The Use of Hedging Devices in Scientific Research Report Writing: A Corpus-Based Comparative Study of Graduate and Undergraduate Students in Social Sciences at a University in Thailand

Pirakorn Seekhem
Lecturer, Naresuan University International College, Naresuan University
First Author: pirakorns@nu.ac.th
Sopit Jenpradab
Lecturer, Naresuan University International College, Naresuan University
Corresponding Author: sopitj@nu.ac.th
Sarunya Tarat
Lecturer, Naresuan University International College, Naresuan University
E-mail: sarunyat@nu.ac.th
Thareerat Suniphan
Lecturer, Faculty of Humanities and Social Sciences, Pibulsongkram Rajabhat University
E-mail: thareerat.su@psru.ac.th

Received: October 31, 2023 **Revised:** January 3, 2024 **Accepted:** January 22, 2024

Abstract

Due to the importance of English as an international language in many academic fields, academic writers who aim to publish their work and gain acceptance in the international academic community often try to apply language devices that help them reach the expectations of the discourse community. Among other frequently used devices, academic writers employ hedges to express their claims or arguments in a tentative manner to show their politeness. This paper presents a preliminary study on the use of hedging devices by two groups of students across different academic levels. The two corpora consisted of discussion/conclusion sections of 15 theses written by the graduates and undergraduates in social sciences of a university. With the taxonomy of hedges proposed by Hyland (1998) as the analytical framework, the findings revealed that, regarding the frequencies of overall hedging devices (research question 1), the lower-level writers in this study tended to hedge more frequently. Involving the pattern of hedging categories (research question 2), both groups were similar in terms of the most and the least frequently used hedging categories. However, concerning

linguistic expressions of hedging devices (research question 3), the upper-level writers tended to use more various hedging expressions.

Keywords: Discourse Analysis, English for Academic Purposes Hedging in Academic Writing, English Writing Proficiency Levels

การใช้รูปแบบภาษาแสดงระดับความมั่นใจในการเขียนรายงานการวิจัย: การศึกษาเปรียบเทียบการใช้รูปแบบภาษาของนักศึกษาระดับบัณฑิตศึกษาและระดับปริญญาตรีในกลุ่มสังคมศาสตร์ของมหาวิทยาลัยแห่งหนึ่งในประเทศไทย โดยวิธีการทางภาษาศาสตร์คลังข้อมูล

พิรากร สีเข้ม
อาจารย์ประจำสาขาวิชาภาษาอังกฤษเพื่อการสื่อสารธุรกิจ วิทยาลัยนานาชาติ มหาวิทยาลัยนเรศวร
First Author: pirakorns@nu.ac.th
โสภิต เจนประดับ
อาจารย์ประจำสาขาวิชาภาษาอังกฤษเพื่อการสื่อสารธุรกิจ วิทยาลัยนานาชาติ มหาวิทยาลัยนเรศวร
Corresponding Author: sopitj@nu.ac.th
ศรัญญา ทารัตน์
อาจารย์ประจำสาขาวิชาภาษาอังกฤษเพื่อการสื่อสารธุรกิจ วิทยาลัยนานาชาติ มหาวิทยาลัยนเรศวร
E-mail: sarunyat@nu.ac.th
ธารีรัตน์ สุนิพันธ์
อาจารย์ประจำคณะมนุษยศาสตร์และสังคมศาสตร์ มหาวิทยาลัยราชภัฏพิบูลสงคราม
E-mail: thareerat.su@psru.ac.th

ได้รับบทความ: 31 ตุลาคม 2566 **ปรับปรุงแก้ไข:** 3 มกราคม 2567 **ตอบรับตีพิมพ์:** 22 มกราคม 2567

