.1 Introduction

This chapter aims to bring this study to a close. It seeks to present conclusions based on what has been learned and studied in the previous chapters. It will include a summary of the thesis sections. In addition, this chapter will provide an overview of the current study's strengths, shortcomings, and recommendations for future studies.

This research is divided into six chapters. The first chapter of the thesis is an outline, in which the study's gap, the approach utilized, and the research questions are presented and illustrated. The researcher's theoretical structure was explored in the second section. In the second chapter, modal verbs' grammatical roles and forms were discussed. In other terms, it emphasized the syntactic and morphological features of modal verbs and the effects and relationships of modal verbs with other sentence elements.

The grammar and pragmatics of modal verbs were discussed in the second section of chapter two. The methodology on which his research is focused is discussed in Chapter 3. The data gathered by the analysis was addressed in Chapter four. The results of the essays and the modals auxiliary verbs used by the participants were also presented in Chapter four. The research findings are discussed in Chapter five and the parallels between the present study and other reports. Finally, chapter six brings the investigation to a close.

6.2 Conclusion

The present research fulfilled its goal of examining the modal verbs employed by Iraqi BA students in their writings. The students in this study were found to have

overused some modal auxiliary verbs. Furthermore, they had misused some modal auxiliary verbs in their essay writing. The study also concluded that students' ability to use modal auxiliary verbs must be developed to reach the appropriate academic level in their writings. Thus, the current study's aim was met, which was to investigate modal verbs uses by Iraqi students in their assigned essays.

All the Students were from Tikrit University. They have good knowledge, especially the third stage concerning writing essays and articles. They study various courses related to creative writing, short stories, novellas, and grammar topics. The researcher observed that male students use modal verbs more frequently than female students. Therefore, the researcher has selected those students, particularly from this mentioned university, and has conducted his study on the three major topics chosen randomly because the students have the high ability to complete those various samples of the writing of the whole essays.

The students study English as a foreign language at Tikrit University. The present thesis examined essays written by freshmen, sophomores, and seniors (first, second, and third years, respectively). Considering the modal verbs' semantic and pragmatic aspects, most students had a problem with that. It was also determined that the first stage selected for the study used a total of 216 modal verbs, while the second stage used 267 modal verbs, and the third stage used 105 modal verbs. The researcher may infer an association between the student's level and the number of modal verbs he or she can use in his or her essay. The more practice a student has in the English language, the more modal verbs with different interpretations he or she may use. In addition, the researcher found that female students are more likely than male students to use modal verbs due to their high ability, broad scientific imagination about writing

various scientific, academic essays, articles, and good grammar usage. Thus this would enhance their scientific knowledge to write correct modal auxiliary verbs in their writings. Also, due to their various duties and responsibilities to reach their goals, this made them creative in writing these essays, and this creativity gave them an excellent opportunity to continue their writing on various topics.

Also, the researcher provided 84 Iraqi English essays to be the study samples to give a more detailed understanding of modal verbs within the perspective of non-native English students. Male students are interested in other areas away from their continuous creativity concerning writing essays. This made them useless modal auxiliary verbs due to their lack of scientific imagination towards the proper use of these modal auxiliary verbs. The researcher discovered that the biggest ambition of male students is to succeed and cross over to other stages of study in various ways, which made their scientific creativity and their use of modals more limited. It was noticed that *can* was the most frequently used word for both males and females because of their limited vocabulary. Finally, the English Department at Tikrit University should provide a course in academic writing rather than depending only on the curriculum materials for the composition course to address their students' writing deficiencies.

The students were found to have overused numerous modal auxiliary verbs. Furthermore, it was revealed that they had misused certain modal auxiliary verbs in their essay writings. The research will shed light on the many uses and applications of modal auxiliary verbs, assisting non-native Iraqi students in their academic writing by demonstrating the right and most appropriate modal auxiliary verbs. Moreover, the current research revealed that students' capacity to use modal auxiliary verbs must be

enhanced for their writing to attain the proper academic level. The findings revealed that the students experience difficulties with their writing, particularly with modal verbs. Therefore, they must improve their academic skills to fulfill the requirement of excellent writing.

6.3 Limitations of the Study

The current study has dealt with modal verbs usage of Iraqi students in Tikrit University.

1. There were a limited number of students because of time constraints and the difficulty of administrating so many students.
2. There was a limited number of written assignments. The research would need more time and resources if more essays were to be analyzed.
3. The researcher only emphasizes the classification of modal verbs by Palmer (1990).
4. The researcher assigned only one topic for each level of the selected university students.
5. The study did not focus on gender.

6.4 Suggestion for Further Researches

Based on the findings of this study, the following are several recommendations for future studies on the usage of modal verbs:

1. Further study into non-native speakers' use of modals in diverse cultures and more detailed writing subject categories is needed. Examining how influences impact non-native English modal use is one solution.

