

# RHETORICAL STRUCTURE ANALYSIS ON RESULTS-DISCUSSION CHAPTER BY THAI POSTGRADUATE STUDENTS

BY

WANIDA ROTBAMRUNG

AN INDEPENDENT STUDY SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF ARTS IN CAREER ENGLISH FOR
INTERNATIONAL COMMUNICATION
LANGUAGE INSTITUTE
THAMMASAT UNIVERSITY
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#### **ENTITLED**

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was approved as partial fulfillment of the requirements for the degree of Master of Arts in Career English for International Communication

on June 27, 2023

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Independent Study Title RHETORICAL STRUCTURE ANALYSIS ON

RESULTS-DISCUSSION CHAPTER BY THAI

POSTGRADUATE STUDENTS

Author Wanida Rotbamrung

Degree Master of Arts

Major Field/Faculty/University Career English for International Communication

Language Institute

Thammasat University

Independent Study Advisor Monthon Kanokpermpoon, Ph.D.

Academic Year 2022

#### **ABSTRACT**

This current research analyzed the rhetorical structure of master's independent study (IS) Results and Discussion chapters written by Thai graduates. The dataset included twenty independent study Results and Discussion chapters written in the traditional five-chapter research report structure. All the independent study Results and Discussion chapters were purposively selected from the electronic database of a public university in Thailand and analyzed using a genre analysis methodology. The analytical framework incorporated into the analysis was adopted from Chen and Kuo (2012) and the idea to combine frameworks for the combined Results and Discussion chapter from Nguyen and Pramoolsook (2015). Based on the Results and Discussion analysis, the findings revealed that the IS authors in this study employed moves and steps as described in the analytical framework to rhetorically compose their Results-Discussion chapters. The IS authors intended to present their study results and discussion using specific moves and steps. Move 1 serves as the opening move, followed by Move 2 and Move 3 as central moves. Move 4 and REF are often included after Move 3 in order to draw conclusions for each results section and to provide support and justification for the results and discussion. Moves 5-7 are less frequent due to various communicationrelated reasons and the overlap in information with the following chapter. The occurrence of steps reveals the inclusion of providing background information, locating graphics, reporting major findings, and commenting on results. The findings of this

investigation are applicable, particularly for MA students in any field to effectively compose their research Results and Discussion chapters. Additionally, instructors of research report writing for graduate students may derive advantages from the findings in their teaching and provide their students with an appropriate guideline for composing the independent study Results and Discussion chapter.

**Keywords:** independent study, research report, results and discussion, rhetorical structure analysis, move-step analysis

#### **ACKNOWLEDGEMENTS**

Without the support of numerous individuals, this project would not have been completed. First, I want to give my sincerest gratitude to Dr. Monthon Kanokpermpoon, who served as my research adviser and supported me tremendously during the whole process of writing this report. I am grateful to have benefited from his insightful counsel, constructive comments, supportive reinforcement, and valuable time spent helping me with my research report from the very beginning to the very conclusion.

In addition, I would like to express my gratitude to the research chairman, Assistant Professor Dr. Vanlee Siriganjanavong, for the significant amount of time she spent reviewing my research report and providing me with insightful suggestions.

Furthermore, I would want to extend my gratitude to my priceless friends for the significant companionship, support, and assistance they have provided. Despite the fact that we work in separate sectors and are students of different areas, the fatigue and hardships that we shared and went through fostered a connection and commonality of understanding among us.

A heartfelt debt of gratitude to the three most influential persons in my life, my parents and my brother. I appreciate your patience and courage in sticking with me even when I made things more challenging for you. I owe a lot of my success to your tireless effort, guidance, and financial and emotional support. Having you here has been crucial to my growth.

Lastly, I want to extend my gratitude to myself, Katy, for helping me accept, embrace, and let go of the pain, disappointment, regret, and grief I have had over the last two years, throughout the COVID pandemic and my period of hard work. The next phase of life has just started, so let's see how it goes.

Wanida Rotbamrung

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## LIST OF ABBREVIATIONS

Symbols/Abbreviations	Terms
IS	Independent Study
RDs	Results and Discussion chapters/sections
ISRDs	Independent Study Results and
	Discussion chapters/sections

# CHAPTER 1 INTRODUCTION

This chapter offers the introduction of the study, consisting of seven sections as follows: (1) background of the study; (2) research objectives; (3) research questions (4) definitions of key terms; (5) scope of the study; (6) significance of the study; and (7) organization of the study.

#### 1.1 Background of the Study

English is a lingua franca utilized by native and non-native speakers in many fields, including science, engineering and technology, medical, trade and commerce, tourism, internet, banking, business, advertising, film industry, transportation, pharmacy, scientific research, education, and more. English is varied due to its being so widely used and recognized globally as a global language in the previously mentioned areas (Rao, 2019). It also has a big impact on educational actions like classroom instruction, studies, and scholarship, not just in places where people speak English, but also in places where ESL or EFL is used (Hyland, 2006).

In academic contexts, particularly at the graduate level, Swales and Feak (2012) mentioned that writing is a common requirement for graduate students regardless of their chosen fields of study. These requirements will be different for each kind of academic program. As students advance through the course, the assignments will keep increasing in complexity. Generally, they must be "academically" written, however particular assignments in certain subjects may include personal insights (such as teaching reflections). Alostath (2021) proposed the findings that the graduates identified a variety of obstacles they face while writing academically (e.g., research proposals, research articles, thesis writing). Four aspects (academic writing as the primary challenge, pressures on the writing process, supervisory relationships, and socioeconomic issues) were found to be the main issues that master's-level students had with their academic writing. In addition, Grabe and Kaplan (1996, as cited in Wuttisrisiriporn, 2014) also revealed that graduate students, both native and ESL/EFL speakers, have had trouble generating well-organized and effective academic writing.

In the same way as Alostath (2021), the issues regarding graduates' research writing were "incorrect punctuation, inaccuracy and inappropriateness of grammar, vocabulary choice, quality of paragraph organization, the overall quality of research paper, the quality of written content, lack of progressive ideas, students' inability to address the research adequately and directly, students' failure to use academic tone, style and attitude while writing, and students' inability to meet the assignment requirements" (p.3). In order to address these issues, a number of L2 writing researchers have shown a consistent interest in the rhetorical structures and language features of academic writing at postgraduate level, for example, rhetorical structure of biochemistry research articles (Kanoksilapatham, 2005), rhetorical structures in academic research writing by non-native writers (Suryani et al., 2014), and move and transitivity analysis of method, result, and discussion sections in research articles (Hendrawan et al., 2022).

It is also known that an MA research report is a type of academic writing that must be done to finish a postgraduate degree. Alostath (2021) stated that a research report is a well-written piece of writing that describes the processes, information, and results of a detailed investigation. As well, according to Thakur (2021), a research report is a significant document that functions as an initial explanation for the research processes and is generally regarded as a reliable and fair informational source. Typically, it involves research-based tasks such as projects, investigations, explorations, theses, and dissertations. Also included in this category is independent study. There are a large number of universities in Thailand, each of which gives a different plan for the master's degree research report, for example, the plan A for the thesis and plan B for the independent study. According to King and Alperstein (2015), independent study involves "an individual student working with a faculty member to design and implement a customized plan of study that meets specific learning objectives" (p. 15). In addition, Language Institute Thammasat University (2020) mentioned the independent study on the Master of Arts Program in Career English for International Communication (CEIC) curriculum in terms of "in-depth investigation of a topic related to career English for international communication; conducting a research study independently under the supervision and guidance of an advisor; presentation of the completed research paper" (p.9). Furthermore, at the postgraduate level, both the thesis and the independent study require the students to conduct research and produce

unique work, but they differ from one another in terms of their objectives, scope, organizational structure, or supervisors' expectations of the results. This is a matter of concern for graduate students, especially those whose first language is not English, since they are required to write a high-quality research report that provides their ideas or the findings of their study in a logical and comprehensible manner (Wuttisrisiriporn & Tangkiengsirisin, 2020).

Dong (1998) discovered that non-native graduates lacked adequate networking channels, writing resource utilization, and recommendations for effective thesis and dissertation writing supervision, and noted that the language and cultural aspects of non-native graduate students influenced their thesis and dissertation writing. Dong also presented results that pointed toward the importance of providing enhanced learning skills in English for Academic Purposes (EAP) courses, setting up support systems, and working together across academic fields to promote writing for a different audience, genre, and subject area. In addition, postgraduate students writing their research reports in either L2 English or native English need appropriate guidance in order to be effective, in particular when it comes to paragraph organization, idea development, and conclusion writing. In response to the above inadequacies and needs, there has been a rise in the number of genre studies that focus on individual research report sections, for example, thesis introductions (Cheung, 2012), thesis literature reviews (Xie, 2017), research article methods sections (Zhang & Wannaruk, 2016), thesis discussion sections (Massoum & Yazdanmehr, 2019; Wuttisrisiriporn & Tangkiengsirisin, 2020), and research article discussion sections (Ahmadi, 2022; Amnuai & Wannaruk, 2013; Ulya, 2022).

The Results to Discussion section is an important element of the research report when the author presents their findings and draws conclusions. In the Results to Discussion section of the research report, graduate students are expected to provide a concise review of their study as well as an analysis of how the results add to the current state of research in their field in ways that are convincing and argue the point (Basturkmen, 2012). However, Nguyen and Pramoolsook (2015) proposed that, in theses, the Results and Discussion chapters are regarded as challenging to write, particularly for non-native English authors. Having the same sense as Basturkmen (2006), graduate students of a foreign language often struggle when writing the Results

to Discussion section as they have to highlight the findings and construct specialized arguments to convince the reader to concur with the writer's views. Consequently, it is interesting to look into the rhetorical structure of the Results to Discussion chapter of a master's research report in order to give helpful writing instructions for novice graduate student writers. A number of research studies investigated moves and steps in MA research report Results and Discussion authored by L2 students. Lim (2010) investigated about commenting on research results in Results and Discussion sections in thirty research articles in applied linguistics and education fields. Pojanapunya and Todd (2011) aimed to find findings in the Results and Discussion areas which could be discussed in the discussion part and the roles of sections for discussion for describing results of ten research articles published in a renowned applied linguistics journal. Chen and Kuo (2012) analyzed the content and organization of twenty applied linguistics master's theses. The researchers also developed and modified a coding scheme for the analysis of completed theses. Amnuai and Wannaruk (2013) examined the rhetorical move structure of English applied linguistic research article discussions in Thai and international publications. Nguyen and Pramoolsook (2015) explored the move-step patterns of the Results and Discussion chapters of twenty-four master's theses authored by Vietnamese graduate students. Boonyuen (2017) investigated second-language research article discussion section textual organization. Massoum and Yazdanmehr (2019) analyzed the rhetorical structure of twenty MA Discussion sections of English language teaching (ELT) theses produced by Iranian students and twenty Discussion sections authored by native English students. Wuttisrisiriporn and Tangkiengsirisin (2020) reported on the results of an MA thesis move analysis on Discussion chapters written by thirty Thai and thirty native English students on English Language Teaching (ELT). These studies revealed similarities and differences in move-step occurrences, ordering patterns, and cyclicity in the Results and Discussion of MA research written by L1 and L2 English postgraduates.

Furthermore, there is a limited amount of rhetorical structure analysis in the Results and Discussion of English master research reports studies that demonstrate how Thai MA postgraduates compose their Independent Study (IS) Results and Discussion. Many of the previous research studies in rhetorical structure analysis on Results and Discussion were conducted using theses, dissertations, or research articles that were

published, rather than in the independent study, which also involves performing research and generating original work at the postgraduate level. The present study, therefore, aims to investigate the rhetorical structure of MA research report Results and Discussion written in English by Thai graduate students. This study aims at answering two research questions: (1) What are the occurrences of the moves found and patterns in master's research report Results and Discussion written by Thai postgraduate students? and (2) What are the occurrences of the steps found and patterns in master's research report Results and Discussion written by Thai postgraduate students? It is intended that the results of this research can be useful in the instruction of academic writing for graduate students. The results of the research can also assist MA students in composing the Results and Discussion chapter of their research report by providing them with guidance based on the moves and steps found in the study.

#### 1.2 Research Objectives

- 1) To identify the occurrences of the moves found and patterns in master's research report Results and Discussion written by Thai postgraduate students
- 2) To investigate the occurrences of the steps found and patterns in the master's research report Results and Discussion written by Thai postgraduate students

#### 1.3 Research Questions

- 1) What are the occurrences of the moves found and patterns in the master's research report Results and Discussion written by Thai postgraduate students?
- 2) What are the occurrences of the steps found and patterns in the master's research report Results and Discussion written by Thai postgraduate students?

#### 1.4 Definitions of Key Terms

- 1) Thai Postgraduate Student represents students in the Master of Arts program in Career English for International Communication (CEIC) at a public university in Thailand.
- 2) Research Report relates to the 2021 release of the independent studies (ISs) by postgraduate students in the program of Career English for International

Communication (CEIC). This term is used interchangeably with the term "Independent Study (IS)" in this study.

- 3) Independent Study (IS) is in-depth research on an issue associated with Career English for International Communication (CEIC); students individually conducting a research study while being supervised and guided by an advisor; and presenting the finished research paper. This term is used interchangeably with the term "Research report" in this study.
- **4) Results and Discussion** is about Chapter four (a few IS may include a discussion part placed in Chapter five) of the independent studies that postgraduate students in the program of Career English for International Communication (CEIC) produced.
- **5) Move** is used to describe a part of a text that has a clear communication purpose. The term *move* in this study refers to the move in the Results and Discussion of the CEIC master's research report.
- **6) Step** is used to describe a part of each move which helps the move in its job of communicating. The term *step* in this study refers to the step in the Results and Discussion of the CEIC master's research report.
- 7) **Frequency of Occurrence** refers to the number of times a move or step shows up in the Results and Discussion of the CEIC master's research report.

#### 1.5 Scope of the Study

This study intends to investigate the move-step occurrences of the master's research report Results and Discussion chapter produced by graduate students in the program of Career English for International Communication (CEIC). The moves and steps in the collected master's research report Results and Discussion chapter are observed and identified. The master's research report Results and Discussion chapter in this study refer to master's CEIC independent study Results and Discussion chapter provided by Language Institute at a public university in Thailand. The dataset is made up of twenty Results and Discussion chapters from CEIC master's research reports. The data is part of the twenty-source research report that was written in the traditional five-chapter research pattern, which includes an Introduction, Literature review, Methodology, Results and Discussion (or Results), Conclusions and Recommendations

(or Discussion, Conclusions and Recommendations). The chapter titles may be different, but each chapter has a clear purpose for communicating. For the most up-to-date information, all the selected Results and Discussion chapter from the research report cover a year in 2021.

#### 1.6 Significance of the Study

The significance of this research lies in the fact that pedagogical implications for teaching and learning how to write master's research report Results and Discussion chapter can be inferred from the findings of this study. The outcomes of this research can be used by graduate instructors to prepare their master's students with a suitable research report Results and Discussion chapter structure. With this support, postgraduate students in any related fields may consider their instructors' suggestions, enabling them to organize and write the Results and Discussion chapter of their own research report in a purposeful and logical manner.

#### 1.7 Organization of the Study

This research is composed of five chapters, references, and appendix.

Chapter 1 provides background of the study, research objectives, research questions, definitions of key terms, scope of the study, significance of the study, and organization of the study.

Chapter 2 offers literature reviews related to discourse and genre analysis, research report as a genre, and the research report Results-Discussion analysis, as well as previous related studies.

Chapter 3 covers the collection of the research corpus, the selected analytical framework for move-step analyses, data analysis procedures, as well as inter-coder reliability analysis.

Chapter 4 reveals research results and discussion.

Chapter 5 discusses research conclusions and recommendations of the study.

#### **CHAPTER 2**

#### **REVIEW OF LITERATURE**

This chapter provides a review of the literature, which includes the main theories and concepts of (1) discourse and genre analysis, (2) research report as a genre, and Results to Discussion analysis. This chapter also contains previous genre-based research studies related to the Results and Discussion sections.

#### 2.1 Main Theories and Concepts

#### 2.1.1 Discourse and Genre Analysis

The study of discourse analysis is a subfield of linguistics that has attracted the attention of a number of academic linguists as well as practical linguists (Wuttisrisiriporn, 2014). Language is the focus of discourse analysis (Jones, 2012). Discourse is the use of language in any way or setting outside of the utterances. It can be spoken or written, one-way or two-way, but there is always a goal or purpose of communication (Schneider & Barron, 2014). Jones (2012) mentioned that many individuals would classify discourse analysis as a subfield of linguistics, which refers to the scientific investigation of language. Jones also stated that discourse analysts examine how sentences and utterances combine to form texts and conversations, as well as how these texts and conversations fit into our sociocultural settings. In addition, Jones also revealed that various text formats include unique textual structures. It relies on the identities of the authors and readers, as well as the social roles of a writing. This is relevant for investigations including genre analysis. In continuation with the previous point, Johnstone (2018) explained that discourse analysis usually relates to the process of analysis in a fairly obvious way. It is a collection of methods that can be applied to the answering of a wide variety of questions. Some discourse analysts explore topics that have typically been posed in linguistics, such as those concerning language structure, linguistic features, meaning, and language learning. Johnstone also furthered discourse analysis that discourse analysts frequently consider it useful to break up longer pieces of texts into smaller pieces based on different criteria, and then look at what each part has in common. Also, divisions can be done based upon the person, such as where the paragraph splits are, when a particular topic is introduced, or at the point

where the issue stops and the statement starts. Moreover, discourse analysis can be related to grammatical patterns, the sentence of a paragraph, individual words and phrases, and concordances, which are lists of statistical data regarding where a word is likely to show up, how often it does, and what words are typically related to it. This is useful in order to back up claims about how sentence construction works or what words indicate. Furthermore to the preceding point, Wang (2009) stated that textual analysis is regarded to have its base in the categorization of discourse or any other sort of text. This field investigates the structures and functions of a large variety of text data form. Wang also provided the claim that the analysis of textual content, defined as genre analysis, has substantial consequences for formatting, design, and instruction. In addition, the terms text form, discourse form, and genre are widely used frequently throughout the discipline.