บทคัดย่อ

ปัจจุบันภาษาอังกฤษในฐานะภาษานานาชาติมีบทบาทสำคัญในศาสตร์ต่างๆ นักเขียนเชิงวิชาการ ซึ่งมีเป้าหมายที่จะตีพิมพ์เผยแพร่ผลงานวิชาการของตนและได้รับการยอมรับจากกลุ่มผู้อ่านในศาสตร์นั้นๆ ทั้งในประเทศและต่างประเทศจึงมักจะพยายามใช้เครื่องมือภาษาต่างๆ ที่ช่วยให้ตนบรรลุความคาดหวังของผู้อ่านเหล่านั้นได้ นักเขียนเชิงวิชาการมักใช้รูปแบบภาษาแสดงระดับความมั่นใจเป็นวิธีการหนึ่งในการแสดงข้ออ้างหรือข้อโต้แย้งในลักษณะที่แสดงความไม่แน่นอนเพื่อให้ภาษามีความสุภาพ บทความชิ้นนี้นำเสนอการศึกษาวิธีการใช้รูปแบบภาษาแสดงระดับความมั่นใจของผู้เขียนที่เป็นนักศึกษาสองกลุ่มในระดับชั้นการศึกษาต่างกัน คลังข้อมูลภาษาสองชุดประกอบด้วยบทอภิปรายผลและสรุปผลการวิจัย ซึ่งอยู่ในวิทยานิพนธ์ จำนวน 15 เรื่อง ซึ่งเขียนโดยนักศึกษาระดับบัณฑิตศึกษาและระดับปริญญาตรีในกลุ่มสังคมศาสตร์ของมหาวิทยาลัยแห่งหนึ่ง เมื่ออ้างอิงการจัดประเภทรูปแบบภาษาแสดงระดับความมั่นใจของ Hyland (1998) ในการวิเคราะห์ข้อมูล ผลการวิจัยที่เกี่ยวข้องกับความถี่ในการใช้รูปแบบภาษาแสดงให้เห็นว่า ผู้เขียนที่เป็นนักศึกษาระดับปริญญาตรีในงานวิจัยนี้มีแนวโน้มจะใช้รูปแบบภาษาแสดงระดับความมั่นใจบ่อยครั้งกว่า (คำถามวิจัยข้อที่ 1) ทั้งนี้ แนวทางการใช้รูปแบบภาษาของผู้เขียนทั้งสองกลุ่มในงานวิจัยนี้มีความคล้ายคลึงกันในแง่ของประเภท ได้แก่ ประเภทของ

รูปแบบภาษาที่มีการใช้บ่อยครั้งที่สุดและน้อยครั้งที่สุด (คำถามวิจัยข้อที่ 2) ในขณะที่ผู้เขียนที่เป็นนักศึกษาระดับบัณฑิตศึกษาในงานวิจัยนี้มีแนวโน้มจะใช้รูปแบบภาษาในประเภทต่างๆ อย่างหลากหลายกว่า (คำถามวิจัยข้อที่ 3)

คำสำคัญ: การวิเคราะห์วาทกรรม, การใช้รูปแบบภาษาแสดงระดับความมั่นใจการเขียนเชิงวิชาการ, ระดับความสามารถในการเขียนภาษาอังกฤษ

Introduction

Due to the importance of English as an international language, academic writers who aim to publish their work and gain acceptance often try to apply language devices that help them reach the expectations of the discourse community (Chen, &Jun Zhang, 2017, pp.1-34; Demir, 2018, pp.74-92; Gee, &Handford, 2012). Hedging is one such expected convention. According to Hyland (1994), "academic writing is rich in hedged propositions", and hedging devices allow writers "to express their uncertainty concerning the factuality of their statements or to indicate deference to their readers" (p.1). According to Saville-Troike, &Barto (2017), not only writers whose first language is English but also writers whose first language is other than English, need to learn and gain academic literacy for academic writing. Therefore, studies on the use of hedges are needed to provide a better understanding of how professional academic writers employ these kinds of devices. A great number of studies have been carried out on the use of hedges in different kinds of genres and with different comparison criteria. This present study, as a preliminary study of a future study on the use of hedging devices among Thai graduate and undergraduate students, aims to investigate how Thai students with different academic levels employ hedging devices in their theses or dissertations which are part of their graduation requirements. This study focuses on the frequencies of overall hedging devices, the pattern of hedging categories, and linguistic expressions of hedging devices. The findings from this study could probably benefit in teaching research report writing, course development or curriculum revision to graduate or undergraduate programs at the university level.