2. There is also a need for further research into the usage of Non-native speakers' modals at various stages of English proficiency. To determine how ability affects students' understanding and use of modals, one might equate beginner and experienced English students in English modals. When given an option, an interview with the students can reveal why they chose one modal.
3. Ascertain models are negated, their interpretations shift. The interaction between nonnative speakers' modal usage and negation would be essential to explore, mainly because this study has not thoroughly researched the negation mechanism.
4. Further research on how native speakers and non-native speakers use modals in spoken languages is required. Given the significant differences between verbal and written languages, it will be helpful to see if non-native speakers and native speakers utilize modals invoice. Non-native speakers' usage of modals in speech and writing may also be compared.
5. Future studies may include all four stages or more than one university.

REFERENCES

- Abdul-Fattah, H. (2011). A formal-functional analysis of the English modal auxiliaries, *Jordan Journal of Modern Languages and Literature*, 3 (1), pp. 39-63
- Aijmer, K. (2002). Modality in advanced Swedish learners' written interlanguage. In S. Granger, J. Huang & S. Petch-Tyson (Eds.), *Computer Learner Corpora, Second Language Acquisition and Foreign Language Teaching* (pp. 55-76). Amsterdam: John Benjamins Publishing.
<http://doi.org/10.1017/S027226310523005X>
- Almeida, F. A., & Pastor, M. L. C. (2017). Variation and function of modals in linguistics and engineering research papers in English. *Evidentiality and Modality in European Languages. Discourse pragmatic perspectives*.277-311
- Azar, B. S. (:1989). Understanding and using English grammar (2n ed.). New Jersey: Prentice Hall.
- Anthony, L. (2004). *AntConc : A Learner and Classroom Friendly, Multi-Platform Corpus Analysis Toolkit*. IWLeL 2004 Program Committee.
- Anthony, L. (2012). *AntConc (3.2.4w)* [Computer Software]. Tokyo, Japan: Waseda University. Retrieved from <http://www.laurenceanthony.net/>
- Biber, D., Conrad, S., and Leech, G. (2002). *Longman student grammar of spoken and written English*. Harlow: Pearson Education.
- Biber, D. (1998). *Variation across speech and writing*. Cambridge: Cambridge University Press.

- Barber, C. (2002). *The English Language: A Historical Introduction*. CUP.
- Butler, C. (1990). Qualifications in science: modal meanings in scientific texts. In Nash, W. *The writing scholar: studies in academic discourse*. (137-170) Newbury Park, CA.
- Bour, Anthony. 2014. Multiple modal constructions in the Western English-speaking world. *Linguistica Atlantica* 34. 45-58.
- Bybee, J., Perkins, R., & Pagliuca, W. (1994). *The evolution of grammar: Tense, aspect and modality in the languages of the world*. Chicago, IL: University of Chicago Press.
- Biber, D., Johansson, S., Leech, G., Conrad, S., & Finegan, E. (1999). *Longman grammar of spoken and written English*. Harlow: Pearson Education Limited.
- Carrió-Pastor, M. (2014). Cross-cultural Variation in the Use of Modal Verbs in Academic English. *SKY Journal of Linguistics*. 27(4), 153-166.
- Coates, J. (1983). *The Semantics of the Modal Auxiliaries*. London: Groom Helm.
- Chen, H. (2010). Contrastive learner corpus analysis of epistemic modality and interlanguage pragmatic competence in L2 writing. *Arizona Working Papers in SLA & Teaching*, 17, 27-51.
- Coates, J. & Leech, G. (1980) The Meanings of the Modals in British and American English, *York Papers in Linguistics*, 8(1), 23-34
- Celce-Murcia, M., & Larsen-Freeman, D. (1999). *The Grammar book: An ESL/EFL teacher's course* (2nd ed.). Heinle & Heinle.

- Collins, P. (2009). *Modals and quasi-modals in English*. New York, NY: Rodopi.
- Cook, W. (1989). Semantic Structure of the English Modals. *TESOL Quarterly*, 12(1), 5-16. <https://doi.org/10.2307/3585786>.
- Dafouz, E. and Núñez, B. and Sancho, C. (2007). Analysing stance in CLIL university context: non-native speaker use of personal pronouns and modal verbs. *The international journal of bilingual education and bilingualism*. 10/5, 647-662
- Ewer, J. (1979). *The modals in formal scientific discourse: function, meaning and use*. Santiago, Chile, University of Chile, Department of English Research Report Mimeograph.
- Facchinetti, R., Krug, M., & Palmer, F. (2012). *Modality in Contemporary English*. Berlin: Walter de Gruyter GmbH & Co. KG.
- Greenbaum, S. (1996). *The Oxford English grammar*. New York: Oxford University Press.
- Gaik, R. (1992). *Radio Talk-Show Therapy and the Pragmatics of Possible Worlds*. In Duranti, A., & Goodwin, C. (Eds.), *Rethinking Context* (pp. 271-289). Cambridge:,CUP.
- Greenbaum, S. and Quirk, R. (1990). *A student's grammar of the English language*. Harlow: Longman.
- Huschová, P. (2015). Exploring modal verbs conveying possibility in academic discourse. *Discourse and Interaction*, 8(2), 35-47.
- Hipkiss, R. (2014). *Semantics: Defining the Discipline*. California:Taylor and Francis.