In regards to genre analysis, Bhatia (1993) stated, primarily, that the communication aims have a great impact on a built genre, in addition to aspects such as style, contents, primary audience, etc. Genres and subgenres can be accurately distinguished using consistent criteria. Secondly, highly skilled professionals and academics consider both the communication objectives and the framework. The structure of the text is drawn on their extensive work in their specialty community. Thirdly, authors may utilize a variety of language components. All the same, to achieve their goals, authors need to follow the rules and customs of a genre. Both specialists and effective language users can spot an incongruence of genre. Lastly, experts, such as members of a professional or academic group, often know more about traditional communication aims than newcomers. In addition, Bhatia (1993) concluded that a full genre fulfills a certain communication function and knows the structure of genre and customary objectives. Furthermore to the preceding comment, Bhatia (2012) elaborated on the existing conceptual idea that traditionally, the majority of ESP (English for Specific Purposes) inspired language analyses have focused on genre analysis of professional and academic writing. This kind of analysis emphasized, and continues to emphasize, the use of text-internal linguistic competence, particularly formal and practical characteristics of communication, particularly the study of rhetorical "moves," with comparatively little attention paid to setting or text-external sources, that have an important impact on the socio-pragmatics of academic as well as professional genres.

Based on the prior reviews, it can be concluded that while discourse analysis is focused on the social and cultural context of communication and how language is used to construct meaning, genre analysis is focused on the textual features and communicative purposes of different types of texts. These ideas can lead to the studies regarding textual/genre analysis. A significant number of scholars and educators have expressed interest in academic and research written discourse/genre. Wuttisrisiriporn and Tangkiengsirisin (2020) noted that there have been a number of academic research projects studying how texts are constructed and what features or methods make a text to be structurally functional. In addition, these investigations have contributed to the development of implications for communicative purposes and instruction in specific genre. For example, Suryani et al. (2013) studied rhetorical structures in academic research writing by non-native writers, Poonchako (2016) conducted a genre analysis of university online overviews: analysis of moves in Japanese university online overviews, Zhang and Wannaruk (2016) provided a study regarding rhetorical structure of education research article methods sections, as well as Vathanalaoha (2017) proposed the research concerning genre analysis and transitivity analysis of dental research article abstracts: Thai and international journals. It is evident that the outcomes of genre analysis research have produced methods for textual analysis as well as the investigation of authors' intentions.

In addition to the preceding examples of rhetorical structures and genre analysis in academic writing from a variety of disciplines, another thing that needs to be mentioned is the framework that is offered, which the researchers make use of in order to investigate the structure of the target text. The move-step framework suggested by Swales (1990) for studying research article introductions is widely recognized as a grounded framework utilized by several genre scholars to analyze the structure of a text as it is applied in investigations. The updated Create a Research Space (CARS) model, which was initially refined by Swales' (1981) four-move model for research article introductions, has produced significant contributions to the field of ESP (English for Specific Purposes) learning and instruction.

In conclusion, views to genres serve as the foundation not just for analyzing the rhetorical structures of texts, but additionally for recognizing coercive cultures and the communicative intentions of authors. Similarly essential, English educators and

learners can also benefit from the result in an enhancement of genre analysis investigations.

#### 2.1.2 Research Report as a Genre

The variety of genres includes both written and spoken forms (Jones, 2012). According to Swales (2004), there are many different types of academic speaking and writing, among them the ones listed in Table 2.1 below.

**Table 2.1**Samples of Academic Genres by Swales (2004, as cited in Wuttisrisiriporn, 2014)

Written genres		Spoken genres	
Research articles	Book reviews	Lectures	Student presentations
Conference abstracts	PhD dissertations	Seminars	Office hour meeting
Grant proposals	Textbooks	Tutorials	Conference presentations
Undergraduate essays	Reprint requests	Peer study groups	PhD defenses
Submission Letters	Editor response letters	Colloquia	Admission interviews

In postgraduate degrees, academic writing abilities are often used as an essential predictor of accomplishment. However, in a discipline-specific program developed for graduate students, students are expected to demonstrate efficient construction abilities by connecting diverse ideas, replicating viewpoints, and writing with a strong focus on correctness, style, and readership (AlMarwani, 2020). Similarly, according to Tardy (2010), graduate-level written work requires the students to choose, assess, reflect, describe, paraphrase, conclude, argue, use vocabulary and grammatical structures, and minimize plagiarism. Nonetheless, Tardy claimed that learners suffer to produce the acceptable writing standards and display abilities to think critically. Moreover, there is a relationship among what individuals read and what they write.

According to Hyland (2006), research study is a form of academic writing undertaken by graduate and postgraduate students to develop their research independence. Wuttisrisiriporn (2014) mentioned that in order to acquire academic degree completion, it seems that graduates must finish their research report. This is their initial move in communicating with individuals of their academic setting, and they

are supposed to be acknowledged and welcomed by the communities and conform to the participants' normal standards. As well, Thakur (2021) wrote that a research report is a document that highlights the outcomes of a research effort or potentially scientific insights on a topic. A research report is a well-written document that describes the methods, results, and conclusions of a systematic inquiry. It is an essential piece of paper serving an initial overview of the investigation procedure, and it is often regarded as a reliable and neutral information resource. On the other hand, some graduate students could struggle when it comes to writing their research report. It can be viewed that developing a research report is a challenging prospect for the majority of postgraduates. This can be attributed to the overwhelming length of the work, as well as the high expectations for the research report. The writing issue involves not just showing expertise regarding the subject, but also utilizing that information to make arguments clearly and coherently to the results of research findings (Dong, 1998). Dong also showed, by the findings of her investigation, that when they first begin writing a research report, many graduates discover that they lack essential understanding of the written basis for research reports. Thus, help from those individuals' advisers is required as a first course of action.

Typically, the research report comprises tasks such as projects, studies, investigations, experiments, theses, and dissertations. However, a suitable format for the study report is also a continuing issue. Wuttisrisiriporn (2014) noted that several investigations have been conducted on how research reports like theses and dissertations are put together, and they appear to have various structures or formats. To observe the general characteristics that are present in the study reports, Thakur (2021) mentioned the major parts and sections of the research report as presented in Table 2.2 below.

**Table 2.2**Research Report in Social Sciences by Thakur (2021)

Major Parts	Sections	
Preliminary Part	1. Title	
	2. Certificate/Authorization document	

	3. Contents	
	4. Preface & Acknowledgements	
	5. List of Tables/Figure	
	6. Acronyms (If applicable)	
Main Body	1. Introduction	
	2. Review of Literature	
	3.Research Objectives/Questions/Hypotheses	
	4. Research Methodology	
	5. Data Analysis/Results/Discussion	
	6. Conclusions and Findings	
	7. Recommendations	
End part	1. Endnotes/References	
	2. Appendices	
	3. Bibliography	
	4. Index	

In research studies, it is intended that certain information will be presented in a structure that is organized following a particular rhetorical pattern. Writings which neglect to correspond to this standard are likely to receive unfavorable feedback or perhaps be disapproved (Suryani et al., 2014). Wuttisrisiriporn and Tangkiengsirisin (2020) reviewed a significant number of current research study trends, including thesis/dissertation formats. All the patterns studied appear to be applicable to students' writing; however, their relevance may depend on the nature of fields and institutes. Wuttisrisiriporn (2014) provided the context of the Thai academic community regarding research report writing; the format of a conventional research report that is broken down into five chapters has a tendency to serve as the most common kind of writing structure that is presented in the research report writing guidelines of Thai universities.

According to the Thammasat University thesis writing guidebook 2021, which was produced by the Thammasat University Library (July 2022), graduate students are

informed by the Publication Manual of the American Psychological Association (APA) about the approved format of their dissertation/thesis/independent study. The guidebook proposes five chapters, including Chapter 1 Introduction, Chapter 2 Review of Literature, Chapter 3 Research Methodology, Chapter 4 Results and Discussion, and Chapter 5 Conclusions and Recommendations. In addition to this, Language Institute Thammasat University's offered template for CEIC independent study suggests a total of five chapters, including Chapter 1 Introduction, Chapter 2 Review of Literature, Chapter 3 Research Methodology, Chapter 4 Results, and Chapter 5 Discussion, Conclusions, and Recommendations. From the provided formats of the five-chapter research report by Thammasat University Library (July 2022) and Language Institute Thammasat University, there are distinct differences when it comes to chapters 4 and 5 in terms of the combined Results and Discussion and the separate Results and Discussion. The chapter titles can be diverse, but each chapter has a distinct purpose to communicate. Regarding the research report in the form of an independent study, Language Institute Thammasat University (2020) provides the definition of the independent study in the Master of Arts Program in Career English for International Communication (CEIC) curriculum (revised 2020) as: in-depth research on an issue associated with career English for international communication; individually conducting a research study while being supervised and guided by an advisor; presenting the finished research paper. In view of this, the current investigation devotes its whole focus on the master's independent studies that are produced by graduate students who are not native English speakers.

In conclusion, the research report is considered a genre because it has a set of typical characteristics, language features, and structure that are recognized and expected in academic and research contexts. By adhering to the conventions of the research report genre, researchers can effectively communicate their research findings to others in their field.

#### 2.2 Results to Discussion Analysis

According to Moreno and Swales (2018), move analysis is a text-analysis technique initially developed by Swales (1981) as a necessary element of the methodology for genre analysis in order to investigate the fundamental generic structure of research articles in terms of moves and steps for academic purposes. Moves are pieces of speech or writing that work together to get a message across. They can be very different in length and in other cases. While steps are the different pieces of text that, surround each other in a particular way, make the move happen. The steps of a move work mainly to accomplish the goal of the move to which they pertain. Moreover, Moreno and Swales (2018) listed the following aspects regarding move analysis. Initially, a move became the rhetorical structure whose linguistic appearance might be as brief as a sentence or as lengthy as a whole article. Second, the purpose of a move was conducted through the existence of one or even more specified functions, or steps. Third, the determination of move range (i.e., the wording that indicates the starting of a move or the shift between moves) might be questionable, but was assisted by a mix of bottom-up lookup for lexical or grammatical signals and top-down detailed review of the content to identify concept splits or changes in content. Fourth, there was a space where specialized discipline professionals could confirm the analysts' judgments, owing to the greater textual expertise and more developed perceptions pertaining to the standard rhetorical pattern and language employed in high-quality articles in their respective fields. Nowadays, integration has sometimes included (occasionally textbased) interviews with a wide range of people, frequently writers, and yet also editors, readers, and specialist discipline experts. Lastly, in accordance with Crookes (1986), there could be an important role for other analysts (or raters) who might support the conclusions of a lead investigator, besides the ambiguity surrounding their needed expertise. Regarding the previous review, a viewpoint on a combination method has to be brought up. Flowerdew (2002) proposed a viewpoint on a combination approach that while detection of the schematic structure is the initial step in genre analysis, this is a simplification in order to provide explanation. In point of fact, different stages of investigation are going at one time, such as figuring out the purpose(s) of communication, the schematic structure, the grammatical structures, the lexical features, etc.

Move analysis has been served as an approach for examining cross-cultural and across fields of study variabilities (Moreno & Swales, 2018) in the generic organization of various research report sections. In the report of their study, Boonyuen (2017) stated that the introduction begins with a wide overview of actual life or the work from others, including concepts, conclusions, and approaches, and afterward deepens to concentrate on the current topic, whereas the results to discussion section progresses in an opposite order. The results to discussion part transitions from the results of a study towards the study of others. Yang and Allison (2003) mentioned that genre analysts have paid a considerable amount of attention to the results to discussion part of academic studies due to its acknowledged importance. In these parts, the study results are provided and explained, the study is taken in context, and the significance and usefulness of the study are highlighted. The writers of research studies must explain how their findings add to the field and how they connect with content areas (Basturkmen, 2012). Along with this, Lim (2010) noticed that the results section is challenging to manage, despite being a key component that should be prepared first since it dominates the paper. This is because students find it difficult to comment on research results, and advisors frequently find it challenging to provide helpful suggestions regarding the way research findings should be discussed and reported on.

According to Chen and Kuo (2012), the delivery of results from research should be viewed as the most communicative aspect of either research articles or theses. This means it matters to investigate how this purpose of communication is implemented through moves and steps. Past study on Results has shown that the findings part(s) does not just present findings, yet additionally comments on them. Thereafter, a cycle of reporting results and commentary may arise (Posteguillo, 1999 as cited in Chen and Kuo, 2012). In addition, Chen and Kuo referred to the discussion that it moves from the particular results reported in Results to a broader perspective on how those results are able to be analyzed and evaluated. In line with Boonyuen (2017), despite the fact that results to discussion parts have mostly been ranked to be among the most crucial parts of a research paper (another section is referred to as the introduction), these areas also happen to be the most challenging to write about, particularly from the standpoint of publication. Many factors play a role in the challenge of composing these sections. Basturkmen (2006) mentioned that graduate students of a foreign language often

struggle when writing the Discussion of Results section as they have to construct specialized arguments to convince the reader to concur with the views of writer. In addition, the barrier can arise from language skills, discussion genre competence, or discussion contents (Basturkmen, 2006). In the same manner as Parkinson (2011), this part requires the use of advanced conversational, conditional, and adjustable argumentation. It needs considerable thought; research techniques and findings must be critiqued by writers. They must investigate as well as provide explanations for any intriguing concerns which occur. As well, graduates must produce recommendations or express their views about the current study or areas for further research that needs to be performed. All of their statements must be backed up by evidence and scholarly research (Boonyuen, 2017). Basturkmen (2009) also found that composing the Results and Discussion section requires combining across the elements of the study to blend information from the literature with the methodology and findings of the research. Basturkmen proposed that, typically, learners lacked previous writing practice for this particular section. Learners are more probably given written reviews of literature as part of the coursework, but few are likely to have discussed the findings of the research they did. Basturkmen also claimed about writing the discussion of results section; that it is also produced late in the process of composing a study report when students can feel exhausted and have not much time to finish the reports.

To present any Results and Discussion analysis, the model of them should be addressed. Nguyen and Pramoolsook (2015) addressed to the models for Results and Discussion sections of the research report. They mentioned that the parts of a research report called "results," "discussion," and "conclusion" can be split up into separate sections or put together in various manner. The following models show the different versions.

Model 1	Model 2	Model 3
Results	Results & Discussion	Results
Discussion	Conclusion	Discussion &
Conclusion		Conclusion

The source of these models is Murrison and Webb's (1991, as cited in Nguyen & Pramoolsook, 2015) Writing a research paper. From the series: Writing Practice for University Students. Nguyen and Pramoolsook (2015) also stated that the results are mostly presented in whole paragraphs, although tables and/or charts are sometimes included as well. The purpose of the discussion part is to: (1) analyze the data reported in the results section; and (2) evaluate these findings in respect to the research question and previous findings in the area.

Particularly with regard to investigation into rhetorical structure or move structure, this indicates the frameworks used to gather data and analyze the structure of research results to discussion parts. Yang and Allison (2003) proposed the frameworks of a genre analysis of research articles in applied linguistics in terms of rhetorical options between potential Results, Results and Discussion, Discussion, Conclusion, and Pedagogic Implications parts, in addition to help identify particular structures within each part. Many researchers have utilized and modified the frameworks provided by Yang and Allison (2003) to analyze the structure of rhetorical moves. For example, Pojanapunya and Todd (2011) analyzed the relationship across the findings presented in the results and the discussion parts of research articles in applied linguistics. The Results and Discussion frameworks of Yang and Allison (2003) were applied to the data given the explanation provided; they helped investigate the arrangement of the discussion section and the subsequent development of research articles following the presentation of results. Moreover, Amnuai and Wannaruk (2013) examined the rhetorical move structure of English applied linguistic research article discussions in Thai and international publications. Two corpora of discussions were analyzed using Yang and Allison's (2003) framework with the provided reasons that the framework was constructed by analyzing research articles in Applied Linguistics. In addition, certain moves in the framework provide a comprehensive list of the individual steps necessary to accomplish the moves directly. Besides, Zamani and Ebadi (2016) examined Research Papers (RPs) conclusion sections' organization in Civil Engineering and Applied Linguistics using Yang and Allison's (2003) model to analyze the dataset with the given reasons that this preceding model provided an ordered set of moves for the conclusion parts of academic papers and suggested a three-step approach with applicable steps for conclusion areas. In addition, Massoum and Yazdanmehr (2019)

analyzed the rhetorical structure of MA thesis Discussion sections of English language teaching produced by Iranian and native English students by using the framework of Yang and Allison (2003) with the reason that it was used primarily for the move analysis of Applied Linguistics research articles, and it also provided the specific moves and steps for analyzation. Furthermore, Wuttisrisiriporn and Tangkiengsirisin (2020) investigated an MA thesis move analyzation Discussion chapters written by Thai and native English students using the same framework. Yang and Allison's (2003) movestep analytical framework was used with two main reasons; it was an outcome of improvements to many analytical frameworks and it was used successfully in a number of studies of move analysis of Discussion part in relevant domains and genres. In addtion to the previous research, Ulya (2022) outlined the structure of the twenty scientific Discussion sections seen in research publications published in reputable journals. The data in this study was also evaluated using Yang and Allison's (2003) Model with the reasons that its descriptiveness and layered structure, as well as its lasting popularity, have made it an attractive tool of further research. Yang and Allison's (2003) frameworks for Results, Discussion, Conclusions, and Pedagogic Implications are presented in Table 2.3 below.