The objectives of the study

1. To investigate the frequencies of overall hedging devices used by the graduate and undergraduate students.

2. To examine the similarities and differences in the pattern of hedging categories between the graduate and undergraduate students.

3. To examine the similarities and differences in linguistic expressions of hedging devices between the graduate and undergraduate students.

Literature Review

There have been different ideas from scholars regarding the definition of hedges. Some characterize hedging devices as linguistic items or ways to show a lack of writers' commitment to a proposition and ease the writer's burden of expressing absolute accuracy (Hinkel, 2002; Hyland, 1998). Others describe hedges as rhetorical devices for demonstrating politeness and consideration for others and giving readers a chance to

disagree or have different interpretations (Brown, &Levison, 1987; Crompton, 1997; Holmes, 1982). Although these explanations point out different characteristics of hedges, they complement one another and add more clarification to the functions or potential of this type of linguistic tool.

As hedging devices are in focus among academia, there are various categorizations of hedges proposed and used by researchers. Some of those are Crompton's (1997), Hyland's (1998) and Hinkel's (2005) classifications. Moreover, some researchers also applied modified categorizations by integrating other classifications from previous literature with those of the mentioned scholars. However, some classifications seem to overlap. To adopt or adapt which taxonomy to be an analytical framework for data analysis depends on the focus of the study or the justification of the researcher.

A great number of studies have been carried out on the use of hedges in different kinds of genres and with different comparison criteria. Some of them studied hedging based on gender differences (Holmes 1990), some explored hedging across various disciplines (Takimoto, 2015) while many focused on different L1 backgrounds of writers (Akbas, &Hardman, 2018; Almakrob, 2020; Chen, &Jun Zhang, 2017; Demir, 2018; Nguyen Thi Thuy, 2018). Still, few studies focus on the use of hedges across groups of writers with different academic levels. Moreover, among few studies concentrating on hedging across different academic levels, some studies such as Abdollahzadeh (2019), Taymaz (2021), and Wu, &Paltridge (2021) tried to control variables to make certain that the corpora are compatible. Those variables included the same language and the same discipline of the focused texts, the same genre of writing, and the same first language (L1) background of writers. However, others such as Aull and Lancaster (2014) may disregard the differences in the disciplines of writers and academic writing genres. Although Aull, &Lancaster (2014) built three large corpora (over 95,000,000 words in total) divided by the academic levels of writers, their corpora were compiled from argumentative essays, critiques/evaluations, response papers, and research articles which were written by writers from 15 different subdisciplines under the three main disciplines (natural sciences, social sciences, and humanities). With the variety of materials (such as disciplines and genres), it is possible that the researchers may fail to generalize the results of their study. Therefore, this present study, as a preliminary study of a future study on the use of hedging devices among Thai graduate and undergraduate students, investigated only one specific aspect of hedging usage which is how graduate and undergraduate students in social sciences (one discipline) employed hedging devices in their scientific research report writing (one genre).

Methodology

This study applied the mixed-method research design of quantitative and qualitative approaches. The quantitative approach was used to acquire the answer to the first research question regarding the frequencies of overall hedging device usage (total instances of usage), while the qualitative approach was used to answer the second and third research questions concerning the patterns of hedging categories (which category out of six is most used and least used) and linguistic expressions (what hedging word/phrase are used), respectively.

Populations and Samples

In this current study, the researchers intended to decrease the possible variations across different universities, disciplines, or genres. Therefore, the researchers decided to collect the data for the two corpora from the same university, study field, and writing genre.

