

Hedging in English Research Articles of Thai Academic Writers

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Abstract

Hedging is an important convention in academic writing in which non-native English writers should be concerned. It is used to express the writer's attitudes or ideas in a tentative way to soften the writer's claims by proposing uncertainty, possibility or doubt. This paper attempts to analyze the hedging markers used by Thai academic novice writers and Thai academic professionals in terms of types and frequency in research articles written in English. The data were taken from twenty research articles published in national and international journals in the Humanities and Social Sciences field. The results showed that both Thai academic novice writers and professionals used a variety of types, namely: Shields, Approximators, and Combined-hedging markers in their academic writing. However, Thai academic professionals appeared to employ these hedging markers more frequently than Thai academic novice writers, especially the combined-hedging, where they combined more than one hedging markers to express their uncertainty and possibility of their propositions.

Keywords: Hedging, Hedging markers, Thai academic writers, Thai academic novices, Thai academic Professionals, Research articles

Introduction

English language has served as a medium of communication in scientific and academic communities for many decades and has been used as an important culprit for spreading the knowledge throughout the world, as it is apparently based on a large number of research articles and academic papers that are written in English. Thus, one of the academic writing conventions that the writers, especially non-native English writers, should be concerned with is hedging. Salager-Meyer (1994) stated that non-native English writers must acknowledge hedging in their academic writing if they would like to be part of the academic community.

Lakoff (1973) defines the term ‘hedges’ as “a set of words or phrases that function to make things fuzzier”. According to Hyland (1998), hedging is used as the linguistic tool to restrict a speaker’s confidence in their ideas or suggestions, to avoid commitment to their claims, and to express uncertain statements or possibilities. In daily life, many hedges in the form of auxiliary verbs, epistemic adjectives, adverbs and lexical verbs are used to express speakers’ opinions and their commitment; e.g. *I think, maybe, or perhaps* (Hyland, 1998). In the academic world, hedging is used to present solutions or answers to research questions in order to attain goals of academic writing. Hedging is used to present uncertainty and tentativeness of the researchers towards their claims and also to allow the readers to make their own judgments or to conduct further studies (Duman, 2016). For example,

- (1) *Even though the results **seem to** support the previous findings,*
- (2) *The number of diabetic patients **probably** increases ...*
- (3) *According to some earlier studies, hedges are **quite** difficult for EFL learners to master.*

Moreover, hedges can show politeness and possibility of claims (Csongor & Rébék-Nagy, 2013; Petchkit, 2016). Prasithrathsint (2015) studied the significance of hedging and the linguistic features of hedging among native English speakers, Filipino speakers of English and Thai speakers of English. She defined ‘hedging’ as words that lessen the impact of an utterance and adopted the word ‘hedges’ as the devices of indirectness, tentativeness and understatement in statements. Elheky (2018) provides a definition for ‘hedging’ as a device for the writer to deliver his/her beliefs and personal points of view about the writer’s claims. In this present study, hedging means the words that are used to show uncertainty and possibility of the writers’ claims in their studies in order to tone down or avoid committing to these claims.

Hedging is one important type of interpersonal meta-discourse, and it has been broadly studied in scientific research articles and academic writing (Duman, 2016; Hyland, 1998; Salager-Meyer, 1994; Salichah, Iraeati, & Basthomi, 2015; Samaie, Khosravian, & Boghayeri, 2014; Zanina, 2016). Hedging is similar to a type of rules in communication among members of the academic community; therefore, using hedging inappropriately or incorrectly may impede the communication and causes misunderstandings (Zanina, 2016).