**Table 2.3**Frameworks of analysis of Results, Discussion, Conclusions, and Pedagogic Implications sections (Yang & Allison, 2003)

Section	Move	Step
Results	1. Preparatory information	
	2. Reporting results	
	3. Commenting on results	1. Interpreting results
		2. Comparing results with literature
		3. Evaluating results
		4. Accounting for results
	4. Summarizing results	
	5. Evaluating the study	1. Indicating limitations
		2. Indicating significance/advantage

	6. Deductions from the	1. Recommending further research
	research	
Discussion	1. Background information	
	2. Reporting results	
	3. Summarizing results	
	4. Commenting on results	1. Interpreting results
		2. Comparing results with literature
		3. Accounting for results
		4. Evaluating results
	5. Summarizing the study	
	6. Evaluating the study	1. Indicating limitations
		2. Indicating significance/advantage
		3. Evaluating methodology
	7. Deductions from the	1. Making suggestions
	research	2. Recommending further research
		3. Drawing pedagogic implication
Conclusion	1. Summarizing the study	
	2. Evaluating the Study	1. Indicating significance/advantage
		2. Indicating limitations
		3. Evaluating methodology
	3. Deductions from the	1. Recommending further research
	research	2. Drawing pedagogic implication
Pedagogic	1. Summarizing the study	
Implications	2. Dealing with pedagogic	1. Indicating necessity for pedagogic
	issues	change
		2. Drawing pedagogic implications
	3. Evaluating the study	1. Indicating limitation
		2. Indicating significance/ advantage

# 4. Deductions from the research

### 1. Recommending further research

Moreover, Chen and Kuo (2012) examined the overall structure of master's theses in the field of applied linguistics. Due to the fact that the majority of past research only examined one or two sections of the theses/dissertations, Chen and Kuo developed a coding structure of moves and steps to help analyze entire theses. Regarding the sections of Results, Discussion, and Conclusions, Chen and Kuo adapted and adjusted the moves and steps according to Yang and Allison's (2003) models in an attempt to create their views not just in accordance throughout the sections yet also suitable for the theses organization. They gave the reasons for the integration and the adjustments that, with this classification structure, it could better represent the relationship between related chapters and distinguish the rhetorical purposes of corresponding moves and steps in various sections.

Some researchers have utilized the modified frameworks provided by Chen and Kuo (2012) to analyze the structure of rhetorical moves. For example, Nguyen and Pramoolsook (2015) explored the move-step patterns of the Results and Discussion chapters of master's theses authored by Vietnamese graduate students. The framework by Chen and Kuo (2012) and the discourse-based interviews with the thesis authors and supervisors were used to collect data. The reason provided for the use of Chen and Kuo's (2012) framework is that Chen and Kuo (2012) updated Yang and Allison's (2003) framework by providing a detailed explanation of the stages in Moves 1 (Introducing the chapter), 2 (Reporting results), 3 (Commenting on results), and 6 (Evaluating the study), as well as the adding of an independent move of linking to other research with three steps (Reference to other studies). Furthermore, Ebadi et al. (2019) investigated the differences/similarities in rhetorical manner between the abstracts and introductions of master theses produced by Iraqi and other international learners studying Applied Linguistics. through the utilization of Hyland's (2000) structure and Chen and Kuo's (2012) framework. They suggested that Chen and Kuo's framework was chosen because of the useful changes made to it. The framework serves the researchers with details regarding the particular features of master's theses in applied linguistics. In addition, this model appears to be an extensive model for characterizing and investigating the organizational arrangement of MA thesis Introduction section within the area of applied linguistics. Chen and Kuo's (2012) framework for the complete thesis is presented in Table 2.4 below.

**Table 2.4**Framework of Research Report Analysis for the Complete Thesis (Chen & Kuo, 2012)

Section	Move	Step
Abstract	1. Introduction	
	2. Method	
	3. Results	
	4. Conclusions	
Introduction	1. Establishing a territory	1. Providing topic
		generalization/background
		2. Indicating centrality/importance of
		topic
		3. Defining terms
		4. Reviewing previous research
	2. Establishing a niche	1. Indicating gap in previous research
		2. Question-raising
		3. Counter-claiming
		4. Continuing/extending a tradition
		5. Indicating a problem/need
	3. Occupying the niche	1. Indicating purposes/aims/objectives
		2. Indicating scope of research
		3. Indicating chapter/section structure
		4. Indicating theoretical position
		5. Announcing research/work carried
		out
		6. Describing parameters of research
		7. Stating research questions/hypotheses

		8. Defining terms
		9. Indicating research method
		10. Indicating findings/results
		11. Indicating models proposed
		12. Indicating applications
		13. Indicating value or significance
		14. Providing justification
		15. Indicating thesis structure
	Referring to other studies	1. Providing background information
		2. Providing definition of terms
		3. Providing support or justification
Literature	Introduction	1. Indicating organization of the review
Review		chapter(s) and justifying the themes
(each		(areas) to be reviewed
thematic	1. Establishing one part	1. Surveying the non-research-related
unit: Moves	of the territory of one's	phenomena or knowledge claims
1-3)	own research	2. Claiming centrality
		3. Surveying the research-related
		phenomena
	2. Creating a research	1. Counter-claiming (weaknesses and
	need (in response to	problems)
	Move 1)	2. Gap-indicating (paucity or scarcity)
		3. Asserting confirmative claims about
		knowledge or research practices
		surveyed
		4. Asserting the relevancy of the
		surveyed claims to one's own research
		5. Abstracting or synthesizing
		knowledge claims to establish a

		theoretical position or a theoretical
		framework
		6. Concluding a part of literature review
		and/or indicating transition to review of
		a different area
	3. Occupying the	1. Indicating research aims, focuses,
	research niche	research questions or hypotheses
	by announcing	2. Indicating theoretical
		positions/theoretical frameworks
		3. Indicating research design/processes
		4. Interpreting terminology used in the
		thesis
	Conclusion	1. Providing a summary of the review of
		the themes and relating the review to
		the present study
Method	1. Introducing the	1. Indicating chapter/section structure
	Method chapter	2. Providing an overview of the study
		3. Indicating theory/approach
	2. Describing data	1. Describing the sample (participants,
	collection method and	location, time, etc.)
	procedure(s)	2. Describing methods and steps in data
	COAT	collection
		3. Justifying data collection
		procedure(s)
	3. Delineating methods	1. Presenting an overview of the (data
	of data analysis	analysis) design
	·	2. Explaining specific method(s) of data
		analysis
		3. Explaining variables and variable
		measurement

		4. Justifying the methods of measuring
		variables or data analysis
	4. Elucidating data	1. Relating (or recounting) data analysis
	analysis procedure(s)	procedure(s)
		2. Justifying the data analysis
		procedure(s)
		3. Previewing results
	Referring to other studies	1. Providing background information
		2. Providing definition of terms
		3. Providing support or justification
Results	1. Introducing the	1. Providing background information or
	Results chapter	how results are presented
		2. Indicating methods used or statistical
		procedure applied
	2. Reporting results	1. Locating graphics
		2. Reporting major findings
	3. Commenting on	1. Interpreting results
	results	2. Comparing results with literature
		3. Evaluating results (including
		strengths, limitations, generalizations,
		etc. of results)
		4. Accounting for results (giving
		reasons)
	4. Summarizing results	1. Making conclusions of results
	5. Evaluating the study	1. Indicating limitations of the study
		2. Indicating significance/advantage of
		the study
	6. Deductions from the	1. Recommending further research
	(research) study	2. Drawing pedagogic implications
		3. Making suggestions

	Referring to other studies	1. Providing background information
		2. Providing definition of terms
		3. Providing support or justification
Discussion	1. Introducing the	1. Providing background information
	Discussions chapter	(such as purpose, design, research
		questions/hypotheses, etc.) or how
		discussions are presented
	2. Reporting results	1. Reporting major findings
	3. Summarizing results	1. Making conclusions of results
	4. Commenting on	1. Interpreting results
	results	2. Comparing results with literature
		3. Accounting for results (giving
		reasons)
		4. Evaluating results (including
		strengths, limitations, etc. of results)
	5. Summarizing the	1. Summarizing the study briefly
	study	
	6. Evaluating the study	1. Indicating limitations
		2. Indicating significance/advantage
		3. Evaluating methodology
	7. Deductions from the	1. Making suggestions
	(research) study	2. Recommending further research
		3. Drawing pedagogic implications
	Reference to other studies	1. Providing support or justification
Conclusions	1. Introducing the	1. Restating purpose, design, research
	Conclusions chapter	questions/hypotheses, results, or
		indicating how conclusions are presented

2. Summarizing the	1. Summarizing the study briefly	
study		
3. Evaluating the study	1. Indicating significance/advantage	
	2. Indicating limitations	
	3. Evaluating methodology	
4. Deductions from the	1. Recommending further research	
(research) study	2. Drawing pedagogic implications	
	3. Making suggestions	
Referring to other studies	1. Providing support or justification	

Furthermore, Hendrawan et al. (2022) explored move and transitivity analysis of Method, Result, and Discussion sections in research articles of novice writers through the most reputable language and linguistics journals by using the framework from Cotos et al. (2015). For this framework, its usage is motivated by the positive results produced when used to examine nine hundred research articles from thirty disciplines, including practical, natural, and social sciences as well as the humanities. The framework by Cotos et al. (2015) is presented in Table 2.5 below.

**Table 2.5**Framework of Research Article Analysis of Method, Result, and Discussion Sections (Cotos et al., 2015)

Section	Move	Step
Method	1. Contextualizing the	1. Referencing previous works
	study	2. Providing general information
		3. Identifying the methodological approach
		4. Describing the setting
		5. Introducing the subjects/participants
		6. Rationalizing pre-experiment decisions
	2. Describing the study	1. Acquiring the data
		2. Describing the data
		3. Identifying variable

		4. Delineating experimental/ study
		procedures
		5.Describing
		tools/instruments/materials/equipment
		6. Rationalizing experiment decisions
		7. Reporting incremental
	3. Establishing	1. Preparing the data
	credibility	2. Describing the data analysis
		3. Rationalizing data processing/analysis
Results	1. Approaching the	1. Providing general orientation
	niche	2. Restating study specifics
		3. Justifying study specifics
	2. Occupying the niche	1. Reporting specific results
		2. Indicating alternative presentation of
		results
	3. Construing the niche	1. Comparing results
		2. Accounting for results
		3. Explicating results
		4. Clarifying expectations
		5. Acknowledging limitations
	4. Expanding the niche	1. Generalizing results
		2. Claiming the value
		3. Noting implications
		4. Proposing directions
Discussion	1. Re-establishing the	1. Drawing on a/theoretical general
	territory	background
	•	2. Drawing on study specific background
		3. Highlighting principal findings
		4. Previewing the discussion 'road map'

2. Framing the new	1. Explicating results
knowledge	2. Accounting for results
	3. Clarifying expectations
	4. Addressing limitations
3. Reshaping the	1. Supporting with evidence
territory	2. Countering with evidence
4. Establishing	1. Generalizing results
additional territory	2. Claiming the value
	3. Noting implications
	4. Proposing directions

Lastly, Wuttisrisiriporn (2014) refered to Kanoksilapatham's (2005) study, her research intended to determine the rhetorical structure of biochemistry journal articles. She gathered sixty research publications in the aforementioned topic before deciding to use Swale's (1990) move-step analysis model. There were fifteen presented moves, three allocated to the Introduction, four allocated to the Methods, another four allocated to the Results, and the last four allocated to the Discussion. Kanoksilapatham's (2005) framework for rhetorical structure of research article introduction, methods, results, and disscussion in biochemistry is presented in Table 2.6 below.

**Table 2.6**Rhetorical Structure of Research Article Introduction, Methods, Results, and Disscussion in Biochemistry by Kanoksilapatham (2005)

Section	Move	Step	
Introduction	1. Announcing the	1. Claiming the centrality of the topic	
	importance of the field	2. Making topic generalizations	
		3. Reviewing previous research	
	2. Preparing for the	1. Indicating a gap	
	present study	2. Raising a question	
	3. Introducing the	1. Stating purpose(s)	
	present study	2. Describing procedures	

		3. Presenting findings
Methods	4. Describing materials	1. Listing materials
		2. Detailing the source of the materials
		3. Providing the background of the
		materials
	5. Describing	1. Documenting established procedures
	experimental	2. Detailing procedures
	procedures	3. Providing the background of the
		procedures
	6. Detailing equipment	
	(optional)	
	7. Describing statistical	
	procedures (optional)	
Results	8. Stating procedures	1. Describing aims and purposes
		2. Stating research questions
		3. Making hypotheses
		4. Listing procedures or methodological
		techniques
	9. Justifying	1. Citing established knowledge of the
	procedures or	procedure
	methodology	2. Referring to previous research
	10. Stating results	1. Substantiating results
		2. Invalidating results
	11. Stating comments	1. Explaining the results
	on the results	2. Making generalizations or
		interpretations of the results
		3. Evaluating the current findings
		4. Stating limitations
		5. Summarizing

Discussion	12. Contextualizing the	1. Describing established knowledge
	study	2. Presenting generalizations, claims,
		deductions, or research gaps
	13. Consolidating	1. Restating methodology (purposes,
	results	research questions, hypotheses restated,
		and procedures)
		2. Stating selected findings
		3. Referring to previous literature
		4. Explaining differences in findings
		5. Making overt claims or generalizations
		6. Exemplifying
	14. Stating limitations	1. Limitations about the findings
	of the study	2. Limitations about the methodology
		3. Limitations about the claims made
	15. Suggesting further research (optional)	

There are several other frameworks offered relating the move analysis or rhetorical analysis on the results to the discussion chapter of the research; however, because of limited space in the independent study, only four distinct frameworks were presented. In conclusion, move analysis is a type of text analysis that looks at the basic structure of research reports or articles in terms of steps and moves. It is used for academic purposes. The Results to Discussion sections of academic studies have been a key focus of genre analysis because it is so important, but it is also one of the hardest to write. The frameworks used by some researchers to gather data and analyze the structure of research results to the discussion part suitable for the research report, such as independent studies or theses, include Chen and Kuo's (2012) move-step analytical framework. Thus, the framework by Chen and Kuo (2012) is utilized for this current study.

#### 2.3 Previous Related Studies on Move Analysis of Results and Discussion Sections

This section discusses earlier research in relation to the Results and Discussion analysis derived from the research article investigation and the analysis derived from the research report (also known as a thesis).

#### 2.3.1 Research Article Results and Discussion sections

Lim (2010) identified how different disciplines and methodologies for conducting the Results section affect how often comments are made, and investigated the different types of comments in terms of the most important language techniques the writers used to convey their main communicative points in thirty research articles from applied linguistics and education fields. This current research used Swales's (1990, 2004) remarkable move-step investigation, which analyzes texts focusing on their communication goals. The results show that novices in applied linguistics ought to be pushed to write significant comments, especially step 1 (explaining the finding/s), step 2 (evaluating the findings), and step 3 (comparing findings with literature), in their RSs, since they are used in most RSs in the field. On the other hand, novices in education might be urged not to include too many evaluations (step 2) in their RSs, since most experienced writers seldom express their own opinions in their RSs. Step 3, which involves comparing the results with literature, is also more likely to be significant to applied linguists showing their findings, while educational researchers don't usually involve their opinions on the results in their RSs. The researcher further indicated that exercises which assist students to get used to the structures and language options in the Results part of the paper can assist students to understand the actual texts, which will help them figure out when and how comments are made and how communication is usually used.

Pojanapunya and Todd (2011) aimed to identify key findings in the Results and Discussion sections that could be further discussed in the dedicated Discussion part. They also explored the roles of different sections in facilitating the description of results in ten research articles published in a renowned applied linguistics journal. All findings mentioned in the discussions had codes attached and were then compared to discipline moves in the content of the discussions. The results pointed out the consistency of the amount of findings in the discussions was greater than in the results. In the discussion

section, results usually appear as summaries. They happen to be initially reported. Over fifty percent of them are involved when explaining results.

Amnuai and Wannaruk (2013) examined the rhetorical move structure of English applied linguistic research article discussions in Thai and international publications. Yang and Allison's (2003) move model was used to examine two corpora of thirty Thai and thirty international discussions. The research identified similarities and differences in move occurrence, move-ordering patterns, and move cyclicity. There is no variance in the frequency of a complicated move like Commenting on results, but their data about the steps in that move show that there is some cross-cultural variability.

Boonyuen (2017) investigated second-language research article discussion section textual organization. Swales' framework was used to analyze one hundred and three research article discussion parts. The findings from the analysis indicate that research discussion sections written in a second language can be broken down into eight Moves. In addition, the finding addressed that the primary purpose of the discussion part is to comment on research results.

Ulya (2022) outlined the structure of the twenty scientific discussion sections seen in research publications published in reputable journals. The data in this study was evaluated using Yang and Allison's (2003) Models. According to the study findings, there are three main moves that writers usually involve: Move 2 (reporting results), Move 4 Step a (interpreting results), and Move 4 Step b (comparing results with literature). In addition, the suggestion is for future study on rhetorical moves analysis and similar research could still be done in other areas.

#### 2.3.2 Thesis Results and Discussion sections

Chen and Kuo (2012) analyzed the content and organization of twenty applied linguistics master's theses. The researchers developed and modified a coding scheme for the analysis of whole theses including abstract, introduction, literature review, method, results, discussion, and conclusions. The framework by Yang and Allison (2003) served as the original detection scheme for the sections of Results, Discussions, and Conclusions. The study findings revealed that all theses outline major findings and provide background information or explain how results are given. In addition, the Results and Discussion sections of the examined theses contain similar moves and

steps as those proposed in the research article investigation by Yang and Allison (2003), but including extra moves and steps, such as the independent move named Reference in other studies and two recommended steps for Move 1 (Introducing the chapter), since the thesis provides more thorough information than the research paper does. This study also compared and contrasted master's theses, research papers, and doctoral dissertations, looking for commonalities and variations among them.

Nguyen and Pramoolsook (2015) explored the move-step organization of the Results and Discussion chapters of twenty-four master theses authored by Vietnamese graduate students. The framework by Chen and Kuo (2012) and the discourse-based interviews with the thesis authors and supervisors were used to collect data in their study. The research indicated that the Vietnamese thesis authors created analysis based on their perceptions of their communication functions. The structure of the introduction section, results report, and summary section tend to show how the texts are put together in the investigated dataset. The study revealed that the thesis writers reported results with few instances of discussing them due to the fact that the writers did not have sufficient information for discussing their results. The study findings also suggested that non-native English writers should be given clear instructions on the rhetorical structures of the Results and Discussion genres. They should also pay attention to how a certain genre is written within a particular discourse community.