When identifying the population of this study, the researchers applied six criteria including (1) the theses provided online access to the soft file for further corpus analysis; (2) the theses were written by Naresuan University (NU) graduate or undergraduate students; (3) the theses were written by the writers in social sciences; (4) the theses were issued during 2019-2021; (5) the theses were written in the English language; (6) the theses applied Introduction, Methods, Results, and Discussion (IMRD) writing format and had a clear discussion/conclusion (D/C) section (the writer did not combine the discussion with the results which is not the focus of the current study). The researchers purposively selected Naresuan University (NU), a public university in the lower northern of Thailand, to be the study context as three of the researchers currently work at this university and hope that the findings from this study could probably benefit the institute. Moreover, the social sciences field was the selected field of study due to more possibility of seeing a higher frequency compared to theses from other disciplines (Hyland, (1994). Besides, the two corpora were generated from only one genre, IMRD (Introduction, Method, Results, Discussion/Conclusion). The researchers chose the discussion/ conclusion section (also referred to as the D/C section in this paper) because the writers usually take their stances most obviously while interpreting the results and linking those results to the related literature to persuade their readers (Taymaz, 2021).

As a result, in this study, the graduate thesis corpus consisted of three theses (two from the Master of Arts in English and one from the Doctor of Philosophy in Logistics and Supply Chain, and the undergraduate thesis corpus consisted of 12 theses (six from the Bachelor of Arts in English for Business Communication and six from the

Bachelor of Business Administration in International Business Management). All these 15 theses (population) were included in this study.

Research Tools/Instruments

The researchers adopted the taxonomy of hedges proposed by Hyland (1998) as the analytical framework of the study. This framework consists of six hedging categories: epistemic modals/modal auxiliaries, verbs/verbal hedges, epistemic adjectives/adjectival hedges, epistemic adverbs/adverbial hedges, quantifiers/determiners, and noun hedges. Also, the researchers applied search queries from those six categories in the AntConc (4.0.3) software developed by Laurence Anthony which was used as a tool for data analysis.

Data Collection Process

To gather graduate and undergraduate theses for the two corpora, the researchers applied the mentioned six criteria regarding the access of texts, the groups of writers, the years the texts were issued, the language the texts were written in, and the characteristics of the text genre. The data that incorporated the graduate corpus was retrieved from the online database called "NU Intellectual Repository" on the NU Library Website while the data for the undergraduate corpus was downloaded from Naresuan University International College (NUIC) Library with assistance from the librarian. The sizes of the two corpora were 18,382 and 17,596 words, respectively (excluding tables and figures). See Table 1.

Table 1 The Description of The Two Corpora

	Graduate Corpus			Undergraduate Corpus		
Number of Theses	**3 papers**			**12 papers**		
Study Programs & Year of Issue	Grad1	MA (Eng)	2019	Undergrad1 Undergrad2 Undergrad3	BA (EBC)	2019
	Grad2	MA (Eng)	2020	Undergrad4 Undergrad5 Undergrad6	BA (EBC)	2020

Table 1 The Description of The Two Corpora

	Graduate Corpus	Undergraduate Corpus
Number of Theses	**3 papers**	**12 papers**
Study Programs & Year of Issue	Grad3 PhD (LogSup) 2021	Undergrad7 Undergrad8 Undergrad9 BBA (IBM) 2019 Undergrad10 Undergrad11 Undergrad12 BBA (IBM) 2020
Total tokens in D/C	18,382 words	17,596 words
The average length of D/C	6,127.33 words	1,466.33 words
The range of the length of D/C	4,071 - 6,859 words	1,074 - 2,180 words

Remark: MA (Eng) = Master of Arts in English, Ph.D. (LogSup) = Doctor of Philosophy in Logistics and Supply Chain, BA (EBC) = Bachelor of Arts in English for Business Communication, and BBA (IBM) = Bachelor of Business Administration in International Business Management

Data Analysis

The researchers adopted the taxonomy of hedges proposed by Hyland (1998) as the analytical framework of the study. Based on the mentioned taxonomy proposed by Hyland (1998) and the queries purposively selected by the researchers (only queries belonging to one hedging category), this study did not recruit any inter-raters to provide their judgments to be used in the data analysis procedure. Then, the researchers applied 82 search queries from the six categories, namely epistemic modals/modal auxiliaries, verbs/verbal hedges, epistemic adjectives/adjectival hedges, epistemic adverbs/adverbial hedges, quantifiers/determiners, and noun hedges, in AntConc software developed by Laurence Anthony. See Table 2.