Many scholars have proposed the forms and functions of hedging in different and various categories. Salager-Mayer (1994), Martin-Martin (2003), and Prasithratsint (2015) take an attribution of both hedging functions and forms into accounts by considering both the linguistic and situational context. For example, Salager-Mayer (1994) uses the term ‘*Shields*’ for all modal verbs showing possibility, semi-auxiliaries, probability adverbs, epistemic verbs to express possibility (e.g. *may, might, shall, should, to appear, to seem, probably, possibly, to suggest*) while Martin-Martin (2003) and Prasithratsint (2015) use the term ‘*Strategy of Indetermination*’ or ‘*Indetermination*’ instead. Moreover, Crompton (1997), Hyland (1998), and Jalifafar (as cited in Elheky, 2018) separate these hedging lexical markers based on their grammatical features, such as certain modal verbs or modal verbs showing probability (e.g. *might, should, could, may*); probability adverbs or epistemic adverbs (e.g. *probably, possibly*); certain lexical verbs or lexical verbs (e.g. *believe, assume, suggest*). Furthermore, Jalifafar (as cited in Elheky, 2018) proposes two more structures of hedging which are: ‘that clause’ (e.g. *it can be suggested that ..., there is a hope that....*), and ‘to-clause + adjective’ (e.g. *it may be possible to..., it is significant to*).

Many studies of hedging have explored hedging at the lexical level. For instance, Prasithratsint (2015) compared the use of hedges, where she focused on the lexical level of hedges among native speakers of English, the Filipino speakers of English and Thai speakers of English. She found that lexical hedges were most frequently used by native English speakers, and were least frequently used by non-native English speakers (Thai scholars). Csongor and Rébék-Nagy (2013) studied the types of lexical hedges (auxiliaries, semi-auxiliary, epistemic verbs, adverbial phrase and numerical hedges) in five medical research articles. The study showed that the linguistic strategy of hedging conveying uncertainty was implemented in popular articles on medicine. Samaie, Khosravian and Boghayeri (2014) investigated the types and frequency of hedges in lexical level in research article introduction sections of Persian and English native speakers, and the results showed that native English speakers employed modal auxiliaries, evidential main verbs, adjectives, and nouns in the introduction section of research articles more often than Persian academic writers. Demir

(2018) analyzed lexical hedges (modal auxiliaries and semi-modal verbs, verbs, epistemic adjectives, epistemic adverbs, quantifiers/determiners and nouns) in scientific articles written by native writers of English and non-native writers of English (Turkish writers). It can be assumed that many studies analyze hedging in terms of lexical hedges.

The present study also examines the lexical hedges in terms of single-hedging markers and combined-hedging markers. The researcher applies hedging in terms of '*Shields*' and '*Approximators*' of Salager-Meyer's (1994) and Martin-Martin's (2003) categories in order to investigate Thai academic writers' exploitation of complexity of various hedges showing uncertainty and possibility of the writers' claims in their studies in order to tone down or avoid committing the claims. '*Shields*' in Salager-Meyer's (1994) comprises of all modal verbs showing probability and possibility, semi-auxiliaries, probability adverbs, epistemic verbs expressing possibility, and modal nouns in Martin-Martin's '*Strategy of Indetermination*' (2003) is added in this category, as it serves the same function of '*Shield*' (hedges relating to uncertainty, probability and possibility). Moreover, '*Approximator*' in Salager-Meyer (1994) and Martin-Martin (2003) refers to adverbs showing quality, degree, frequency and time (e.g. *approximately, roughly, somewhat, quite, often, occasionally*) indicating an unwillingness to clarify the writer's actual commitment to the proposition. Moreover, this study also investigates the exploitation of combined-hedging markers used by Thai academic writers.

Additionally, there are a few studies comparing the hedging used among Thai academic writers writing in English, especially between novices and professionals. There are some researches comparing the language used between expert/professional writers and L2-English students, not between the non-native English novice writers and expert/professional writers, for example, the research of Chen and Baker (2010) and the research of Pan, Reppen and Biber (2016). Chen and Baker (2010) studied the lexical bundles employed in L1-English expert writers, L1-English students and L2-English students in academic writing. The study of Pan, Reppen and Biber (2016) is about comparing the use of lexical bundles in research articles between L1-English and L2-English academic professionals. Most studies have focused on comparing non-native English writers and native English writers who have different perceptions regarding the use of language because of their dissimilar cultural background.