Massoum and Yazdanmehr (2019) analyzed the rhetorical structure of twenty MA Discussion sections of English language teaching (ELT) theses produced by Iranian students and twenty Discussion sections authored by native English students by using the framework of Yang and Allison (2003). Most English-speaking TEFL study writers did a much better job of summarizing the study in the Discussion section than did Iranian writers. The results also demonstrated that Iranian TEFL graduate writers are more reluctant to highlight limits than native English authors.

Wuttisrisiriporn and Tangkiengsirisin (2020) reported on the results of MA theses move analyzation Discussion chapters written by Thai and native English students as part of English language teaching (ELT). Purposive sampling gathered thirty Thai and thirty native English MA theses. Yang and Allison (2003) move-step analytical framework was used to code all Discussion chapters. The results showed that Thai and native English graduates followed framework elements. Nonetheless, several

differences were noted, notably in Move 6 *Evaluating the study* and Move 7 *Deductions* from the research.

The summary of previous studies on move analysis of the Results and Discussion sections is shown in Table 2.7.

**Table 2.7**Summary of Previous Studies on Move Analysis of Results and Discussion Sections

Writer	Text	Framework/ Data	Important feature and
		analysis	result
Lim (2010)	Results and	Swales's (1990,	Most frequent moves in
	Discussion	2004) frameworks	Applied linguistics RSs:
	sections in 30		explaining the finding/s,
	research articles		evaluating the findings,
	in applied		comparing findings with
	linguistics and		literature
	education fields		
			Not frequent moves in
			Educational RSs:
			evaluating the findings
			Have tasks that help
			students learn the Results
			section's structures and
			language.
Pojanapunya	Results and	Code individual	Discussions had more
and Todd (2011)	Discussion	results: the	findings than the results
	sections in 10	sequence they	part.
	research articles	appear in the	
	published in a	article	Results are summarized i
	renowned		the discussion.

	applied	Categorize and	
	linguistics	code content of	Over half of the findings
	journal	discussions: 9	used to explain the results.
		categories (Swales	
		& Feak, 1994;	
		Hopkins &	
		Dudley-Evans,	
		1988; Peacock,	
		2002)	
Amnuai and	Discussion	Yang and	Most frequent move:
Wannaruk	sections in 30	Allison's (2003)	Commenting on results
(2013)	Thai and 30	framework	
	international		Initial move for Thai RAs:
	research articles		Reporting results
	in applied		
	linguistics		Initial move for
			international Ras:
			Background information
			Ending move for Thai
			RAs: Deduction from the
			research and Commenting
			on results
			Ending move for
			international RAs:
			Commenting on results
			Some cross-cultural
			variability

**Boonyuen** Discussion Swales' framework 8 moves found (2017) sections in 103 second-language Most frequent move: research articles Moves 1(Providing from 5 reputable background information), 4(Reporting results), journals 5(Commenting on results), 7(Evaluating the study), 8 (Making deductions) Main function of this section: To comment on results Typical sequences: Moves 4-5 (Reporting results-Commenting on results), 4-5-8 (Reporting results-Commenting on results-Making deductions), 1-4-5 (Providing background information- Reporting results- Commenting on results), and 7-8 (Evaluating the study-Making deductions) An unusual move: Move 2 (Managing the section)

Ulya (2022)	Discussion sections in 20 scientific research articles published in reputable journals	Yang and Allison's (2003) framework	Most frequent move:  Moves 2(Reporting results), 4a(Interpreting results), 4b(Comparing results with literature)  Core move in the discussion: Move 4(Commenting on results)
			An unusual move: Move 6 (Evaluating the study)
Chen and Kuo (2012)	Complete theses for 20 master's theses in applied linguistics	Yang and Allison's (2003) modified frameworks for Results,	Results: describe important findings and background information or explain how results are given.
		Discussion, and Conclusion	Discussion and Conclusions: contain similar moves and steps as research articles but include more detailed moves and steps.
Nguyen and	Results and	Chen and Kuo's	Writers constructed for
Pramoolsook (2015)	Discussion chapters of 24 master theses in	(2012) modified framework	their perceived communicative purposes
	TESOL authored	The discourse- based interviews	Textual cycles matter

	by Vietnamese graduate students	with actual thesis writers and	Writers' insufficient knowledge about Results
		supervisors	and Discussion genres
Massoum and	Discussion	Yang and	Native (English) speaker:
Yazdanmehr	sections in 20	Allison's (2003)	to provide background
(2019)	native (English)	framework	information, to comment
	and 20 non-		on the results, to
	native (Iranian)		summarize the study, to
	English		indicate limitations
	speakers' master		
	theses in TEFL		Non-native (English)
			speaker: to report the
			results and summarize the
			results
Wuttisrisiriporn	Discussion	Yang and	Most frequent move:
and	sections in 30	Allison's (2003)	Moves 1(Background
Tangkiengsirisin	Thai and 30	framework	information), 2(Reporting
(2020)	native English		results), 4(Commenting on
	master theses in		results), 7(Deductions from
	ELT		the research)
			MA writers should use
			Move 1 (Background
			information) to provide
			overall information.
			Thai students: less flexible
			in Move 6(Evaluating the
			study).

The table provides a summary of nine studies that analyzed the Results and Discussion sections of research articles and master theses in various fields, such as applied linguistics, ELT, TEFL, second language, education and scientific research written by authors from different cultural and linguistic backgrounds. The studies used different frameworks and data collection methods to identify the moves or rhetorical patterns used in the Results and Discussion sections and the writers' perceived communicative purposes. Commenting on the results is the most frequent move identified in the Results and Discussion sections across studies, followed by providing background information, summarizing the study, indicating limitations, and making deductions from the research. However, there is some variation between cultures, and the typical order of moves is explained in the Discussion sections, as well as some unusual moves, such as Move 2 in Boonyuen (2017) and Move 6 in Ulya (2022). The studies also highlight some challenges faced by writers while composing the Results and Discussion sections, such as insufficient knowledge about the structure, language, genre, textual cycles, and the purpose of the moves. For example, Lim (2010) suggested that exercises that help students learn the Results section's structures and language should be provided. Nguyen and Pramoolsook (2015) found that Vietnamese graduate students struggled to differentiate between the Results and Discussion chapters. Massoum and Yazdanmehr (2019) revealed that non-native (Iranian) English master students tended to report the results rather than comment on them. There are several similarities and differences among the studies summarized above. Regarding similarities, all nine studies investigate results and/or discussion sections in academic writing. Five out of nine studies, Chen and Kuo (2012), Amnuai and Wannaruk (2013), Massoum and Yazdanmehr (2019), Wuttisrisiriporn and Tangkiengsirisin (2020), Ulya (2022) used or modified Yang and Allison's (2003) framework to analyze the moves and steps in the Results and Discussion sections. Commenting on results is a common move found in all nine studies. Some studies found that there is cross-cultural variability in the moves used in discussion sections, with differences between Thai and international writers, and between native and non-native English speakers. Insufficient knowledge or understanding of the structure, language, genre, or moves involved in the Results and Discussion parts are common issues identified in several studies (Lim, 2010; Nguyen & Pramoolsook, 2015; Wuttisrisiriporn & Tangkiengsirisin, 2020). Regarding differences, the studies used different existing frameworks to analyze the Results and Discussion sections (such as Chen & Kuo, 2012; Yang & Allison, 2003; Swales, 1990, 2004). Nguyen and Pramoolsook (2015) included the discourse-based interviews with actual thesis writers and supervisors for data collection whose results gave insights. Also, the studies explored different types of academic writing, including research articles and master's theses in various fields. There is some variation in the most frequent or core moves discovered in the research, as well as the typical sequences of moves.

After reviewing the aforementioned structure analysis studies, it is evident that there is a limited amount of rhetorical structure analysis in the Results and Discussion chapters of English master independent study project in the program of Career English for International Communication (CEIC) studies that demonstrates how Thai MA postgraduates compose their research report Results and Discussion chapters. Many of the previous research studies in rhetorical structure analysis on Results and Discussion chapters were conducted using theses or research articles that were published, rather than in the independent study, which also involves performing research and generating original work at the graduate level. In addition, Chen and Kuo's (2012) frameworks for the combined Results and Discussion correspond to the current study for three main reasons. Initially, the frameworks had been modified to fit into the research report genre (e.g., independent study, thesis, or dissertation). The second reason is that they have been used to analyze the many parts of the theses and the complete thesis in the previous research, for example, Introduction (Ebadi et al., 2019), Results and Discussion (Nguyen & Pramoolsook, 2015), the complete thesis (Chen & Kuo, 2012). The third reason is that their frameworks contain a wide variety of steps that can be utilized to evaluate clear and precise moves.

#### **CHAPTER 3**

### RESEARCH METHODOLOGY

This chapter describes the research methodology of the study. It consists of four major sections: (1) collection of research corpus; (2) move-step analytical framework for master's research report Results and Discussion chapter; (3) data analysis procedures; and (4) inter-coder reliability analysis.

#### 3.1 Collection of Research Corpus

The corpus analyzed in this study consisted of twenty master's independent study Results and Discussion chapters in the program of CEIC (Career English for International Communication) authored by Thai master's degree students and submitted to a public university in Thailand. These research reports have been made accessible and can be accessed online through the database of the university.

The researcher entered the online database provided by the university in order to gather all of the texts that are included in the corpus. In order to look for CEIC master's independent studies written in English, the researcher first set the category to "Faculty/College", then typed in the key phrase "Language Institute", and set the collections to "University Theses", and lastly set the beginning year to 2021 and the finished year to 2022 in their search terms. Then, the researcher purposively selected the study papers that were published in 2021. Purposive sampling was used throughout the data gathering procedure.

Throughout the data gathering procedure, the approach of purposive sampling was used. In other words, all research reports published in 2021 by CEIC graduates follow the conventional five-chapter research report format as follows: 1) Introduction, 2) Literature review, 3) Research Methodology, 4) Results and Discussion / Results, and 5) Conclusions and Recommendations / Discussion, Conclusions, and Recommendations. The headings of each chapter can be different and varied, but their communication purpose has to be purposefully focused to the five chapters listed. Particularly, consider only chapter four under the heading 'Results and Discussion'. All 'Results and Discussion' sections in this dataset (i) were positioned right after the

Research Methodology' chapter, (ii) included detailed results/findings, discussion of the results/findings, as well as other relevant details, and (iii) were followed by a section titled 'Conclusions and Recommendations' (or Summary, Implications, and Recommendations), in accordance with the key elements outlined in Chen and Kuo's (2012) and Nguyen and Pramoolsook's (2015) analytical frameworks, which would be discussed in the next section. Nonetheless, a small number of independent study reports also included a discussion section in chapter five. Seventy-four percent of CEIC independent studies published in 2021 were found to have the heading for chapter four as "Results and Discussion". The fourth chapter of research reports under the heading 'Results' were removed due to the fact that this study intended to examine the combined Results and Discussion section. In this study, theses, dissertations, and research papers in other fields (such as ELT) were excluded. All the independent studies selected into the analysis were written in English language, published in the year of 2021.

# 3.2 Move-Step Analytical Framework for Master's Research Report Results and Discussion Chapter

Researchers in the field of second language writing have provided a wide range of analytical frameworks for the move-step investigation of the Discussion chapter/section (Chen & Kuo, 2012; Cotos et al., 2015; Kanoksilapatham, 2005; Yang & Allison, 2003). The current research, nevertheless, followed the analytical frameworks of the Results and Discussion sections suggested by Chen and Kuo (2012) as well as the suggested combination of framework ideas for the combined Results and Discussion section of the research report by Nguyen and Pramoolsook (2015). In Table 3.1, the moves and steps of the chosen frameworks for Results and Discussion sections are described.

**Table 3.1**Chen and Kuo's (2012) Move-Step Analytical Frameworks for MA Research Report Results and Discussion sections

Section	Move	Step	

Results	1. Introducing the Results	1. Providing background information or
	chapter	how results are presented
		2. Indicating methods used or statistical
		procedure applied
	2. Reporting results	1. Locating graphics
		2. Reporting major findings
	3. Commenting on results	1. Interpreting results
		2. Comparing results with literature
		3. Evaluating results (including
		strengths, limitations, generalizations,
		etc. of results)
		4. Accounting for results (giving
		reasons)
	4. Summarizing results	1. Making conclusions of results
	5. Evaluating the study	1. Indicating limitations of the study
		2. Indicating significance/advantage of
		the study
	6. Deductions from the	1. Recommending further research
	(research) study	2. Drawing pedagogic implications
		3. Making suggestions
	Referring to other studies	1. Providing background information
		2. Providing definition of terms
		3. Providing support or justification
		2.110 raing support of Justification

	4 7 . 1	1.5 11 1 1 1 0 1
Discussion	1. Introducing the	1. Providing background information
	Discussions chapter	(such as purpose, design, research
		questions/hypotheses, etc.) or how
		discussions are presented
		1. Reporting major findings
	2. Reporting results	
		1. Making conclusions of results
	3. Summarizing results	
		1. Interpreting results
	4. Commenting on results	2. Comparing results with literature
		3. Accounting for results (giving
		reasons)
		4. Evaluating results (including
		strengths, limitations, etc. of results)
		1. Summarizing the study briefly
	5. Summarizing the study	
		1. Indicating limitations
	6. Evaluating the study	2. Indicating significance/advantage
		3. Evaluating methodology
		1. Making suggestions
	7. Deductions from the	2. Recommending further research
	(research) study	3. Drawing pedagogic implications
		1. Providing support or justification
	Reference to other studies	

The updated models for examining the Results and Discussion by Chen and Kuo (2012) (Table 3.1) were used to figure out what moves were being made in this study. In addition to a full move-step scheme for investigating each thesis chapter, their

updated frameworks also have a new step that lets each section refer to other research on its own, which was not present across all prior studies of move-steps.

However, the presence of twenty combined Results and Discussion chapters in 2021's Independent Studies by CEIC graduates encouraged the researcher to combine the frameworks for analyzing the combined section of Results and Discussion. The distinction between the frameworks of Results and Discussion by Chen and Kuo (2012) is the placement of the Commenting on Results (Move 3), which comes before Summarizing results (Move 4) in the Results framework, whereas this move follows Summarizing results (Move 4) in the Discussion framework and the addition of Summarizing the study (Move 5) in the Discussion. In order to analyze the combined Results-Discussion chapters, Nguyen and Pramoolsook (2015) suggested that retaining the position of the initial four moves of the Results model and combining those with the final four moves of the Discussion model, thus resulting in an eight-move model for the combined Results and Discussion sections. In addition, Nguyen and Pramoolsook (2015) used this combined model to analyze the combined Results and Discussion sections of master theses in TESOL authored by Vietnamese graduates. In Table 3.2, the moves and steps of the combined frameworks for the combined Results and Discussion sections are described.

**Table 3.2**The Combined Frameworks for the Combined Results-Discussion Chapter based on Chen and Kuo's (2012) frameworks

Moves	Steps
(R) 1. Introducing the Results-	A: Providing background information or how
Discussion chapter	results are presented
	B: Indicating methods used or statistical
	procedure applied
(R) 2. Reporting results	A: Locating graphics
	B: Reporting major findings

(R) 3. Commenting on results	A: Interpreting results
	B: Comparing results with literature
	C: Evaluating results (including strengths,
	limitations, generalizations, etc. of results)
	D: Accounting for results (giving reasons)
(R) 4. Summarising results	A: Making conclusions of results
(D) 5. Summarising the study	A: Summarising the study briefly
(D) 6. Evaluating the study	A: Indicating limitations
	B: Indicating significance/advantage
	C: Evaluating methodology
(D) 7. Deductions from the	A: Making suggestions
(research) study	B: Recommending further research
	C: Drawing pedagogic implications
(D) Reference to other studies	A: Providing support or justification

This study utilized the frameworks of Chen and Kuo (2012) for its move-step analysis for three main reasons. First, Chen and Kuo's (2012) frameworks were made by analyzing research theses regarded as a research report comparable to those of independent studies, the dataset for this study. The second reason is that every move in their framework includes a large range of the steps used in order to consider making clear and specific moves. The third reason is that their frameworks have been used in other studies of rhetorical move analysis of each section of the research report and the whole thesis in related fields, for example, master thesis Introduction (Ebadi et al., 2019), master thesis Results and Discussion (Nguyen & Pramoolsook, 2015), and the whole thesis (Chen & Kuo, 2012).

As a result, the move-step frameworks for the Results and Discussion sections that Chen and Kuo (2012) presented and the suggested combination of framework ideas

for the combined Results and Discussion section by Nguyen and Pramoolsook (2015) were suitable for move-step analysis of MA Independent Study Results and Discussion in the program of Career English for International Communication (CEIC) for the intention of the present research.

#### 3.3 Data Analysis Procedures

To organize the corpus, each independent study was given a unique name from IS1 to IS20 for quick retrieval and to keep the authors' details confidential. Then, the Results and Discussion sections of these independent studies were copied and put into a separate file. Once a total of twenty master's independent study collections were finished, every word in each independent study's Results and Discussion section was counted. The intention was to provide information on the size of the corpus. The word count for each dataset is shown in the following Table 3.3.

**Table 3.3**Word Count of the Corpus

Dataset	IS1	IS2	IS3	IS4	IS5	IS6	IS7	IS8	IS9	IS10
Words	1,382	920	3,498	4,673	4,200	7,283	2,591	3,382	3,146	2,744
Dataset	IS11	IS12	IS13	IS14	IS15	IS16	IS17	IS18	IS19	IS20
Words	2,860	4,697	2,120	2,339	2,857	3,125	7,012	1,359	2,663	7,261
$\mathbf{Max} = 7,$	,283	Min =	920	Tota	1 = 70,1	12	Averag	e = 3,50	6	

The total word count for the Results and Discussion sections of CEIC independent study corpus found that 70,112 words were implemented. IS6 employed the greatest number of words, 7,283, while IS2 employed the lowest number of words, 920. The calculated average word count per the IS Results and Discussion chapter was 3,506 words.