Hermerén, L. (1978). *On Modality in English: A Study of the Semantics of the Modals*.

Lund: CWK Gleerup.

Hinkel, E. (2009). The effects of essay topics on modal verb uses in L1 and L2 academic writing. *Journal of Pragmatics*, 41(4), 667-683.

Hykes, J. M. (2000). *A Comparison of the Use of Modal Verbs in Research Articles by Professionals and Non-Native Speaking Graduate Students* (Master's thesis). Iowa State University, Iowa. *Paul International*.

Hinkel, E. (1995). The Use of Modal Verbs as a Reflection of Cultural Values. *TESOL Quarterly*, 29(2), 325-343.

Hinkel, E. (2013). Research Findings on Teaching Grammar for Academic Writing. *English Teaching*, 68, 4, 3-22.

Haegeman, L. (1989). Be going to and will: A pragmatic account. *Journal of Linguistics*. 25(1) 291-317.

Huddleston, R. (1971). *The sentence in written English: a syntactic study based on an analysis of scientific texts*. Cambridge: Cambridge University Press.

Hyland, K. and Milton, J. (1997). Qualification and certainty in L1 and L2 students' writing. *Journal of second language writing*, 6/2, 183-205.

Holmes, J. (1983). Speaking English with the appropriate degree of conviction. In C. Brumfit (Ed.), *Learning and teaching languages for communication: Applied linguistic perspectives*. London: *Centre for Information on Language Teaching and Research for British Association for Applied Linguistics*.

- Javadi-Safa, A. (2018). A Brief Overview of Key Issues in Second Language Writing Teaching and Research. *International Journal of Education and Literacy Studies*, 6(2), 15-25.
- Joshi, M. (2014). *English Modal Auxiliary Verbs*. Boston: Longman publishing.
- Khoshsima, H. (2016). A Cross-linguistic and Cross-cultural Study of Epistemic Modality Markers in Linguistics Research Articles. *Iranian Journal of English for Academic Purposes*, 5(2), 102-122.
- Keck, C.M. and Biber, D. (2004) Modal use in spoken and written university registers. In R. Facchinetti and F. Palmer (eds) *English Modality in Perspective. Genre Analysis and Contrastive Studies* (pp. 3_25). Frankfurt Am Main: Peter Lang.
- Kasper, G. (1979). Communication strategies: modality reduction. *Interlanguage studies bulletin*, 4, 266-283.
- Khosravi, M. (2016). Epistemic modality in Iranian EFL learners' written performance. *Proceedings of the International Conference on Literature and Linguistics*. Rome.
- Khojasteh, L.& Reinders, H.(2013). How textbooks (and learners) get it wrong: A corpus study of modal auxiliary verbs, *Applied Research on English Language*: 2(1), pp. 33-44.
- Lee, K. (2013). Hedging expressions used in academic written feedback: a study on the use of modal verbs. *Research in Corpus Linguistics*, 1(1), 33-45.

- Leech, N. (2014). *Meaning and the English Verb*. New York: Routledge.
- Leech, G. (2004). *Recent grammatical change in English: Data, description and theory*, Amsterdam: Rodopi. Available at: http://www.lancaster.ac.uk/fass/doc_library/linguistics/leechg/leech_2004.pdf
- Lyons, J (1977). *Semantics*, Vol. 2. Cambridge: Cambridge University Press.
- Leech, G., Hundt, M., Mair, C. & Smith, N. (2009). *Change in Contemporary English* .
- Majeed, M., Hassoon, M. (2016). Investigating students' ability in identifying English modals. *Al-adab journal*, 118(2), 1-14.
- McEnery, T. and Hardie, A. (2012). *Corpus linguistics*. Cambridge: Cambridge University Press.
- Myers, G. (1989). The pragmatics of politeness in scientific articles. *Applied Linguistics*, 10(1), 1-35.
- Mair, C. & Leech, G. (2006). *Current Changes in English Syntax*. Lancaster University.
- Mitchell, T. and El-Hasan, S. (1994). *Modality, mood and aspect in spoken Arabic (with special reference to Egypt and the Levant)*. London/New York: Kegan
- Ngula, R. S. (2017). Epistemic modal verbs in research articles written by Ghanaian and international scholars: a corpus-based study of three disciplines. *Brno studies in English*, 43(2), 5-27.
- Nordstrom, J. (2010). *Modality and subordinators*. London: John Benjamin's Publishing Company.