Table 2 The Search Queries from Six Categories Applied in the AntConc software

Hedging Categories	Number of words / Search Queries	Search Queries
Modals	6 words/6 queries	may, might, can, cloud, should, would
Verbal Hedges	10 words/ 30 queries*	appear, assume, believe, demonstrate, expect, imply, recommend, report, reveal, seem

Table 2 The Search Queries from Six Categories Applied in the AntConc software

Hedging Categories	Number of words / Search Queries	Search Queries
Adjectival Hedges	10 words/10 queries	approximate, likely, partial, possible, probable, reasonable, rough, unlikely, potential, slight
Adverbial Hedges	10 words/10 queries	almost, approximately, mainly, mostly, often, perhaps, potentially, relatively, sometimes, somewhat
Quantifiers	6 words/6 queries	few, most, much, not all, several, to some extent
Noun Hedges	10 words/ 20 queries**	assumption, attempt, belief, expectation, implication, intention, majority, recommendation, suggestion, tendency

Remark: * 30 verbal hedges include present third person singular forms (–s) and past forms (–d) of the verbs, ** 20 noun hedges include singular and plural forms (–s) of the nouns.

Results

In this section, the researchers present the results from the analysis of the graduate and undergraduate corpora in social sciences which were compiled from the D/C sections of 15 theses. The researchers divide the results into three parts according to the research questions and provide a discussion in the following section by referring to findings from previous studies.

Research Question 1: What are the frequencies of overall hedging devices used by the graduate and undergraduate students?

As Table 3 illustrates, the frequency of overall hedges in the graduate corpus was lower than in the undergraduate corpus (18.06 and 23.07 per 1,000 words, respectively). This result indicated that the undergraduate writers in this study tended to use hedges more frequently than the graduate writers.

Table 3 The Frequencies of Overall Hedges Between The Two Corpora

Hedging Categories	Graduate Corpus (18,382 words)		Undergraduate Corpus (17,596 words)	
	Raw Freq.	Normalized Freq. (per 1,000 words)	Raw Freq.	Normalized Freq. (per 1,000 words)
Epistemic Modals	164	8.92	182	10.34
Verbal Hedges	48	2.61	30	1.70

Table 3 The Frequencies of Overall Hedges Between The Two Corpora

Hedging Categories	Graduate Corpus (18,382 words)		Undergraduate Corpus (17,596 words)	
	Raw Freq.	Normalized Freq. (per 1,000 words)	Raw Freq.	Normalized Freq. (per 1,000 words)
Adjectival Hedges	22	1.20	5	0.28
Adverbial Hedges	35	1.90	24	1.36
Quantifiers	30	1.63	97	5.51
Noun Hedges	33	1.80	68	3.86
Total	332	18.06	406	23.07

Research Question 2: What are the similarities and differences in the pattern of hedging categories between the graduate and undergraduate students?

As Table 4 reveals, the graduate and undergraduate writers in this study were similar in terms of the most and the least frequently used hedging categories. Both seemed to prefer epistemic modals the most as seen from the percentage of usage among other categories (49.40% for the graduates and 44.83% for the undergraduates). Moreover, both writer groups seemed to prefer adjectival hedges the least (lower than 10% in both corpora). However, when comparing the proportion of other categories, the undergraduate writers of this study tended to use verbal hedges and adverbial hedges more often than the other group, as seen as the second (23.89%) and the third (16.75%) most frequent categories of the undergraduate corpus, compared to the lower percentages (14.46 % and 10.54%) in the graduate corpus.