Afterwards, move-step analysis was conducted. Before going into the coding process, the researcher read through the corpus' Results and Discussion chapters to get a concept of their overall communication functions. The researcher manually coded the texts and recognized moves and steps according to the combined frameworks for analyzing the combined Results and Discussion by Chen and Kuo (2012) (Table 3.2).

An inter-rater, who is an instructor and researcher in the area, was invited to check and approve the analysis of the researcher for all twenty independent study Results and Discussion chapters in order to improve coding reliability and consistency. After that, a general outline of the overall move-step patterns of the whole corpus was produced. Following that, the dataset was put through several move-step detection and categorization procedures. The purpose of the move-step categorization was to identify whether a particular move-step used in the corpus was sufficiently qualified to be classed as obligatory, conventional, or optional.

Afterwards, all of the moves were categorized into different frequency ranges according to the occurrence ranges, in accordance with the criteria that were presented by Kanoksilapatham (2005). For a move to be determined obligatory (N = 100%), it must appear in every independent study Results and Discussion chapter gathered. A move is classified as conventional (N  $\geq$  60%) if it does not present in all independent studies, but it does appear in at least 60% of the corpus or more. The last requirement is that the frequency of a move would fall below 60% of the corpus in order to be viewed as optional (N < 60%). In addition, all the move-step occurrences were identified to provide the frequency and communicative pattern.

## 3.4 Inter-Coder Reliability Analysis

An investigation of coding reliability was performed to show that each part of text corresponds to the textual territory of sections to an exceptionally high level of consistency (Kanoksilapatham, 2005). To assess the accuracy and consistency of the moves and steps originally recognized by the author of the present study, an inter-rater was invited to assist in analyzing the coding reliability of the move-step analysis. All datasets were submitted to an inter-rater for reliability assessment. First, the researcher finished coding on the coding sheet. The completed coding sheet was then submitted to the inter-rater to check and approve all the move-step occurrences, sequence, and pattern. In this investigation, the inter-rater tried to determine if the researcher could adequately demonstrate her coding skills. The reason for this is due to the fact that the experience in this field of the inter-rater was greater than that of the researcher. The inter-rater is both an instructor at a university and a researcher who specializes in the analysis of rhetorical moves. It was essential for the inter-rater to validate the reliability

and performance of the researcher's coding abilities, who was a student working toward a master's degree.

The current research used percentage agreement to determine the degree of qualitative consistency for assessing reliability and providing comparative confirmation of the coding analysis that existed between two different coders. Roaché (2017) mentioned that percentage agreement is an intercoder reliability method based on the degree of agreement between the two separate evaluators regarding coded units. Percentage agreement is the most common method to measure intercoder reliability, and it serves best for a minimum measurement level. Numerous researchers concur that the percentage of agreement ought to value from 75% to 90% in order to reach a satisfactory assessment of agreement (Hartmann, 1977). Graham et al. (2012) provided the criteria regarding the percentage agreement, that it would be satisfactory if the degree of absolute agreement was nearer to 75%; on the other hand, precise and nearby agreement needs to be close to 90% which is thought to be ideal for the use of ratings in meaningful manners. The results of inter-coder reliability are presented in the following Table 3.4. The table contains information regarding code units, units of agreement and disagreement between the two different coders, and percentage agreement.

**Table 3.4**Percentage Agreement

Move	Unit Agreement		Disagreement	Percentage	
				Agreement	
Introducing the chapter	115	100	15	86.96	
Reporting results	567	557	10	98.24	
Commenting on results	299	287	12	95.99	
Summarizing results	28	26	2	92.86	
Summarizing the study	7	6	1	85.71	
Evaluating the study	4	4	0	100	
Deductions from the study	1	1	0	100	
Reference to other studies	82	80	2	97.56	

|--|

Table 3.4 shows the agreement level of each move between the researcher and the inter-rater. The average percentage of the entire measurement is 96.19% which can be interpreted to mean that there was ideal agreement between the researcher and the inter-rater in all significant respects.



### **CHAPTER 4**

### RESULTS AND DISCUSSION

This chapter intends to present study results associated with the previously mentioned research questions 1) What are the occurrences of the moves found and patterns in the master's research report Results and Discussion written by Thai postgraduate students? and 2) What are the occurrences of the steps found and patterns in the master's research report Results and Discussion written by Thai postgraduate students? From the analysis, the research findings involve the following: 1) the move occurrences in the IS Results and Discussion chapter, as well as 2) the steps occurrences in the IS Results and Discussion chapter.

# 4.1 The Occurrences of the Identified Moves in the Results and Discussion Chapter

The first research question attempts to determine the move occurrences and patterns of the text of the CEIC master's independent study Results and Discussion written by Thai postgraduate students. The corpus of all independent study Results and Discussion sections was analyzed to identify move found and its sequence to answer this question.

All twenty CEIC independent study Results and Discussion chapters were collected and analyzed using Chen and Kuo's (2012) move-step analytical frameworks and the combined framework ideas for the combined Results and Discussion sections from Nguyen and Pramoolsook (2015). The investigation of the current move analysis in twenty IS Results and Discussion showed that the entire move occurrence in this corpus made use of the moves that were outlined in the analytical frameworks proposed by Chen and Kuo (2012) and the combined framework ideas for the combined Results and Discussion chapters from Nguyen and Pramoolsook (2015). All three of these studies analyzed data from the same genre dataset, namely the research report (thesis and independent study) and applied similar analytical frameworks to analyze the data. There was a total of eight different moves discovered, including the seven moves, as well as the one independent move called REF (Reference to other studies).

The move occurrences for the combined Results and Discussion Chapters are provided below.

The Move Occurrences in the combined Results and Discussion Chapters

- (R) Move 1: Introducing the Results-Discussion chapter
- (R) Move 2: Reporting results
- (R) Move 3: Commenting on results
- (R) Move 4: Summarizing results
- (D) Move 5: Summarizing the study
- (D) Move 6: Evaluating the study
- (D) Move 7: Deductions from the (research) study
- (D) REF: Reference to other studies

*Note:* R = Results section / D = Discussion section

Aside from the moves highlighted above, going into further details regarding the overall utilization of the move variance, numbers and percentages of all IS Results and Discussion chapters for moves found were performed. All the moves found were considered to be obligatory, conventional, and optional moves following the frequency ranges using the suggested criteria of Kanoksilapatham (2005), that an obligatory move occurs in 100% of the corpus, a conventional move occurs in 60-99% of the corpus, and an optional move occurs less than 60% of the corpus. Table 4.1 is constructed to display the wide range of moves identified in this corpus of IS Results and Discussion chapters.

**Table 4.1**The Move Occurrence in the IS Results and Discussion Chapters

Moves	No. of RDs for	Percentage of	Classification
	<b>Moves found</b>	RDs for Moves	
	(n=20)	found (%)	
1. Introducing the chapter	20	100	Obligatory
2. Reporting results	20	100	Obligatory
3. Commenting on results	20	100	Obligatory
4. Summarising results	13	65	Conventional

5. Summarising the study	5	25	Optional
6. Evaluating the study	2	10	Optional
7. Deductions from the study	1	5	Optional
Reference to other studies (REF)	17	85	Conventional

*Note:* n = the total number of IS Results-Discussion chapters used for this analysis

Table 4.1 shows the numbers and percentages of all IS Results and Discussion chapters for moves found. Regarding the combined frameworks for analyzing the combined Results and Discussion chapters, the numbers and percentages of all IS Results and Discussion chapters for moves found revealed that Moves 1-3 (Introducing the results, Reporting results, and Commenting on results) are obligatory because they were found in all 20 IS Results and Discussion chapters (100%), followed by REF (Reference to other studies), which is conventional because it was found in 17 out of 20 IS Results and Discussion chapters (85%), and Move 4 (Summarising results) is also conventional because it was presented in 13 out of 20 IS Results and Discussion chapters (65%), and Moves 5-7 (Summarising the study, Evaluating the study, and Deductions from the study) are optional because they were presented in 5, 2, and 1 out of 20 IS Results and Discussion chapters (25%, 10%, and 5%), respectively.

The results suggested that IS authors compiled their results-discussion chapters, which belong to chapter four in their independent studies, by introducing the chapter (Move 1), reporting the results (Move 2), and commenting on them (Move 3). This finding is consistent with the results proposed by Nguyen and Pramoolsook (2015), who found that Vietnamese thesis authors were likely to introduce the results-discussion chapter, report results, and comment on them, with all three moves occurring in 100% of their thesis results-discussion corpus. Within the particular Results section, Chen and Kuo (2012) stated that the results in theses prioritize reporting results (Move 2) and commenting on them (Move 3), whereas thesis writers as well prefer to include background information (Move 1) for the delivery of results, which is in accordance with this study's finding. When it comes to Reference other studies (REF) and Summarizing results (Move 4), as these were conventional moves in the IS results-discussion corpus, it can be seen that IS writers typically associate these two moves with other moves to provide support or justification, or to draw conclusions from

results. In contrast to the findings provided by Nguyen and Pramoolsook (2015), whose theses authors reported the Reference to other studies (REF) as an obligatory move and the Summarizing results (Move 4) as an optional move in their combined results-discussion corpus. These differences can be indicated by the fact that authors of Vietnamese theses were notably more inclined to provide references to other studies than authors of independent studies, which might be related to the lengthier and more elaborately presented research reports. On the other hand, this research reported that Summarizing the study (Move 5), Evaluating the study (Move 6), and Deductions from the study (Move 7) were optional moves. This may be because these moves coincide with those in the upcoming chapter, which is the Conclusion and Recommendation chapter. Therefore, the first three moves in the Results-Discussion chapter can be viewed as illustrating its main rhetorical purposes. REF and Move 4 can be associated with previous moves, while Moves 5 through 7 can be related to the following chapter.

Considering that Moves 1–3 have a frequency of occurrence of one hundred percent each, as well as REF and Move 4, which have a frequency of second and third highest, respectively, this has led to the interest associated with the move sequence pattern that occurs in the Results-Discussion chapter of the IS writers. The sequence of move occurrences in all twenty of the IS Results-Discussion chapters is shown below in order to reveal the communicative intention of the IS writers for the Results-Discussion chapters and to figure out rhetorical patterns that they utilized throughout the sections. Table 4.2 is presented to show the move sequence in the twenty IS Results and Discussion chapters.

Table 4.2

The Sequence Pattern of Moves in the twenty IS Results and Discussion chapters

IS No.	Move Sequence									
1.	M1,	M2,	M3,	M4,	M1,	M2,	M1,	M3,	REF,	M3
2.	M1,	M2,	M3,	M2,	M3					
3.	M1,	M2,	M4,	M2,	M3,	M1,	M3,	M4,	M3,	REF,
		M3,	M2,	M3,	M4					

4.	M1,	M2,	M3,	REF,	M2,	M3,	M1,	M2,	REF,	M3,
		M1,	M2,	M3,	M4					
5.	M1,	M2,	M3,	M2,	REF,	M3,	M2,	M3,	REF,	M3,
		M1,	REF,	M3,	REF,	M4				
6.	M1,	M2,	M3,	M4,	M2,	M3,	M4,	M1,	M4,	M3,
		M4,	M2,	M3						
7.	M5,	M1,	M2,	M5,	M2,	M6,	REF,	M6,	M4,	M3,
		M2,	M3,	M4,	M7					
8.	M1,	M2,	M3,	REF,	M2,	M1,	M2,	M3,	M2,	REF,
		M2,	M3,	M4,	REF,	M4				
9.	M1,	M2,	M4,	M6,	REF,	M3,	M5,	M3,	REF,	M3,
		M6								
10.	M1,	M2,	M1,	M2,	M3,	REF				
11.	M1,	M2,	M3,	REF						
12.	M1,	M2,	REF,	M3,	REF,	M3,	M2,	M3,	M1,	M2,
		M3,	REF,	M2,	M3					
13.	M1,	M2,	M3,	REF,	M3					
14.	M1,	M2,	M3,	REF,	M2,	M3,	M2			
15.	M1,	M2,	M3,	M2,	M4,	M3,	M1,	M3,	REF,	M3
16.	M1,	M2,	M3,	M4,	M1,	M2,	M5,	M3,	REF,	M3
17.	M1,	M2,	M1,	REF,	M2,	REF,	M2,	M3,	M1,	M2,
		M3,	M2,	M4,	M2,	REF,	M2,	M3,	M1,	M2,
		M3,	M4							
18.	M1,	M2,	M5,	M3,	REF,	M3				
19.	M1,	M2,	M3,	M2,	M4,	M1,	M2,	M3,	REF,	M3,
		M4,	M3,	REF,	M5					
20.	M1,	M2,	M3,	M4,	M2,	M4,	M2,	M3,	M1,	M2,
		M3,	REF,	M3						

The results of this investigation reveal that 95% of IS Results-Discussion chapters begin with Move 1 (Introducing the Results-discussion chapter) and only 5% begin with Move 5 (Summarizing the study). And after the first move was presented,

Move 2 (Reporting results) was frequently followed in the majority of the IS Results-Discussion Chapters, and Move 3 (Commenting on results) was usually connected with Move 2 (Reporting results). As well as Move 4 (Summarising results) and REF (Reference to other studies) that usually linked to move 3 (Commenting on results). In addition, Move 3 (Commenting on results) often occurred as a closing move in 45% of IS Results-Discussion chapters. Move 4 (Summarising results) occurred as a closing move in 25% of the corpus. REF (Reference to other studies) occurred as a closing move in 10%, while Move 2 (Reporting results), Move 5 (Summarizing the study), Move 6 (Evaluating the study), and Move 7 (Deductions from the study) occurred as closing moves in 5% each of the corpus. From the provided results, the three most common rhetorical patterns found for the IS Results-Discussion chapter are shown in figure 4.1 below.

Figure 4.1

Common Move patterns in the IS Results-Discussion Chapters

Pattern 1	Pattern 2	Pattern 3
Move 1	Move 1	Move 1
Move 2	Move 2	Move 2
Move 3 <b>♣</b>	Move 3	Move 3
	Move 4	REF <b>▼</b>

As represented in Figure 4.1, it can be inferred that the IS authors intended to begin the chapter with Move 1 (Introduction to the Results-Discussion chapter), as was the case in the majority of instances of the corpus, by providing background information, describing how results are presented, and/or indicating the methods used or statistics applied, followed by Move 2 (Reporting results) and Move 3 (Commenting on results). It is apparent that each pattern needs to include these three obligatory moves (Moves 1-3), but it was discovered in pattern 2 that these first three moves are frequently followed by Move 4, which is known to provide a conclusion of the results for each section of the results before moving on to the next section of the results. In addition, pattern 3 was discovered, which showed that the first three moves were also often followed by REF (Reference to other research) by offering support or

justification after commenting on the findings. This was shown to be a regular occurrence. In the IS Results-Discussion chapter, it can be concluded that the IS authors preferred to begin with an introduction, then report the results and comment on them, and then conclude with a summary of the results or a reference to other studies. Consequently, the move-step occurrences are described in the upcoming section.

In conclusion, a general outline of the incidence of move structure was constructed throughout all twenty IS Results and Discussion chapters. All the moves that occurred corresponded with the composition that had been identified within the integrated analytical frameworks. The authors of the IS intended to present the results of their study and discuss their findings by using two main communicative moves (Moves 2 and 3) to convey the entire chapter. Move 1 is usually employed as the opening move for this chapter, followed by Move 2 and Move 3 which are considered as the central moves for this combined chapter of Results and Discussion. In addition, Move 4 and REF are likely to be found following Move 3 due to the fact that the IS authors tended to provide support or justification by referring to other studies in the field and to draw conclusions of results before moving on to report the next results. Moves 5-7 were found with minimal frequencies in the IS Results and Discussion chapters for a variety of communication-related reasons.

## 4.2 The Move-Step Occurrences in the IS Results and Discussion chapter

The first and second research questions attempt to investigate the move-step occurrences and patterns of the text of the CEIC master's independent study Results-Discussion section written by Thai postgraduate students. The corpus of all independent study Results and Discussion sections were analyzed to identify moves, steps, and the move-step cyclic pattern to answer the proposed questions.

All twenty CEIC independent study Results and Discussion chapters were collected and analyzed using Chen and Kuo's (2012) move-step analytical framework, and the combined framework ideas for the combined Results and Discussion sections from Nguyen and Pramoolsook (2015). The analyzed results provide an overall picture of the occurrences of move-step in the entire CEIC independent study Results and Discussion chapters. The analysis revealed that the majority of the corpus employed the moves and steps illustrated in the analytical framework proposed by Chen and Kuo

(2012). Moves and steps found were considered to be obligatory, conventional, and optional moves following the frequency ranges using the suggested criteria of Kanoksilapatham (2005) that an obligatory move occurs in 100% of the corpus, a conventional move occurs in 60-99% of the corpus, and an optional move occurs less than 60% of the corpus. Table 4.3 is constructed to display the wide range of moves and steps identified.