- Omer, T. (2016). An Exploration of Modality and Hedging In Academic Discourse: Focusing On a Kurdish University Context. *International Journal of English Language Teaching*, 4(3), 67-77.
- Orta, I. (2010). *A contrastive analysis of the use of modal verbs in the expression of epistemic stance in Business Management research articles in English and Spanish*, *Ibérica* 19(1), 77-96.
- Palmer F.R. (2014). *Modality and English Modals*. Hoboken: Taylor and Francis.
- Portner, P. (2010). *Modality*. Oxford: Oxford University Press.
- Palmer, F. R. (2001). *Mood and modality* (2nd ed.). Cambridge: Cambridge University Press.
- Pastor, M. L. C. (2012). A contrastive analysis of epistemic modality in scientific English. *Revista de lenguas para Fines Específicos*, 18, 115-132.
- Palmer F.R. (2013). *Modality and the English Modals*. New York: Routledge.
- Palmer, F. (1990). *Modality and the English modals* (2nd ed.). London: Longman.
- Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. (1985). *A comprehensive grammar of the English language*. Harlow: Longman.
- Römer, U. (2004). A corpus-driven approach to modal auxiliaries and their didactics. In Sinclair, J. *How to use corpora in language teaching*. Amsterdam, Benjamins, 185-199.
- Riviere, C. (1981). Is should a weaker must? *Journal of Linguistics*. 17(1). 179-195.

- Saleh Akeel, E. (2014). A Corpus-Based Study of Modal Verbs in Academic Writing of English Native Speakers and Saudis. *SSRN Electronic Journal*, 11(2), 12-130.
- Safa, A. (2018). A Brief Overview of Key Issues in Second Language Writing Teaching and Research. *International Journal of Education and Literacy Studies*, 6(2), 12. <https://doi.org/10.7575/aiac.ijels.v.6n.2p.15>
- Shirono, I., & LaPenta, J. (1994). *Common pitfalls in everyday English*. Tokyo: Communications.
- Stamatović, M. V. (2016). Scaling deontic modality in parliamentary discourse. *Logos et Littera: Journal of Interdisciplinary Approaches to Text*, 2(3), 131-149.
- Stafford, C. (1975). *Expressing the future: 'Will' vs. 'going to.'* Unpublished English 215 paper, 'UCLA, Fall 1975. University Press.
- Thompson, P. (2002). Modal verbs in academic writing. In Kettemann, B. and Marko, G. (eds.) *Teaching and learning by doing corpus analysis: proceeding of the fourth international conference on teaching and language corpora, Graz, 19 24 July 2000*. (pp. 305-325). Amsterdam: Rodopi.
- Tenuta, A., Oliveira A., & Orfanó, B. (2015). *How Brazilian learners express modality*.
- Thompson, P. (2001). *A pedagogically-motivated corpus-based examination of PhD theses: macrostructure, citation practices and uses of modal verbs*. Reading.
- Vethamani, M., Abd Manaf, U., and Akbari, O. (2008). ESL learners' use of English modals in narrative compositions: syntactic and semantic accuracy. *TEFLIN journal*, 19/2, 141-159.

- Vold, Eva T. (2006) *The choice and use of epistemic markers in linguistics and medical research articles*. Academic Discourse Across Disciplines. Bern: Peter Lang, 225–249. In: Hyland, Ken and Marina Bondi (eds.)
- Viana, V. (2006). *Modals in Brazilian advanced EFL learners' compositions: A corpus-based investigation*, Profile, 77-86.
- Wechsler, S. (2015). *Word meaning and syntax*. London: Oxford University Press.
- Wilson, A. (2009). Modal verbs in written Indian English: A quantitative and comparative analysis of the Kolhapur corpus using correspondence analysis, *ICAME Journal*, 29, pp.151-169.
- Yamamoto, N. (1999). *The Use of Modals in ESL Academic Writing* (Master's thesis). California State University, San Bernardino.
- Yang, X. (2018). A Corpus-based Study of Modal Verbs in Chinese Learners' Academic Writing. *English Language Teaching*, 11(2), 122.

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CURRICULUM VITAE

Ahmed Hamad Kareem worked as a teacher and a lecturer of the English language. He has a BA in English Language and Literature from Tikrit University. He came to Turkey in 2019 to get the degree of master in English Language and Literature from Karabuk University.