However, this research attempts to study the hedging markers used by academic writers who have similar socio-cultural backgrounds in terms of nationality. In this study, Thai academic novices and professionals are categorized according to the biodata part which

is presented at the end of the English research articles after the references section of their academic/research papers. The academic novices in this study are the postgraduate students (Master's degree students and Doctorial students); on the other hand, the academic professionals are the lecturers or researchers with the academic titles of Professor or Associate Professor. The aim of dividing the groups in this manner was to explore the obvious distinctions of academic writing experiences between these two groups. The researcher made the assumption that the professional group (Professors or Associate Professors), as members of the academic community, would be more experienced and tended to use complicated and varied types of hedging markers more frequently in their academic or research papers compared to those novice writers.

ESL/EFL learners and writers, including undergraduate, graduate and postgraduate students, exercise hedging in their academic writing, but they often become confused and challenged as to how to use it appropriately. The overuse of hedging may lead to an opposite effect of the writer's desire and a doubt about the reliability of the writer's statements, but underusing of hedging may lead to overstatement (Demir, 2018). Furthermore, these language learners or novice writers have difficulties to interpret and apply hedging in English writing. This shows that they have insufficient knowledge of hedges, and they have to work under the pressure of unfamiliar academic cultural norms and linguistics features (Loi & Lim, 2019; Salichah, Iraeati, & Basthomi, 2015; Yüksel & Kavanoz, 2015). Thus, this study attempts to explore whether Thai academic novices and Thai academic professionals exploit different types and frequency of hedging markers in their academic papers.

The present study aims to investigate the use of hedging markers and the frequency of hedging markers used by Thai academic novice writers and Thai academic professionals in English research articles published in national and international journals, which are open-access and apply a "double-blind" peer-review in Humanities and Social Sciences field.

Research Hypotheses:

The hypotheses of this study are (1) Thai academic professionals can employ different types of hedging markers in order to convey their message to academic community members compared to novices, and (2) Thai academic professionals employ hedging markers more frequently compared to Thai academic novice writers.

Research Method

Data

The data for hedging used by Thai academic novices and professionals, when writing English research articles, were taken from articles published in national or international Humanities and Social Sciences journals. These journals are open-access and double-blind peer-reviewed journals.

From these journals, the selected articles were purposely chosen so to represent two different sets of research article writers: the novices who are Thai graduate and postgraduate students, and the professionals who are Thai lecturers or researchers who have gained academic titles of Professor or Associate Professor. Twenty English research articles (ten articles from Thai academic novices and ten articles from Thai academic professionals) were subsequently chosen from national or international journals with similarity in terms of branches of the Humanities and Social Sciences fields. The total length of the texts (word counts) from the selected articles is shown in Table 1.

Table 1

The Total Length of the Texts Used in This Study

Texts written by Thai academic novices	Texts written by Thai academic professionals
38,283 words	41,190 words

Data Analysis

According to Hyland (1998), in the research article IMRD macrostructure (Introduction, Method, Results, and Discussion), the Introduction and Discussion parts are those sections where academic writers and researchers make their arguments and assert their decisions and claims. Moreover, Salager-Meyer (1995) mentions that there are different types of hedges occurring throughout the different sections (Introduction, Methods, Results, Discussion/Conclusion) of research articles. Therefore, this study attempted to analyze the hedging markers in the Introduction, Method, Results, Discussion, and (or) Conclusion parts, where academic scholars attempted to assert their ideas, interpretations and claims in English research articles.

The study employed a corpus-based approach, and it was a comparative and quantitative study in nature. It focused on the types and frequency of hedging markers,

including the combined-hedging markers. The hedging markers in this study are the hedging words showing uncertainty and possibility of the writers' claims in their studies in order to tone down or avoid committing to their claims.