**Table 4.3** *The Occurrences of Entire Moves and Steps in the IS Results and Discussion Chapter* 

Moves & Steps	No. of RDs	Percentage of	Classification	
	showing	RDs showing		
	Moves and	Moves and		
	Steps	Steps (%)		
	(n=20)			
1. Introducing the chapter	20	100.00	Obligatory	
A: Providing background information or	20	100.00	Obligatory	
how results are presented				
B: Indicating methods used or statistical	17	85.00	Conventional	
procedure applied				
2. Reporting results	20	100.00	Obligatory	
A: Locating graphics	20	100.00	Obligatory	
B: Reporting major findings	20	100.00	Obligatory	
3. Commenting on results	20	100.00	Obligatory	
A: Interpreting results	18	90.00	Conventional	
B: Comparing results with literature	17	85.00	Conventional	
C: Evaluating results (including strengths,	7	35.00	Optional	
limitations, generalisations, etc. of results)				
D: Accounting for results (giving reasons)	11	55.00	Optional	
4. Summarising results	13	65.00	Conventional	
A: Making conclusions of results				
5. Summarising the study	5	25.00	Optional	

A: Summarising the study briefly						
6. Evaluating the study	2	10.00	Optional			
A: Indicating limitations	1	5.00	Optional			
B: Indicating significance/advantage	1	5.00	Optional			
C: Evaluating methodology	1	5.00	Optional			
7. Deductions from the study	1	5.00	Optional			
A: Making suggestions	1	5.00	Optional			
B: Recommending further research	0	0.00	-			
C: Drawing pedagogic implications	0	0.00	-			
Reference to other studies (REF)	17	85.00	Conventional			
A: Providing support or justification						

*Note:* n = the total number of IS Results-Discussion chapters used for this analysis

Table 4.3 reveals that all seven moves (Moves 1–7) and one additional independent move (REF) in this corpus occurred in accordance with the analytical frameworks described previously. However, when examining the steps for each move, it appears that not every step in the first three obligatory moves (Moves 1-3) is considered to be obligatory. For instance, Move 1 Step B (Indicating methods used or statistical procedure applied) is conventional in 85% of occurrences, Move 3 Step A (Interpreting results) is conventional in 90% of occurrences, Move 3 Step B (Comparing results with literature) is conventional in 85% of occurrences, Move 3 Step C (Evaluating results) is optional in 35% of occurrences, and Move 3 Step D (Accounting for results) is also optional in 55% of occurrences. Only Move 2 Step A (Locating graphics) and Step B (Reporting major findings) are obligatory in 100% of occurrences. REF (Reference to other studies) and Move 4 (Summarizing results) are both conventional in 85% and 65% of instances, respectively. Move 5 (Summarising the study) and Move 6 (Evaluating the study) are both optional in 25% and 10% of occurrences, respectively. Each step in Move 6 (A: Indicating limitations, B: Indicating significance/advantage, and C: Evaluating methodology) occurred once for 5% of the corpus. Regarding Move 7 (Deductions from the study), only Step A (Making suggestions) occurred in 5% of the corpus, while Steps B (Recommending further research) and C (Drawing pedagogical implications) did not occur at all for this corpus.

Although it is evident that all the moves in this corpus comply with the suggested analytical framework, it is not possible to identify all the steps using the given framework. It can be observed that the steps proposed in the provided analytical framework are based on the thesis investigation, which provides much more extensive data than the independent study. In addition, due to possible overlapping in information, some of the steps in the Discussion section may be shifted to the following chapter, which addresses the Conclusions and Recommendations. However, the findings proposed by Nguyen and Pramoolsook (2015) regarding the steps found in the combined Results-Discussion chapters analysis of Vietnamese thesis writers revealed that Move 6 Step 1 (Indicating limitations of the study) and Move 7 Step 1 (Recommending further research) were not found in their analysis, which is in line with this study's finding that some steps were not able to be found in the analysis as a result of the fact that the data in this section can overlap with the data in the following section. In addition, it is apparent from this study that Move 1 Step A (Providing background information or how results are presented), Move 2 Step A (Locating graphics), and Move 2 Steps B (Reporting major findings) are prominent steps in this IS Results and Discussion corpus.

The occurrence of the move-step in this corpus reveals that IS Results and Discussion sections in the program of Career English for International Communication (CEIC) can be described with seven moves and Reference to other studies. These moves are Move 1 (Introducing the Results chapter), Move 2 (Reporting results), Move 3 (Commenting on results), Move 4 (Summarising results), Move 5 (Summarising the study), Move 6 (Evaluating the study), Move 7 (Deductions from the (research) study) and REF (Reference to other studies). All the moves contain at least one step. In order to answer the research questions, the following section describes in detail the structure of each move and step found in this study.

### 4.2.1 Move 1: Introducing the Results-Discussion Chapter

This Move serves as the opening move for this Results-Discussion chapter, and its purpose is to notify the reader of the preceding elements and establish a connection with them. Yang and Allison (2003) stated that it offers information which is pertinent to the purpose of preparing for the delivery of the study results. In this study,

this move is obligatory, as it can be found in all IS Results-Discussion chapters. Chen and Kuo (2012) proposed two steps for this starting move, which are relevant to background information or how to present results and methods used or statistical procedures applied.

Move 1, Step A: Providing background information or how results are presented. This Step is employed to establish a correlation between the results presentation and the research. Yang and Allison (2003) mentioned that authors might lay out pertinent elements, including research questions, objectives and intentions, and conceptual or theoretical information. In this study, this Step is obligatory, as it can be found in all IS Results-Discussion chapters. An example of this Step is shown below.

## Example:

This research study intended to investigate Thai English teachers' perceptions and the frequency of using active learning activities in English classroom. The previous chapters included the background, relevant literature, and research methodology respectively. This chapter presents the results. (IS1)

### Move 1, Step B: Indicating methods used or statistical procedure applied.

This Step is used to make a connection between the results presentation and the study, which is similar to the previous Step. In this study, this Step is conventional, as it can be found in 85% of the corpus. Since not all datasets contain this Step, it can be seen that it is commonly followed by Move 1, Step A, possibly due to the communicative purposes where the IS authors might relate the methodological or statistical information to the background information or how results are presented before moving to present the results. An example of this Step is shown below.

# Example:

The findings are grouped and discussed based on Molina and Albir's translation frameworks (2002) and are presented sequentially from the highest to the lowest percentage. (IS2)

### 4.2.2 Move 2: Reporting results

This Move serves as the main move for the whole of this chapter. Chen and Kuo (2012) noted that reporting the results of research should be considered the main communicative significance, whether of research articles or theses. This Move serves as the central move upon which the findings of the research are shown, typically with supporting evidence including statistics and examples (Yang & Allison, 2003). In this study, this Move is obligatory, as it can be found in all IS Results-Discussion chapters. The authors of the IS preferred to present their results using numerals, statistical data, tables, charts, interviews, and related examples. Chen and Kuo (2012) proposed two steps for this core move, which are relevant to graphics and major findings.

Move 2, Step A: Locating graphics. This Step is employed to specifically focus on finding or identify appropriate graphics to support and enhance the presentation of the results. In this study, this Step is obligatory, as it can be found in all IS Results-Discussion chapters. The IS authors tended to locate graphics including charts, graphs, tables, diagrams, or any relevant visual representation in this chapter. An example of this Step is shown below.

Figure 4.2

Example of Locating graphics

No.	Source Language	Target Language
1.	ข้าวคลุกกะปีที่ใช้ข้าวออร์แกนิกและกะปี	Khao Khluk Kapi; the organic rice
	ชั้นดีกลิ่นหอม <u>รัญจวน</u> เสิร์ฟพร้อมกุ้ง	cooked with salty <u>aromatic</u> shrimp paste and pork jam, is served with perfectly
	แม่น้ำราดซอส มันกุ้งต้มยำ	done river prawns
2.	ข้าวผัด <u>โคตรปู</u>	Fried rice with crabmeat

Table 4.1.2 illustrates the use of the translation strategy by a more neutral/less expressive word. (IS9)

Move 2, Step B: Reporting major findings. This Step is specifically focused on reporting the most important or significant findings in a clear and straightforward manner. In this study, this Step is obligatory, as it can be found in all IS Results-Discussion chapters. The IS authors tended to place this step after the previous step; in other words, Step A is about locating graphics that can help show the results, while Step B is about explaining the most important findings in a clear and brief way. These two steps work together to enhance the presentation and understanding of the research results. An example of this Step, which is related to the previous example in Move 2 Step A, is shown below.

### Example:

This strategy is used when the translator realizes that the source language is too direct or contains too negative/positive meanings. To avoid the attachment of the author's feelings, sometimes the translator translated the non-equivalence by using the nearest equivalence to make an acceptable translation. For instance, the food named 'ข้าวผัดโคตรปู' was translated into 'fried rice with crabmeat'. The translator avoided using the word 'โครต' which means 'to emphasize something intensely or very...' which might contain the intention or feeling of the author. (IS9)

#### 4.2.3 Move 3: Commenting on results

This Move is about discussing and analyzing the findings of a study. It includes offering explanations, providing insights, and giving opinions about the results obtained. Yang and Allison (2003) revealed that the primary objective of this Move is to determine the meaning and importance of the research results in the context of the subject at hand. Nguyen and Pramoolsook (2015) noted that this Move may represent the principal communicative goals of the chapter's Results-Discussion section. In this study, this Move is obligatory, as it can be found in all IS Results-Discussion chapters. Chen and Kuo (2012) proposed four steps for this move, which are relevant to interpretation, comparison with literature, evaluation, and account for results.

**Move 3, Step A: Interpreting results.** This Step is about making sense of the results and understanding its meanings. It involves looking for connections, explaining

why certain results occurred, and identifying any important insights or messages that can be derived from the data. In this study, this Move is conventional, as it can be found in 90% of the corpus. The study suggests that few IS authors tended to account for results rather than interpret them. An example of this step is shown below.

#### Example:

The second challenge was found to be related to non-verbal misinterpretation. Foreign teachers in Thai schools experienced misunderstandings and felt offended by EFL learners because they misinterpreted EFL learners' nonverbal cues, such as body language, facial expressions, tone of voice, and touch. For example, EFL learners sometimes avoid eye contact incidentally, which is considered impolite in foreign teachers' cultures and led to conflicts in the classroom. (IS5)

Move 3, Step B: Comparing results with literature. This Step functions to involve analyzing how the study's findings relate to existing knowledge, providing a broader understanding of the research's contribution to the field. In this study, this Step is conventional, as it can be found in 85% of the corpus. The results suggest that the IS authors tended to state how their findings align with or differ from what has already been reported in relevant published works. An example of this step is shown below.

#### Example:

The finding is in line with Jandt's (1995) study, which found that teachers did not have knowledge involving Thai culture, social, values, beliefs, and attitudes, causing teachers to act ethnocentrically according to their own culture that they were familiar with. (IS5)

Move 3, Step C: Evaluating results (including strengths, limitations, generalizations, etc. of results). This Step is used to critically analyze the outcomes of the study and consider various aspects such as the quality of the data, the reliability of the methods used, and the potential impact of the findings. It involves identifying the strengths, limitations, and generalizability of the study's findings, providing a balanced assessment of the outcomes and their potential implications. In this study, this Step is

optional, as it can be found in 35% of the corpus. The results suggest that few IS authors tended to evaluate their results. An example of this step is shown below.

#### Example:

However, it could be concluded that the source Thai words are distinctive and could not be translated into the target English word equivalently. Then the translators need to overcome these difficulties in translating those words by borrowing words from the source language including the name of a certain food or place or specific name in order to maintain the culture vibe and background of the source language. In some cases, the translators may assume that the readers are familiar with the source words and some of them are already well-known and widely used in the target culture, for example, 'Tom Yum', 'Matsaman', or 'Pad Thai'. (**IS9**)

Move 3, Step D: Accounting for results (giving reasons). This Step involves offering reasons or explanations for the observed findings, considering various factors that could have influenced the outcomes of the study, such as the research methods used, the characteristics of the study participants, external influences, or any other relevant variables. It helps provide a more comprehensive understanding of the results and their underlying mechanisms. In this study, this Step is optional, as it can be found in 55% of the corpus. The results suggest that some IS authors tended to provide reasons regarding related factors for their results. An example of this step is shown below.

#### Example:

Therefore, it is possible that foreign teachers who have discourse competence will have the ability to adapt and create different speech acts when misunderstanding arises. (IS5)

### 4.2.4 Move 4: Summarising results

This Move is about distilling the main findings of the study into a clear and brief overview. It serves as a final recap of the research results and helps to emphasize the key contributions and implications of the study. Yang and Allison (2003) mentioned that this Move produces combined findings based on several of the chosen findings. In

this study, this Move is conventional, as it can be found in 65% of the corpus. Chen and Kuo (2012) proposed a step for this move, which is relevant to conclusion of results.

Move 4, Step A: Making conclusions of results. This Step involves synthesizing the findings and forming final judgments or inferences based on the evidence gathered in the study. In this study, this Move-Step is conventional. The results indicate that some IS authors tended to draw conclusions at the end of each results section before moving on to the next results section. An example of this step is shown below.

## Example:

It can be concluded that the adjectives excellent, outstanding, and superb frequently co-occur with various noun collocates. Despite the fact that they share some collocates, the number of shared collocates is relatively small. Although they are equivalent in terms of formality, these two expressions are utilized differently. This demonstrates that these three synonyms cannot be used interchangeably in all situations; they can be distinguished based on the words they are most likely to occur with. (IS8)

### 4.2.5 Move 5: Summarising the study

This Move involves condensing the main aspects of the research into a clear and concise summary, including the purpose, methodology, key findings, and potential implications. It serves as a final recap of the entire study, providing a comprehensive understanding of the research endeavor. Yang and Allison (2003) claimed that the authors of research articles employ this Move to deliver a concise summary of the key ideas that come out of the study as a whole. In this study, this Move is optional, as it can be found in 25% of the corpus. Chen and Kuo (2012) proposed a step for this move, which is relevant to summarizing the study briefly.

Move 5, Step A: Summarising the study briefly. This Step involves distilling the key elements of the research into a concise summary. In this study, this Move-Step is optional. The results indicate that few IS authors summarized their whole study. An example of this step is shown below.

#### Example:

From the study, it can be concluded that there are five ways to illustrate the dishes clearer: (1) using an adjective to describe the food's color, (2) using an adjective to identify the origin place/ origin country of such food or its ingredients, (3) using a preposition such as 'with' or 'top(ped) with' to signify the style of food serving, the appearance of such dish, as well as the ingredients that were cooked in food dish, (4) describing the cooking methods of the dish in order to make the dish's physical appearance clear, and (5) adding an adjective to elaborate on the taste of the food. (**IS9**)

### 4.2.6 Move 6: Evaluating the study

This Move provides a thorough assessment of the study, helping to determine the credibility and reliability of the research findings. Yang and Allison (2003) stated that this Move evaluates the entire study by highlighting its limitations, contributions, and evaluating its methodology. In this study, this Move is optional, as it can be found in 10% of the corpus. Chen and Kuo (2012) proposed three steps for this move, which are relevant to limitations, significance/advantage, and methodology evaluation.

Move 6, Step A: Indicating limitations. This Step helps provide a balanced assessment of the research and ensures that readers are aware of the potential limitations or factors that may impact the interpretation of the findings. In this study, this Step is optional, as it can be found in 5% of the corpus. The results suggest that few IS authors indicated limitations for their findings. An example of this step is shown below.

#### Example:

The problem of non-equivalence at word level in translation is one of obstacles in translation. It means that the translator cannot find the target text which contains the exact meaning of the source text. (IS9)

Move 6, Step B: Indicating significance/advantage. This Step helps showcase the unique contributions and potential impact of the research, ensuring that readers recognize the value and relevance of the findings. In this study, this Step is optional, as

it can be found in 5% of the corpus. The results suggest that few IS authors indicated significance/advantage for their findings. An example of this step is shown below.

#### Example:

A jewelry designer's duties include receiving and analyzing information from clients, supervisors, and other designers. For maximum efficiency, after receiving the information, it must be conveyed and transferred to the other party. The greater the use of multiple languages in communication, the greater care must be used when communicating. Miscommunication and misunderstanding will have a severe impact on information and work efficiency. Improved English communication skills may lead to a better social life as well as improved job opportunities in the future. (IS7)

**Move 6, Step C: Evaluating methodology.** This Step helps ensure that the methodology aligns with best practices and strengthens the overall quality of the research. In this study, this Step is optional, as it can be found in 5% of the corpus. The results suggest that few IS authors evaluated the methods used for their findings. An example of this step is shown below.

### Example:

this study found that the translation strategies of Baker's (1992) could cover all the menus that were found in the translated version. In contrast, the previous studies of Vorajaroensri (2002), Kunavarote (2006), and Buranatrakoon (2020) highlighted that Baker's (1992) translation strategies could not cover all those items. (**IS9**)

# 4.2.7 Move 7: Deductions from the (research) study

This Move helps to synthesize the results and provides valuable insights or implications that contribute to the existing knowledge in the field. Yang and Allison (2003) revealed that this is the Move in which the writers further the findings to propose alternatives to the issues raised in the study, suggesting further research or pedagogical implications. In this study, this Move is optional, as it can be found in 5% of the corpus. Chen and Kuo (2012) proposed three steps for this move, which are relevant to

suggestions, recommendations, and implications; however, only one step can be recognized in this study.

Move 7, Step A: Making suggestions. This Step helps bridge the gap between research and application by offering ideas for action, further investigation, or improvements in related areas. In this study, this Move-Step is optional. The results indicate that few IS authors made suggestions after their results presentation. An example of this step is shown below.

## Example:

Not only would this be good for Thai jewelry designers themselves, but it can also be used to awaken the idea of the jewelry industry in Thailand, to promote more language learning in this profession, and to develop the jewelry industry to become more international. (IS7)

## 4.2.8 Reference to other studies (REF)

This independent Move demonstrates the researchers' awareness of the existing literature and contributes to knowledge and understanding of the subject. In this study, this Move is conventional, as it can be found in 85% of the corpus. Chen and Kuo (2012) proposed a step for this move, which is relevant to support or justification.

**REF, Step A: Providing support or justification.** This Step involves using references to other studies to strengthen the arguments, claims, or findings of the current research. In this study, this Move-Step is conventional. The results indicate that majority of IS authors provided support or justification by referring to other studies in the field for their Results and Discussion. An example of this step is shown below.

# Example:

Moreover, in the gender aspect, Holmes (1995) found that women produced apology more often than men for maintaining the relationship and as the remedies for offense since women are particularly vulnerable in the interaction. Apart from grounder, the other external modification devices did not have obvious distinction from each other in term of frequency. (IS12)

Considering the move-step occurrences in this IS Results and Discussion chapter analysis, it is necessary to investigate the overall move-step found in order to examine the intentional communication of this chapter and the relationship between these moves and steps. Table 4.4 is constructed to display the overall moves and steps identified in the IS Results and Discussion Chapters.