Table 4 The Frequencies and Proportion of Hedging Categories Between The Two Corpora (Frequencies and Percentages are Ordered from High to Low)

Hedging Categories	Graduate Corpus (18,382 words)		%	Undergraduate Corpus (17,596 words)		%
	Raw Freq.	Normalized Freq. (per 1,000 words)		Raw Freq.	Normalized Freq. (per 1,000 words)	
Epistemic Modals	164	8.92	49.40	182	10.34	44.83
Verbal Hedges	48	2.61	14.46	97	5.51	23.89

Table 4 The Frequencies and Proportion of Hedging Categories Between The Two Corpora (Frequencies and Percentages are Ordered from High to Low)

Hedging Categories	Graduate Corpus (18,382 words)		%	Undergraduate Corpus (17,596 words)		%
	Raw Freq.	Normalized Freq. (per 1,000 words)		Raw Freq.	Normalized Freq. (per 1,000 words)	
Adverbial Hedges	35	1.90	10.54	68	3.86	16.75
Noun Hedges	33	1.80	9.94	48	2.61	7.39
Quantifiers	30	1.63	9.04	24	1.36	5.91
Adjectival Hedges	22	1.20	6.63	5	0.28	1.23
Total	**332**	**18.06**	**100**	**406**	**23.07**	**100**

Research Question 3: What are the similarities and differences in linguistic expressions of hedging devices between the graduate and undergraduate students?

To answer this question, the researchers examined the comparative usage of 82 hedging devices between the two writer groups. Due to the space limitation, in this paper, the researchers present only outstanding findings by dividing them into key similarities and differences in the following paragraphs.

The key similarities between the two writer groups in terms of the use of hedging expressions could be found in the categories of epistemic modals and quantifiers. Both groups employed all six epistemic modals selected as search queries. Also, both groups seemed to prefer “can” the most, although their least frequently used expressions varied. “Might” was the least frequently used in the graduate corpus while “could” was the least in the undergraduate. Moreover, both groups had a similar preference for the top three quantifiers, namely “most,” “much,” and “several.” Especially, “most” was used with the highest frequency in this category and among six hedging categories in the undergraduate corpus.

The major differences between the two writer groups in terms of the use of hedging expressions could be found in the usage of verbal hedges, adjectival hedges, adverbial hedges, and noun hedges. The graduates in this study tended to use more various hedging expressions under these four categories than the undergraduates. The graduates used nine out of ten search queries on verbal hedges, five out of ten search queries on adjectival hedges, nine out of ten search queries on adverbial hedges, all ten search queries on noun hedges (compared to eight queries, three queries, five

queries, and nine queries, respectively, used by the undergraduates). Moreover, the graduates also tended to use various noun expressions in similar frequencies while the undergraduates tended to use only certain noun expressions much more repeatedly. For example, “expectation/-s” and “recommendation/-s” occurred in the undergraduate corpus with higher frequencies than other expressions in the category.

Discussion

The researchers compared the results of this study with the results from previous studies which focused on the same variable (the study levels of writers – lower and upper). The researchers provide two main discussion points as follows.

Firstly, the result of research question 1 of this study regarding the frequencies of overall hedges is contradicted by the findings of some previous studies. While this current study found that the lower-level writers (the undergraduates) hedged their propositions more frequently than the upper-level writers (the graduates), Abdollahzadeh (2019), Aull, &Lancaster (2014) and Wu, &Paltridge (2021) found the opposite result in their study which compared the corpora of the graduate students and the published writers, the first-year undergraduates and the other two upper-level groups, and the MA and the Ph.D. students, respectively. However, the finding of this current study still resonates with the finding of Taymaz (2021) which found that even though the upper-level writers (Ph.D. students) composed longer discussion sections than the lower-level writers (MA students), they employed hedges less frequently than the lower-level group.