The research framework of this current study was based on Salager-Meyer's (1994) and Martin-Martin's (2003) categories in terms of "Shields" and "Approximators" with the following subcategories:

1. Shields (Salager-Meyer's)

Shields are the hedging markers relating to probability and possibility comprising of six types:

- a) All modal verbs showing possibility: *would, will, could, may, might, must, should*
- b) Semi-auxiliaries: *to appear, to seem*
- c) Probability adverbs: *probably, likely, possibly, apparently, maybe, perhaps, seemingly*
- d) Probability adjectives: *possible, probable*
- e) Epistemic verbs expressing possibility: *to suggest, to speculate, to assume*
- f) Modal Nouns: *suggestion, possibility, tendency* (**Martin-Martin's**)

2. Approximators (Salager-Meyer's)

Approximators are the hedging markers indicating an unwillingness to clarify the writer's actual commitment to the proposition using adaptors or rounders of quality, degree, frequency and time. In this study, Approximators are adverbs showing quality, degree, frequency, and time: *approximately, roughly, somewhat, quite, often, occasionally, generally, frequently*.

In this study, the researcher classified hedging markers into two main categories: (1) *single-hedging markers* referring to the use of one marker belonging to Shields or Approximators, and (2) *combined-hedging markers* that are more than 1 marker belonging to Shields and Approximators that are used in order to convey the probability, uncertainty and unwillingness to clarify the writer's actual commitment to the claims. For example,

- (4) *It was **assumed** that ...* (1 hedging marker: **assume**)
- (5) *It **may suggest** that ...* (2 hedging markers: **may, suggest**)
- (6) *It **seems possible to assume** that* (3 hedging markers: **seems,**

possible, assume)

Sentence (4), the writer uses one hedging marker (*assume*), so in this study, it is called a *single-hedging marker*. On the other hand, sentence (5) and (6) have more hedging markers compared to sentence (4) because the writer uses more than 1 hedging marker, and thus uses *combined-hedging markers* in his/her writing.

After obtaining the sample research articles, markers of hedging were identified and classified into two main categories: single-hedging markers and combined-hedging markers.

Subsequently, the frequency of the hedging markers occurrences between the novices and the professionals was accounted for.

Results

The results of the present study are divided into two parts: qualitative and quantitative results. The qualitative results are presented by showing some examples which are divided into two categories, namely: single-hedging markers (Shields and Approximators) and combined-hedging markers. After that, the quantitative results are shown in order to compare the types and the frequency of the single-hedging markers and the combined-hedging markers exploited by Thai academic novices and professionals.

Single-hedging markers

According to Salager-Meyer (1994) and Martin-Martin (2003) categories regarding “Shield”, there are six subcategories that are (a) modal verbs showing probability and possibility, (b) semi-auxiliaries, (c) probability adverbs, (d) probability adjectives, (e) epistemic verbs expressing possibility, and (f) modal nouns. All of these subcategories were employed by both the novices and professionals in their academic articles, like the following examples, to show the possibility of their claims.

(a) modal verbs showing probability and possibility: *would, will, could, may, might, should*

(7) *Student teachers possessing just content-knowledge or pedagogical knowledge may not necessarily become good teachers.* (novice 2)

(8) *The findings such as the participants' initial speaking competency or integration of the practice into a course could also be an important factor to consider...*

(novice 5)

(9) *... additional research could be instigated by the subtlety and complexity of the findings generated by the study being reported.* (professional 1)

(b) semi-auxiliaries: *to appear, to seem*

(10) *...it seems to complement the popular culture of love.* (novice 1)

(11) *This particular group of students **appeared** to have inadequate command of the English language.* (professional 4)

(c) probability adverbs: *probably, likely, possibly, apparently, perhaps*

(12) *...confirm the idea that GA is more **likely** to be positioned as a global English language rather than BE...* (novice 6)

(13) *Introduction of the research topic can **possibly** be accomplished by the use of this step.* (professional 1)

(14) *The reason for it is **probably** the influence of their native language.* (professional 3)

(d) probability adjectives: *possible, probable*

(15) *...it is **possible** for Thai speakers of English to favor one English variety* (novice 6)

(16) *Physiological cues such as depression, anxiety, fatigue, sweating and trembling may signal **probable** failure to individuals.* (professional 4)