**Table 4.4**The Overall Moves and Steps Found in the IS Results and Discussion Chapters

Moves & Steps	<b>Overall Moves</b>	Percentage of	
	& Steps found	Moves &Steps	
	(Total = 1,103)	found (%)	
1. Introducing the Results-Discussion chapter	115	10.43	
A: Providing background information or how results	57	5.17	
are presented			
B: Indicating methods used or statistical procedure	58	5.26	
applied			
2. Reporting results	567	51.41	
A: Locating graphics	208	18.86	
B: Reporting major findings	359	32.55	
3. Commenting on results	299	27.11	
A: Interpreting results	156	14.14	
B: Comparing results with literature	82	7.43	
C: Evaluating results (including strengths, limitations,	12	1.09	
generalisations, etc. of results)			
D: Accounting for results (giving reasons)	49	4.44	
4. Summarising results	28	2.54	
A: Making conclusions of results			
5. Summarising the study	7	0.63	
A: Summarising the study briefly			
6. Evaluating the study	4	0.36	
A: Indicating limitations	1	0.09	

B: Indicating significance/advantage	2	0.18
C: Evaluating methodology	1	0.09
7. Deductions from the (research) study	1	0.09
A: Making suggestions	1	0.09
B: Recommending further research	0	0.00
C: Drawing pedagogic implications	0	0.00
Reference to other studies (REF)	82	7.43
A: Providing support or justification		

Table 4.4 reveals the occurrences and the percentages of moves and steps in all ISRDs Move 2 (Reporting results) gains the highest number of 567 move-step found in all IS Results and Discussion chapters (51.41%), followed by Move 3 (Commenting on results) with 299 move-step found (27.11%), afterwards followed by Move 1 (Introducing the results) with 115 move-step found (10.43%), REF (Reference to other studies) with 82 move-step found (7.43%), and Move 4 (Summarising results) with 28 move-step found (2.54%). Regarding Moves 5, 6, and 7, the move-step with a single-digit number appears as 7, 4, and 1 (0.63%, 0.36%, and 0.09%), respectively.

From the results, the high frequency of Moves 2 (Reporting results) and 3 (Commenting on results) can be viewed as showing that there is an intense connection among both of these moves and steps, which shows the fundamental communicative focus of the Results and Discussion section of a master's IS report. In other words, IS authors tended to largely report the results and comment on the results of their research through interpreting results, comparing results with literature, accounting for results, and evaluating results. However, this finding is different from the findings proposed by Nguyen and Pramoolsook (2015) regarding the Results chapters that the writers of theses preferred mainly to report the results of the study with minimal commentary (e.g., interpreting results). With the Results-Discussion chapter structure, the IS authors in this study commented on results with the second-highest frequency (27.11%), including interpreting results (14.14%), comparing results with literature (7.43%), accounting for results (4.44%), and evaluating results (1.01%). On the other hand, Nguyen and Pramoolsook (2015) revealed that thesis authors who adhered to the Results-Discussion chapter organization commented on results, such as interpreting the

research findings, with a high frequency on average. In addition, a large number of thesis writers correlated their results to those of previous research and accounted for the results. This is in line with the results that were found in this present study. Moreover, the results in this study are also different from the findings proposed by Wuttisrisiriporn and Tangkiengsirisin (2020) regarding the discussion analysis that Commenting on results was found to be the highest frequency move, followed by Reporting results, the second noticeable move. Commonly, authors of theses tended to comment on results rather than report them in the separate discussion section. In this study, the authors of IS were more likely to report results and then comment on them in the combined results-discussion section. However, it can be observed that the occurrence percentages of Move 2 (51.41%) and Move 3 (27.11%) differ from one another by nearly half a ratio. Moreover, a very few steps in Move 3 (commenting on results) were discovered in some datasets after an in-depth investigation. In spite of the fact that the IS authors claim to include both the results and a discussion in this chapter, it can be seen that some of the IS authors chose to merely display the results rather than offering any commentary or discussing the significance of their results. This finding is consistent with the findings of the research conducted by Nguyen and Pramoolsook (2015), who found that the authors of the theses reported results but only provided a small amount of discussion on those results. This was owing to the fact that the authors lacked sufficient information to adequately describe their results. As well, Massoum and Yazdanmehr (2019) revealed that non-native (Iranian) English master students tended to report the results rather than comment on them.

In addition, Move 1 (Introducing the Results chapter) was ranked as the third most frequent move within the corpus. Move 1 clearly served a significant part in the IS authors' reporting and commentary of their research findings. The IS authors offered background data or how results are shown, as well as an outline of methods or statistical procedures to gain a more comprehensive understanding of the offered research context and the results, as well as the discussion that followed. Move REF (Reference to other studies), was recognized as the fourth move of the corpus. It can be seen that the IS authors related their Results and Discussion to what the previous studies proposed in order to provide support or justification for their findings and discussion. Move 4 (Summarising results) was ranked as the fifth move of the corpus. It was found that

this move was employed to sum up the results and to make the conclusion for each part of results. Move 5 (Summarising the study) was ranked as the sixth move of the corpus. It can be viewed that this move was used to summarize the overall study briefly. It normally was found at the end of the chapter. Move 6 (Evaluating the study) was ranked as the seventh move of the corpus. It was used to evaluate the study by pointing out limitations, research significance/ advantages, and evaluating the research methodology. Move 7 (Deductions from the study) was rated as the move in the corpus with the lowest frequency. Only one step was found in the twenty IS Results-Discussion chapters for having deductions from the study based on making suggestions. It can be determined that the majority of IS authors were unlikely to employ this strategy in their IS Results and Discussion chapters.

Regarding move-step cyclic pattern, the high frequency of occurrences of Moves 1-3 and Move REF prompted the investigation of cyclic patterns between these move and step occurrences, as well as those related to them. The organization of moves and steps in the cycles could represent the authors' intentional decision to compose a combined Results and Discussion chapter organization. It is found that there are fifteen different cycle patterns in this current research study. In order to illustrate the movestep cycle presented in the IS Results and Discussion Chapter, it is shown in Table 4.5.

**Table 4.5** *Move-Step Cycles in the IS Results and Discussion Chapter* 

No.	Move /Step cycle	Pattern	Total	Percentage
1.	Providing background information	(M1A)–(M1B)	22	5.87
	or how results are presented			
	Indicating methods used or statistical			
	procedure applied			
2.	Providing background information	(M1A)–(M2B)	18	4.80
	or how results are presented			
	Reporting major findings			
3.	Providing background information	(M1A)-(M1B)-	7	1.87
	or how results are presented	(M2A)		

	Indicating methods used or statistical			
	procedure applied			
	Locating graphics			
4.	Providing background information	(M1A)–(M1B)–	9	2.40
	or how results are presented	(M2B)		
	Indicating methods used or statistical			
	procedure applied			
	Reporting major findings			
5.	Indicating methods used or statistical	(M1B)–(M2B)	15	4.00
	procedure applied			
	Reporting major findings			
6.	Indicating methods used or statistical	(M1B)-(M2A)-	6	1.60
	procedure applied	(M2B)–(M3A)		
	Locating graphics			
	Reporting major findings			
	Interpreting results			
7.	Indicating methods used or statistical	(M1B)–(M2A)–	14	3.73
	procedure applied	(M2B)		
	Locating graphics			
	Reporting major findings			
8.	Locating graphics	(M2A)–(M2B)	144	38.40
	Reporting major findings			
9.	Locating graphics	(M2A)–(M2B)–	19	5.07
	Reporting major findings	(M3A)		
	Interpreting results			
10.	Reporting major findings	(M2B)–(M3A)	35	9.33
	Interpreting results			
11.	Reporting major findings	(M2B)–(M3B)	16	4.27
	Comparing results with literature			
12.	Interpreting results	(M3A)–(M3B)	26	6.93
	Comparing results with literature			

13.	Interpreting results	(M3A)–(M3D)	18	4.80
	Accounting for results			
14.	Interpreting results	(M3A)–(REF)	19	5.07
	Reference to other studies			
15.	Comparing results with literature	(M3B)–(REF)	7	1.87
	Reference to other studies			

According to table 4.5, the majority of move-step cyclic patterns in this corpus contain only two moves or steps, or ten out of fifteen patterns contain only two moves or steps with a high frequency. There are five patterns with more than two moves/steps, such as three or four. The table shows that Locating graphics (M2A)-Reporting major findings (M2B) appears to have the highest frequency (38.40%) in this corpus; however, this pattern also connects to Move 3(A) (Interpreting the results). Reporting major findings (M2B) - Interpreting results (M3A) is ranked second in terms of frequency, with 9.33% indicating a relationship between reporting results and then discussing them. Interpreting results (M3A) - Comparing results with literature (M3B) is ranked third in terms of frequency, with 6.93% representing the connection within the move pertaining to discussing the results in relation to previous research. The majority of high frequency cyclic patterns consist of only two moves/steps; however, cycles with three and four moves/steps are intriguing to investigate. Locating graphics (M2A) -Reporting major findings (M2B) - Interpreting results (M3A) is ranked fifth in terms of frequency, with 5.07% demonstrating the connection between reporting the results with both graphics and data, and then commenting on them. Moreover, *Indicating methods* used or statistical procedure applied (M1B) - Locating graphics (M2A) - Reporting major findings (M2B), Providing background information or how results are presented (M1A) - Indicating methods used or statistical procedure applied (M1B) - Reporting major findings (M2A), and Providing background information or how results are presented (M1A) - Indicating methods used or statistical procedure applied (M1B) -Locating graphics (M2A) are ranked ninth tenth, and eleventh in terms of frequency, with 3.37%, 2.4%, and 1.87%, respectively, showing the relationship between introducing the chapter with background data and method used, and then reporting results with both graphics and data. Moreover, there is only one cyclic pattern with four

steps, which is *Indicating methods used or statistical procedure applied (M1B)* - *Locating graphics (M2A)* - *Reporting major findings (M2B)* - *Interpreting results (M3A)*, this cyclic pattern illustrates the relationship between introducing the chapter, reporting the results with both graphics and data, and discussing the important results.

From the results, it can be concluded that IS authors were likely to write their Results and Discussion chapters using the cycle pattern of Locating graphics (M2A) -Reporting major findings (M2B). Even though this pattern appeared as the most common, the table shows that there were also cyclical patterns with the steps in Move 3, such as Interpreting the results and Comparing the results with the literature. This finding is in accordance with the idea proposed by Nguyen and Pramoolsook (2015), namely that the combination between the steps of moves 2 and 3 in the cycles could indicate the thoughtful decision of the authors in the arrangement of the combined Results and Discussion chapter structure. In addition, it is remarkable that the cyclical pattern of Move 1 (Introduction to the results chapter), Move 2 (Reporting results), and Move 3 (Commenting on results) occurs commonly, demonstrating the significant relationship between these moves and steps, beginning with background information or methods employed, moving to results graphics and/or main findings, going to results interpretation and/or previous related studies, and/or results accounting. The patterns observed in Moves 1-3 correspond with the results of the previous part, which revealed that Moves 1-3 (Introducing the results, Reporting the results, and Commenting on the results) are obligatory because they appeared in every IS Results and Discussion section; however, not every step from Moves 1 and 3 was included in all the IS Results and Discussion Chapters (e.g., M1B, M3C, and M3D). Additionally, it is notable that both Interpreting results (M3A) and Comparing results with literature (M3B) are correlated with Reference to other studies (REF), suggesting that some IS authors tended to provide support or justification with previous research following commenting on results. Furthermore, there was no evidence of a cyclic pattern in the summary, evaluation, and deductions sections, as they were determined to be optional moves in this corpus. The finding in this study contradicts the findings of Nguyen and Pramoolsook (2015), who reported that the cycle of the Summary section, which offers a summary of the entire chapter and an Introduction to the next chapter's content, was found in their Results-Discussion chapters, although with a low frequency. They

proposed that the summary section in this chapter's Results and Discussion represented a fresh move cycle.

In conclusion, the incidence of moves and steps were analyzed throughout all twenty IS Results and Discussion chapters. The moves and steps that occurred corresponded with the composition that had been identified within the integrated analytical frameworks. The authors of the IS intended to present the results of their study and discuss their findings by using Moves 2 and 3, which each went through a number of distinct steps. The occurrences of steps revealed that providing background information or how results are presented (Move 1), locating graphics (Move 2), and reporting major findings (Move 2) were always found in all IS Results and Discussion chapters. These three steps frequently occur together in the cyclic patterns throughout the entire corpus reflecting the intense relationship of communicative purposes as the IS authors tended to refer to background information before reporting their results. Commenting on results (Move 3) is regarded as one of the core moves in this chapter; on the other hand, not all the step occurrences in this Move can be found all in the corpus which means that some IS authors preferred to only report the results rather than comment or discuss them. A few steps of Move 3 were found in some ISRDs, even though this chapter states to provide both results and discussion. The other movestep and the reference to other studies were included in the IS Results and Discussion chapter for multiple communication-related considerations exist.

### **CHAPTER 5**

## CONCLUSIONS AND RECOMMENDATIONS

This chapter intends to provide the conclusions of the study results associated with the previously mentioned research objectives: to identify the occurrences of the moves found and patterns in master's research report Results and Discussion written by Thai postgraduate students and to investigate the occurrences of the steps found and patterns in the master's research report Results and Discussion written by Thai postgraduate students, and the recommendations from this study. This chapter involves three parts as follows: (1) summary of the study, (2) implications, and (3) limitations of the present study and recommendations for further research.

# **5.1 Summary of the Study**

This study was conducted to investigate rhetorical structure of master's independent study Results and Discussion chapters in the program of Career English for International Communication (CEIC) composed by Thai postgraduate students. The research questions are 1) What are the occurrences of the moves found and patterns in the master's research report Results and Discussion written by Thai postgraduate students? and 2) What are the occurrences of the steps found and patterns in the master's research report Results and Discussion written by Thai postgraduate students? In this study, the dataset consisted of twenty Results and Discussion chapters, collected from the online database of a public university in Thailand. The analytical frameworks for Results section and Discussion section proposed by Chen and Kuo (2012) and the combined framework ideas for the combined Results-Discussion section by Nguyen and Pramoolsook (2015) were adopted for this rhetorical move-step analysis. To ensure the analysis of move-step reliability, inter-coder reliability analysis was conducted. In this corpus, an inter-rater was requested to review and approve the move-step structure and analysis. The summary gained from the move-step analysis has been separated into sections and presented in two separate areas: 1) the occurrences of the identified moves in the Results and Discussion chapter, 2) the move-step occurrences in the IS Results and Discussion chapter.

#### 5.1.1 The Occurrences of the Identified Moves of the Results and Discussion Chapter

This study analyzed the structure of the Results and Discussion chapter in the independent study reports of Thai postgraduate students in the CEIC program. A corpus of twenty independent study reports was examined, and the word count for each report was recorded. The total word count for the Results and Discussion sections of the corpus was 70,112 words. The analysis employed move-step analytical frameworks proposed by Chen and Kuo (2012) and the idea to combine frameworks of Results section and Discussion section from Nguyen and Pramoolsook (2015). A comparison of move occurrence across three studies was conducted, revealing that all seven moves outlined in the analytical frameworks were present in the corpus, including one independent move as REF (Reference to other studies).

Moves 1-3 (Introducing the results, Reporting results, and Commenting on results) were found to be obligatory in all 20 independent study reports, while REF (Reference to other studies) was considered conventional, appearing in 17 chapters. Move 4 (Summarising results) was also conventional, presenting in 13 chapters, while Moves 5-7 (Summarising the study, Evaluating the study, and Deductions from the study) were optional, appearing in 5, 2, and 1 chapters of the datasets, respectively. The authors generally followed a pattern of introducing the chapter, reporting results, and commenting on them. REF and Move 4 were associated with other moves to provide support or draw conclusions from the results. Moves 5-7 were less frequently utilized, possibly due to their overlap with the subsequent Conclusion and Recommendation chapter.

The move sequence analysis showed that 95% of the IS results-discussion chapters began with Move 1, while only 5% began with Move 5. Move 2 (Reporting results) was frequently followed by Move 3 (Commenting on results), and Move 3 frequently served as a closing move in 45% of the corpus. Move 4 and REF were also used as closing moves, each appearing in 25% and 10% of the corpus, respectively. Moves 2, 5, 6, and 7 occurred as closing moves in 5% each of the corpus. The three most common rhetorical patterns identified involved beginning with Move 1, followed by Moves 2 and 3, and either Move 4 or REF. The authors aimed to present an introduction, report the results, comment on them, and conclude with a summary or reference to other studies.

In conclusion, the Results and Discussion chapters in the IS reports followed a consistent move structure. Moves 2 and 3 were central to the chapter, while Move 1 served as the opening move. Move 4 and REF were often used to provide support or draw conclusions, and Moves 5-7 appeared with less frequency for various communication-related reasons and the content overlap in the following chapter. The findings were in line with previous studies regarding the research report analysis and provided insights into the rhetorical patterns utilized by IS authors in presenting their results and discussing their findings.

# 5.1.2 The Move-Step Occurrences in the IS Results and Discussion Chapter

This part describes the move-step occurrences in the Results and Discussion chapters of independent studies conducted by Thai postgraduate students in the program of Career English for International Communication (CEIC). The analysis was conducted using a move-step analytical framework proposed by Chen and Kuo (2012), along with ideas for the combined frameworks from Nguyen and Pramoolsook (2015) for the combined Results and Discussion sections. The analysis revealed that the majority of the independent study Results-Discussion chapters followed the moves and steps outlined in the analytical framework. The moves and steps were categorized as obligatory, conventional, or optional based on their frequency of occurrence in the corpus using the suggested criteria of Kanoksilapatham (2005).

Move 1, titled "Introducing the Results-Discussion chapter," serves as the opening move and is found in all datasets. It consists of two steps: providing background information or how results are presented (obligatory) and indicating methods used or statistical procedure applied (conventional).

Move 2, titled "Reporting results," is the main move of the chapter and is also found in all chapters. It includes two obligatory steps: locating graphics and reporting major findings.

Move 3, titled "Commenting on results," involves discussing and analyzing the findings. It is found in all chapters and includes four steps: interpreting results (conventional), comparing results with literature (conventional), evaluating results (optional), and accounting for results (optional).

Move 4, titled "Summarizing results," focuses on summarizing the main findings of the study. It is found in many datasets and includes one step: making conclusions of results (conventional).

Move 5, titled "Summarizing the study," involves summarizing the entire research. It is optional and found in some chapters, with one step: summarizing the study briefly (optional).