Secondly, in some previous studies, the explanations regarding such mentioned contradicting findings were not clearly supported by the evidence in those studies. For example, Taymaz (2021) explained that the contradiction with the results from other previous studies might come from the fact that his study compared the Ph.D. theses with MA theses written by the same writers instead of random selection. He also claimed that there might be a change in the writers’ perception of making claims in their theses at different levels. When becoming Ph.D. students, the writers may think that they should support their points more strongly, and displaying hesitation is a sign of inability to defend themselves in the academic community. Another reason suggested by the same researcher was that the Turkish students in his study may not be fully aware of the necessity of using hedges in academic writing. However, from the perspective of the researchers of the current study, those explanations from Taymaz (2021) may be relevant to some extent. His claims were somehow not supported by the evidence from his study. The instruments and processes (such as questionnaires or interviews)

to verify why the upper-level writers hedged less and whether they were aware of the importance of hedging were needed.

For this current study, the answer to research question 3 could explain a reason behind the unusual phenomenon of why the lower-level writers hedge more than the upper-level writers in research question 1. According to the findings, the researchers could draw a probable conclusion that the frequency of overall hedging usage by the undergraduate writers was higher than the upper-level writers because of the high frequencies of certain hedges. Those hedges were "most," "can," "may," "should," and "recommendation/-s." Only these five most frequently used hedges can form up to more than 50% of hedges appearing in the whole undergraduate corpus (See Table 5). This could indicate that the undergraduate writers in this study may use hedging devices more often; however, they could not use as various hedges as the upper-level writers. The undergraduate writers in this study were familiar with some specific hedges and had the tendency to repeatedly use those hedges in their writing.

Table 5 The distribution of the five most frequently used hedges of two corpora

Linguistics Expressions	Graduate Corpus		Linguistics Expressions	Undergraduate Corpus	
	Raw Freq.	Normalized Freq. (per 1,000 words)		Raw Freq.	Normalized Freq. (per 1,000 words)
can	59	3.21	**most**	84	4.77
could	34	1.85	**can**	73	4.15
would	25	1.36	**may**	37	2.10
should	23	1.25	**should**	34	1.93
most	20	1.09	**recommendation/-s**	33	1.88
Total	**161**	**8.76**	**Total**	**261**	**14.83**

Conclusion

The present study investigates the use of hedging devices by two groups of writers with different academic levels through a corpus-based approach. The researchers built two corpora from the discussion/conclusion sections of 15 theses written by the graduates and the undergraduates in the social sciences field of a university. The researchers adopted the taxonomy of hedges proposed by Hyland (1998) as the analytical framework. The findings revealed that the lower-level writers in this study tended to use hedges more frequently than the upper-level writers. Both groups of

writers were similar in terms of the most and the least frequently used hedging categories. Both seemed to prefer epistemic modals the most, but adjectival hedges the least. Although the lower-level writers in this study may use hedging devices more often, they were familiar with some specific hedges and tended to repeatedly use those in their writing. Nevertheless, the upper-level writers in this study tended to use more various expressions, as seen in categories of verbal hedges, adjectival hedges, adverbial hedges, and noun hedges.

Originality and Body of Knowledge

The understanding of hedging device usage with the empirical evidence from this current study could be used to help the lecturers of the course, the course developers or responsible persons of curriculum revision in responding to the needs of certain groups of Thai students who have different levels of English proficiency and are required to complete research and write their research report. Those academic stakeholders may apply some quantitative and qualitative findings from this small-scale study in making more effective decisions based on awareness of the strengths, weaknesses, and preferences of their students. For example, despite the higher frequencies of hedging device usage (shown in the finding of research question 1), the undergraduates' preference for some hedging expressions (shown in the finding of research question 3) may reflect one of the weaknesses students at this level need improvement.

Suggestion for Further Study

The present study still has some limitations. Firstly, the size of the corpus was relatively small due to the aim to control the variables within the study. Therefore, future studies should base on larger corpora (more theses/dissertations of different study levels) and may compile from different disciplines to gain more generalizable findings. Secondly, this current study did not focus on the perception or the awareness of the writers. Findings from those foci may help explain the emerging phenomena in future studies. By that, researchers may consider questionnaires or interviews to gain a more in-depth understanding of the use of hedging devices between groups of writers.