(e) epistemic verbs expressing possibility: *to suggest, to speculate*

(17) *I could not **assume** that the good learning process for one person could be used for another...* (novice 9)

(18) *These findings are also supported by earlier studies which **suggest** that factors such as the collective nature of Thai society, the strong attachment to traditional ways of thinking.* (professional 6)

(f) modal nouns: *suggestion, possibility, tendency*

(19) *The use of this step suggests the **possibility** that scholars*

can continue their line of research for accurate and in-depth understanding of the research topic. (professional 1)

(20) *...there is a **tendency** to generalize a sense of success to similar situations.* (professional 4)

Moreover, the Approximators (*approximately, somewhat, quite, often, generally, frequently*), which are adverbs indicating unwillingness to clarify the writer's commitment to the proposition, were chosen by both Thai academic novices and professionals when writing their research articles. For example,

(21) *Taylor Swift **frequently** portrays this negative aspect of liberalism in many songs of hers.* (novice 1)

(22) *...it was **quite** easy to understand her in most situations.* (novice 5)

(23) *This is **generally** accepted, but in addition to that, in this study, I will try to show that native-like competence in English ...* (professional 3)

(24) *This study was conducted with a **somewhat** unique sample of EFL students...* (professional 4)

(25) ***Approximately** 44 percent had 9-12 years of experience in learning English...* (professional 4)

Combined-hedging markers

From the data of the selected texts, it was found that combined-hedging markers were used by Thai academic writers, both the novices and professionals, in order to show the possibility or the uncertainty of the writers regarding their propositions. The academic writers of this study combined the hedging markers between Shields and Shields, e.g. *seem to suggest*, Approximators and Shield, e.g. *quite possible*. For example,

(26) *...the participants perceived that ICC was **quite possible** for integration into English courses.* (approximators and probability adjective) (novice 2)

(27) *In conclusion, the findings in this study **seem to suggest** that the authors of any form of literary work can effectively use the devices of figurative language to ...* (semi-auxiliary and epistemic verb) (novice 1)

(28) *The two instances below congruently **suggest possible** avenues for future research.* (epistemic verb and probability adjective) (professional 1)

(29) *The average number of 15 **might seem** to be high but for the case*

of university students who are in the age of studying, this can be understandable. (modal verb and semi-auxiliary) (professional 2)

(30) *Although students **might appear** to be encouraged to express their own thoughts, this is often only up to a level that does not harm the existing social structure of Thai society or institutions.* (modal verb and semi-auxiliary) (professional 6)

Figure 1 shows the three types of hedging markers in this study which were exploited by Thai academic novices and Thai academic professionals. Based on the results, it can be said that both Thai Academic novice writers and Thai academic professionals employed both single-hedging markers, Shields and Approximants, and combined-hedging markers to exhibit the uncertainty and possibility of their claims in order to tone down or avoid committing to their claims.

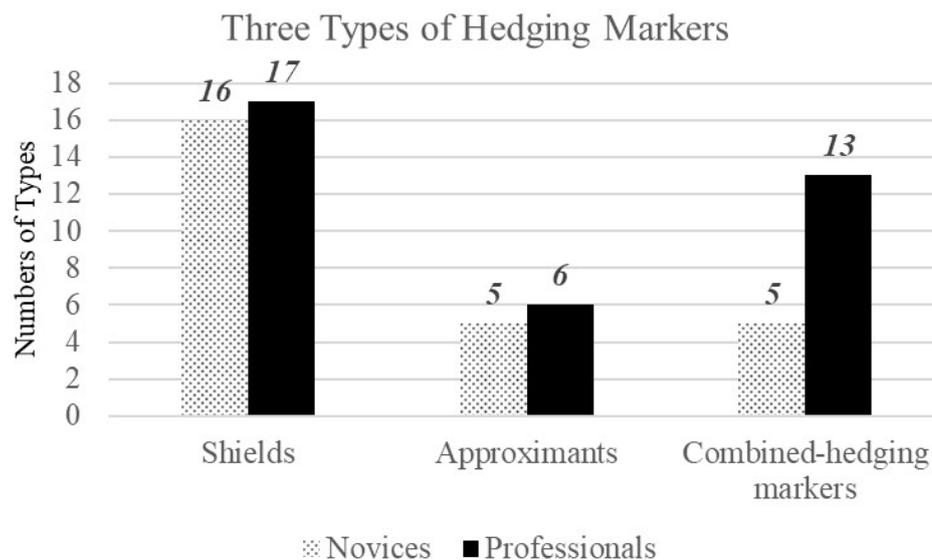


Figure 1. Types of hedging markers comparing Thai academic novices and Thai academic professionals.