Move 6, titled "Evaluating the study," provides a thorough assessment of the research. It is optional and includes three steps: indicating limitations (optional), indicating significance/advantage (optional), and evaluating methodology (optional).

Move 7, titled "Deductions from the (research) study," is the least frequent move found in only one Results-Discussion chapter. It includes one step: making suggestions (optional).

In addition to the moves and steps proposed by Chen and Kuo (2012), an independent move called REF (Reference to other studies) is also frequently presented in the corpus. It includes one step: providing support or justification (conventional).

The findings and discussion in this study highlight the structure of each move and step, providing explanations and examples for better understanding. It also relates that not all steps proposed in the analytical framework were found in the analysis, indicating that some steps may not be applicable to the independent study context or they can be placed in the following section of the research report regarding the Conclusions and Recommendations. The analysis of IS Results and Discussion chapters suggests that IS authors commonly follow a cycle pattern of locating graphics and reporting major findings. However, cyclical patterns involving steps in Move 3, such as interpreting results and comparing them with the literature, were also observed. This finding aligns with the idea proposed by Nguyen and Pramoolsook (2015) that the combination of steps in moves 2 and 3 indicates a deliberate structuring of this combined chapter. Moves 1-3 (introducing results, reporting results, and commenting on results) show a significant relationship and often occur together, starting with background information or methods, moving to results graphics or main findings, and then results interpretation or related studies. While Moves 1-3 are obligatory in every IS Results and Discussion section, not all steps from Moves 1 and 3 were consistently included in all the chapters. Interpreting results, comparing them with literature, and

referencing other studies were found to be correlated, suggesting authors' inclination to support their comments with previous research. The study found no evidence of a cyclic pattern in the summary, evaluation, and deductions sections, which were considered optional moves. This contradicts the findings of Nguyen and Pramoolsook (2015) who reported a low-frequency cycle in the summary section. In conclusion, the authors of IS Results and Discussion chapters aim to present their study's results and discuss their findings using distinct moves and steps.

## **5.2 Implications**

The purpose of this study was to analyze the rhetorical moves and steps that Thai master's graduate students in the discipline of Career English for International Communication (CEIC) use to communicate their message or persuade their audience when composing the Results and Discussion chapters of their independent studies. The findings of the research have consequences for classroom instruction on the part of both instructors and students and for the organization.

- 1) Instructors should provide practice opportunities for learners concerning important moves and steps in order for students to properly produce their master's independent study Results and Discussion chapter. Reporting and discussing the results of research deserves to be considered as the most essential communicative function of the research report. Consequently, it is essential to investigate how this communication intent is implemented through moves and steps (Chen & Kuo, 2012). According to the findings of this study, some IS authors have a tendency to only report the results without commentary or discussion, despite the fact that this chapter's heading is Results and Discussion. This analysis predominantly discovered the first three moves; on the other hand, other moves should be emphasized in the research report writing class in order to introduce IS authors to the proper construction of this combined chapter reaching their intentional communicative purposes. These other moves include the move-step of summarizing results, summarizing the study, evaluating the study, and deductions from the study. These should all be brought up in order to help the IS authors convey the proper communicative purposes of this combined chapter.
- 2) Students should be able to have access to course materials that outline how to logically compose the Results and Discussion section of a research report.

Additionally, the format, organizational structure, language indicators, key terms and phrases containing distinctive moves and steps should be supplied to facilitate their application. This is owing to the fact that the majority of students working toward their master's degrees have been having trouble composing their research projects (Basturkmen, 2012). In the Results and Discussion chapter, graduate students must demonstrate their writing skills, logical reasoning, and their contributions to the discipline (Wuttisrisiriporn & Tangkiengsirisin, 2020). Because of this, the findings of the present research are practically useful for the compilation of the independent study Results and Discussion in the sense that these provide the rhetorical move-step structure and explanation in more in-depth detail.

- 3) With the research findings in this study, CEIC postgraduate students may consider the move-step occurrences, move-step sequence and cyclic pattern, characteristics and given examples of the move-step proposed in this study to enable them to organize and write the Results and Discussion chapter of their own research report in a purposeful and logical manner.
- 4) Language Institute Thammasat University's offered template for CEIC independent study under the heading "CEIC-IS\_Template\_Revised-4AUG2022" suggested a total of five chapters, including Chapter 1 Introduction, Chapter 2 Review of Literature, Chapter 3 Research Methodology, Chapter 4 Results, and Chapter 5 Discussion, Conclusions, and Recommendations. On the other hand, according to the findings of this research, a large proportion of CEIC independent study authors (74%) decided to compose their Chapter 4 under the title "Results and Discussion" and their Chapter 5 under the title "Conclusions and Recommendations.". Each chapter's headline reflects the chapter's unique contribution to the overarching goal of communicating that chapter's content. As a result, the modification that was made to the format of the template that was provided for the CEIC independent study has to be taken into consideration in order to get the most recent data.

#### **5.3 Limitations and Recommendations**

The limitations of this current study are related to the field of the study, corpus size, data analysis, and areas of analysis.

First of all, this research was limited to the Results and Discussion chapters of master's independent studies in the field of Career English for International Communication (CEIC). The results of this study cannot be generalized to apply to findings in other fields of study. For this reason, further study ought to investigate the structural use of text in different disciplines.

Secondly, the research gives a preliminary comprehension of the general rhetorical structure of twenty master's independent studies Results and Discussion chapters, despite having a limited corpus size. The results need to be validated in further study by making use of a corpus that is much greater in size.

Thirdly, this research is solely concerned with the examination of the move-step of the Results and Discussion sections of independent studies; nevertheless, both move and step analysis need to be carried out for the other portions, such as abstract, introduction, literature review, methodology, conclusion and recommendation, or entire independent study report in the further studies.

Lastly, the scope of this research was limited to analyzing the rhetorical movestep organization of the Results and Discussion chapters of independent study projects. Further research should be conducted with the goal of investigating other components of writing the Results and Discussion chapter, such as sentence tenses, lexical bundles, auxiliary words, and so on. Analyzing the linguistic characteristics of the independent study, such as the vocabulary that was used, the sentence structure, the level of cohesion and coherence, and the pragmatic characteristics, is an additional area that future studies might focus on paying attention to. Alternately, it is recommended to do a comparative research study comparing the research reports of students who are native English speakers and students who are not native English speakers.

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## **APPENDIX A**

# THE MOVE-STEP OCCURRENCES IN THE INDEPENDENT STUDY RESULTS AND DISCUSSION CHAPTERS

### IS NO. MOVE-STEP FOUND

- M1(A&B), M2(B), M1(B), M2(A), M2(B), M3(A), M4, M1(A&B),
   M2(A), M2(B), M1(B), M1(A), M3(A), M3(B), REF, REF, REF, M3(A),
   REF, M3(A), REF, REF, M3(A), REF, M3(A), REF, M3(D)
- M1(A), M1(B), M1(A), M2(B), M3(D), M2(B), M3(B), M2(A), M2(B),
   M2(A), M2(B), M3(C&D), M2(B), M2(A), M2(B), M3(D), M3(C),
   M2(B), M2(A), M2(B), M3(D), M2(B), M2(A), M2(B), M3(C), M2(B),
   M3(D), M2(B), M2(A), M3(C), M2(B), M3(D)
- M1(A), M1(B), M2(B), M2(B), M2(A&B), M2(A&B), M2(A&B),
   M2(B), M2(A&B), M2(A&B), M2(A&B), M2(A&B), M2(A&B),
   M2(A&B), M2(A&B), M2(A&B), M2(A&B), M2(A&B), M1(A),
   M1(B), M2(A), M4, M2(A&B), M3(C), M1(A&B), M3(D), M4, M2(A),
   M2(A), M2(A&B), M3(D), M1(A&B), M2(B), M1(A), M1(B), M2(A),
   M2(B), M3(B), M2(B), M2(B), M3(B), REF, M3(B), REF, M3(B),
   M2(B), M3(B), M3(B), M2(B), M3(A), M4
- **4.** M1(B), M2(B), M2(A), M2(A), M2(A), M2(A), M2(B), M1(A&B), M1(A), M2(A), M2(B), M3(B), M2(B), M3(D), REF, M2(B), M3(A),

M3(B), M1(A), M2(A), M1(B), M2(B), M3(B), M3(A), REF, M2(B), M3(B), M2(B), M3(A), M1(A), M2(A), M1(A), M2(B), M3(D), REF, M3(B), M3(A), M3(D), REF, M3(A), M3(D), REF, REF, M1(A), M2(A), M1(A), M2(B), M3(A), M3(B), REF, M3(A), M3(D), REF, M3(A), REF, REF, M2(A), M2(B), M3(A), M3(D), REF, REF, REF, M3(A), M1(A), M1(A), M2(B), M3(D), REF, REF, M1(A), M2(B), M3(A), REF, M1(A), M2(B), M3(B), M1(A), M2(B), M3(B), M1(A), M2(B), M4

- M1(A), M1(B), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B),
  M2(A), M2(B), M1(A&B), M2(A), M2(B), M2(A), M2(B), M2(A),
  M2(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B),
  M1(A), M1(A), M2(B), M2(B), M2(B), M3(A), M2(B), REF, M3(D),
  M2(B), M3(A), REF, M3(B), M3(B), REF, M3(A), M3(B), M3(A),
  M3(B), M1(A), REF, REF, REF, M3(D), M3(A), REF, M3(D), REF,
  M3(A), REF, M3(D), M3(A), REF, M4
- M1(A), M2(B), M1(A), M2(A), M1(B), M2(B), M3(A), M1(A), M2(B), M2(A), M2(A), M2(B), M3(A), M2(B), M3(A), M3(A), M2(A), M2(A), M2(A), M2(B), M3(A), M3(A), M3(A), M3(A), M2(B), M2(A), M3(A), M1(A), M1(B), M2(B), M2(B), M2(A), M2(B), M3(A), M3(A), M3(A), M3(A), M3(A), M1(B), M2(B), M3(A), M3(A), M2(B), M3(A), M3(A), M3(A), M3(A), M2(B), M3(A), M2(B), M3(A), M2(B), M3(A), M2(B), M3(A), M2(B), M3(A), M2(B), M3(A), M3(B), M3(B),

- M2(A), M2(B), M3(A), M3(A), M1(B), M2(A), M2(B), M3(A), M3(A), M4, M2(A), M3(D), M4, M1(A&B), M1(B), M4, M3(A), M3(B), M3(A), M3(B), M3(A), M3(B), M3(A), M3(B), M3(A), M3(B), M3
- M5, M1(A), M2(A&B), M2(A&B), M2(A&B), M2(A&B), M2(A&B),
   M2(A&B), M2(A&B), M2(A&B), M2(A&B), M2(A&B), M2(A&B),
   M2(A&B), M5, M2(A&B), M2(A&B), M5, M2(A&B), M2(A&B),
   M2(B), M2(B), M6(B), REF, M6(B), M4, M3(B), M2(B), M3(B),
   M2(B), M3(B), M3(B), M4, M7(A)
- 8. M1(A), M1(B), M2(A), M2(B), M3(D), REF, REF, M2(B), M3(A), REF,M2(B), M2(A), M1(B), M2(B), M2(B), M2(B), M3(A), M2(A), M2(B), M3(A), M2(A), M2(B), REF, M2(A), M2(B), M3(B), M3(B), M2(B), REF, M2(B), M2(A), M2(B), M2(B), M2(B), M2(B), M2(B), M3(B), M3(B), M3(B), M3(B), M3(A), M4, M4, REF, M4
- M1(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A),
  M2(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B),
  M2(B), M2(A), M2(B), M4, M6(A), REF, M3(A), M5, M3(B), REF,
  REF, M3(A), M3(B), M3(A), M3(B), M3(C), M6(C)

- M1(A&B), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B),
  M2(A), M2(B), M2(A), M2(B), M2(B), M1(B), M2(A), M2(B), M2(B),
  M2(B), M2(B), M2(B), M2(B), M2(B), M2(B), M3(A), REF, REF, REF
- M1(A), M1(B), M2(B), M1(B), M2(A), M2(B), M2(A), M2(B), M2(B),
  M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(B), M2(A), M2(B),
  M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A),
  M2(B), M2(A), M2(B), M3(A), M3(B), M3(B), M3(A), M3(B), M3(A),
  REF, M3(A), M3(B), REF, M3(A), M3(B), M3(B), M3(A), M3(B), REF,
  REF, M3(A), M3(A), M3(C), REF, M3(A), REF, REF
- M1(A), M1(B), M2(A), M2(A), M2(B), M2(A), M2(B), M2(B), M2(A),
  M2(B), REF, M3(B), REF, M3(A), M2(B), M2(B), M2(B), M2(A),
  M2(B), M3(D), M3(B), M2(B), M2(A), M2(B), M2(B), M3(B), REF,
  M3(A), M2(B), M2(A), M2(B), M3(A), M3(D), M2(B), M3(A), M2(A),
  M2(B), M3(A), M1(A), M2(B), M2(B), M3(A), M2(B), M3(A), REF,
  M2(B), M3(A), M3(B), REF, M3(A), M3(B), M2(B), M3(A)
- M1(A), M1(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A),
  M2(B), M2(A), M2(B), M2(B), M1(B), M2(A), M2(B), M2(A), M2(B),
  M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(B), M2(A), M2(B),
  M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(B), M2(A), M2(B),
  M2(A), M2(B), M2(B), M3(A), REF, REF, REF, REF, REF, M3(C)

- M1(A), M2(B), M2(A), M2(B), M3(A), REF, M2(B), M3(A), M2(A),
  M2(B), M3(A), M2(A), M2(B), M3(A), M2(A), M2(B), M3(A), M2(A),
  M2(B), M3(A), M2(B), M2(B), M2(B), M2(B), M2(B)
- M1(A), M1(B), M2(A), M1(A), M2(B), M2(A), M2(B), M3(A), M2(B),
  M2(A), M2(B), M3(A), M2(A), M2(B), M3(A), M2(A), M2(B), M2(B),
  M2(A), M2(B), M4, M3(A), M1(A), M2(B), M2(B), M2(B), M2(B),
  M2(B), M2(B), M3(A), M2(B), M2(B), M3(A), M1(A), M3(A), REF,
  M3(B), M3(A), M3(A), M3(B), M3(B), M3(A)
- M1(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A),
  M2(B), M2(A), M2(B), M1(B), M1(B), M2(A), M2(B), M3(A), M1(B),
  M2(A), M2(B), M3(A), M2(B), M3(A), M1(B), M2(A), M2(B), M3(A),
  M4, M1(B), M2(A), M2(B), M3(A), M2(A), M2(B), M3(A), M4,
  M1(B), M2(B), M2(B), M5, M3(A), M3(B), M3(B), M3(A), REF,
  M3(A), M3(B), M3(A), M3(B), M3(A), M3(B), M3(B), M3(A)
- M1(A), M1(B), M2(B), M2(A), M1(B), REF, REF, M2(B), REF,
  M2(B),M3(A), M1(B), M2(B), M1(B), M2(B), M3(B), M2(B), M4,
  M1(B), M2(B), M3(B), M1(B), M2(B), M1(B), M2(B), M2(B), M2(B),
  M3(A),M2(B), M2(B), M4, M1(B), M2(B), M3(B), M1(B), M2(B),
  M2(B), M2(B), M3(B), M2(B), M2(B), M2(A), M2(B), M3(B&A),

M2(B), M3(B), M2(B), M3(A), M2(A), M4, M2(B), M2(B), M2(A), M2(B), M3(A), M1(B), M2(A), M2(B), M2(A), M2(B), M2(A), M3(A), M2(B), M3(B), M2(B), M3(B), M2(B), M2(B), M2(B), M2(B), M2(B), M3(A), M3(B), M1(B), M2(A), M2(B), M2(A), M2(B), M2(B), M2(B), M2(B), M2(B), M2(B), M3(A), M3(A), M3(B), M3(A), M3(B), M3(A), M3(B), M3(A), M3(B), M3(A), M3(B), M3(A), M3(A), M3(A), M3(A), M3(A), M3(A), M3(A), M3(A), M4(B), M3(A), M3(A), M3(A), M4(B), M3(A), M3(A), M3(A), M4(B), M3(A), M3(A), M3(A), M4(B), M3(A), M3(A)

- M1(A), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B),
  M2(A), M2(B), M2(A), M2(B), M2(B), M1(B), M2(A), M2(B), M2(A),
  M2(B), M2(A), M2(B), M2(B), M1(B), M2(A), M2(B), M2(B), M5,
  M3(A), REF, REF, M3(D), M3(A), M3(B), M3(B)
- M1(A), M2(B), M1(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B),
  M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(B),
  M1(B), M2(A), M2(B), M3(A), M2(A), M2(B), M2(A), M2(B), M4,
  M1(B), M2(B), M2(B), M2(B), M3(A), REF, M3(A), M3(B), M3(D),
  M4, M3(B), M3(B), REF, M5
- M1(A&B), M1(A), M1(B), M2(B), M2(A), M2(B), M2(A), M2(B),
  M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A),
  M2(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B), M2(A), M2(B),
  M2(A), M2(B), M2(A), M2(B), M1(A), M2(B), M2(B), M2(A), M2(B),
  M2(B), M2(B), M2(B), M2(A), M2(B), M2(A), M2(B), M3(A), M1(A),

M2(A), M2(B), M3(A), M2(B), M2(B), M2(B), M2(B), M2(B), M2(A),
M2(B), M2(A), M2(B), M4, M2(A), M2(B), M4, M2(B), M3(D), M2(B),
M3(A), M1(A), M2(B), M3(A), M3(B), M3(D), M3(A), M3(D), M3(A),
M3(D), M3(A), M3(D), M3(A&D), M3(A), M3(D), M3(A), REF,
M3(A), M3(D), M3(A), M3(B), M3(C), M3(D), M3(B), M3(D), M3(C),
M3(B), M3(D), M3(A), M1(A), M5, M3(A), M3(D), M3(A),
M3(D), REF, REF, REF, M3(A), M3(B), M3(D), M3(C), REF, M3(A),
M3(D), M3(A), M3(D), M3(B), M3(B), M3(A&D)