References

Abdollahzadeh, E. (2019, January). A Cross-cultural Study of Hedging in Discussion Sections by Junior and Senior Academic Writers. **Ibérica 38,** 177-202.

Akbas, E., &Hardman, J. (2018, August). Strengthening or Weakening Claims in Academic Knowledge Construction: A Comparative Study of Hedges and Boosters in Postgraduate Academic Writing. **Educational Sciences: Theory &Practice, 18(4),** 831–859. http://dx.doi.org/10.12738/estp.2018.4.0260.

Almakrob, A. Y. (2020, October). Native Versus Nonnative English Writers' Use of Hedging in Linguistics Dissertations. **Asian EFL Journal, 27(4.4),** 360–381.

Aull, L., L., &Lancaster, Z. (2014, March-April). Linguistic Markers of Stance in Early and Advanced Academic Writing. **Written Communication, 31(2),** 151–183. https://doi.org/10.1177/0741088314527055.

Brown, P., &Levinson, S. C. (1987). **Politeness: Some Universals in Language Usage** (Vol. 4). Cambridge University Press.

Chen, C., &Jun Zhang, L. (2017, May). An Intercultural Analysis of The Use of Hedging by Chinese and Anglophone Academic English Writers. **Applied Linguistics Review, 8(1),** 1–34. https://doi.org/10.1515/applirev-2016-2009.

Crompton, P. (1997). Hedging in Academic Writing: Some Theoretical Problem. **English for Specific Purposes, 16(4),** 271-287.

Demir, C. (2018, July-September). Hedging and Academic Writing: an Analysis of Lexical Hedges. **Journal of Language and Linguistic Studies, 14(4),** 74-92.

Gee, J., P., &Handford, M. (2012). The Routledge Handbook of Discourse Analysis. Routledge. https://doi.org/10.4324/9780203809068.

Hinkel, E. (2002). **Second Language Writers' Text: Linguistic and Rhetorical Features. Mahwah & London:** Lawrence Erlbaum Associates Publishers.

_____. (2005). Hedging, Inflating, and Persuading. **Applied Language Learning, 15(1&2),** 29-53.

Holmes, J. (1982, December). Expressing Doubt and Certainty in English. **RELC Journal 13(2),** 9-28.

_____. (1990, July-September). Hedges and Boosters in Women's and Men's Speech. **Language & Communication, 10(3),** 185-205.

Hyland, K. (1994, July). Hedging in Academic Writing and EAP Textbooks. **English for Specific Purposes, 13(3),** 239–256. https://doi.org/10.1016/0889-4906(94)90004-3.

_____. (1998). **Hedging in Scientific Research Articles.** John Benjamins. https://doi.org/10.1075/pbns.54.

Nguyen Thi Thuy, T. (2018, April). A Corpus-Based Study on Cross-Cultural Divergence in The Use of Hedges in Academic Research Articles Written by Vietnamese and Native English-speaking Authors. **Social Sciences, 7(4),** 70. https://doi.org/10.3390/socsci7040070.

Saville-Troike, M., &Barto, K. (2017). **Introducing Second Language Acquisition.** Cambridge: Cambridge University Press.

Takimoto, M. (2015, July). A Corpus-Based Analysis of Hedges and Boosters in English Academic Articles. **Indonesian Journal of Applied Linguistics, 5(1),** 95-105.

Taymaz, N. (2021). A Corpus-Based Comparison of Use of Hedges and Boosters by Turkish ELT MA and PhD Students. **Dilve Dilbilimi Çalışmaları Dergisi, 17(1),** 33–49. https://doi.org/10.17263/jlls.903302

Wu, B., &Paltridge, B. (2021). **Stance Expressions in Academic Writing: A Corpus-Based Comparison of Chinese Students' MA Dissertations and PhD Theses.** Lingua, 253, 103071. https://doi.org/10.1016/j.lingua.2021.103071.