The researcher counted the number of hedging markers at a lexical level for each type. Shields comprises of six modal verbs (*would, will, could, may, might, should*), two semi-axillaries (*to appear, to seem*), five probability adverbs (*probably, likely, possibly, apparently, perhaps*), one probability adjective (*possible*), two epistemic verbs (*to suggest, to speculate*), and three modal nouns (*suggestion, possibility, tendency*). It was found that Thai academic novice writers employed 16 lexical forms of Shields hedging markers while Thai professionals used 17 lexical forms of Shields.

Approximators consist of six adverbs showing quality, degree, frequency, and time (*approximately, somewhat, quite, often, generally, frequently*), which the academic writers of this study used in their texts. The results show that Thai academic professionals used every adverb in Approximators while novice writers employed five adverbs amongst Approximators, except *often*.

Moreover, as we can see in Figure 1, the outstanding type, which both Thai academic novice writers and professionals utilized differently in their academic writing, was the combined-hedging markers. While Thai academic novices used only 5 combined-hedging markers, the professionals used 13 combined-hedging markers.

Frequency of the occurrences of hedging markers (The single-hedging markers – Shield and Approximators, and the combined-hedging markers)

In Figure 2 below, the percentage of Shields, Approximators, and Combined-hedging markers used by Thai academic novices and professionals are presented.

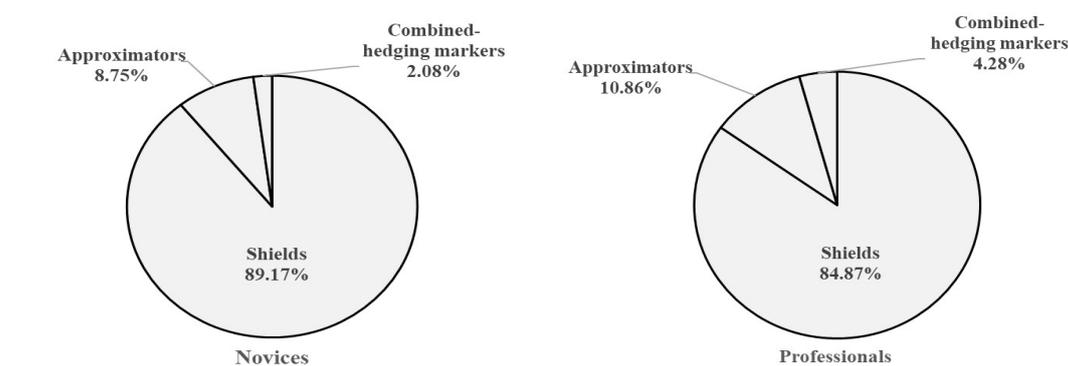


Figure 2. Proportions of Shields, Approximators, and Combined-hedging markers between Thai academic novices and Thai academic professionals.

As seen in Figure 2, it can be stated that Thai academic professionals used higher hedging markers of all types compared to Thai academic novices. Moreover, both groups of the academic writers used Shields the most even if they employed more than one hedging marker the least when it came down to the possibility and the uncertainty of their claim.

According to Figure 3, when comparing the subcategories of Shields, all six subcategories were employed by both groups of Thai academic professionals. However, Thai academic professionals used these six subcategories of Shields more frequently compared to Thai academic novices. While the modal verbs were used the most by the novice and

professional writers, modal nouns, showing the possibility (*possibility, probability, tendency*), were almost never used by either group of Thai academic writers.

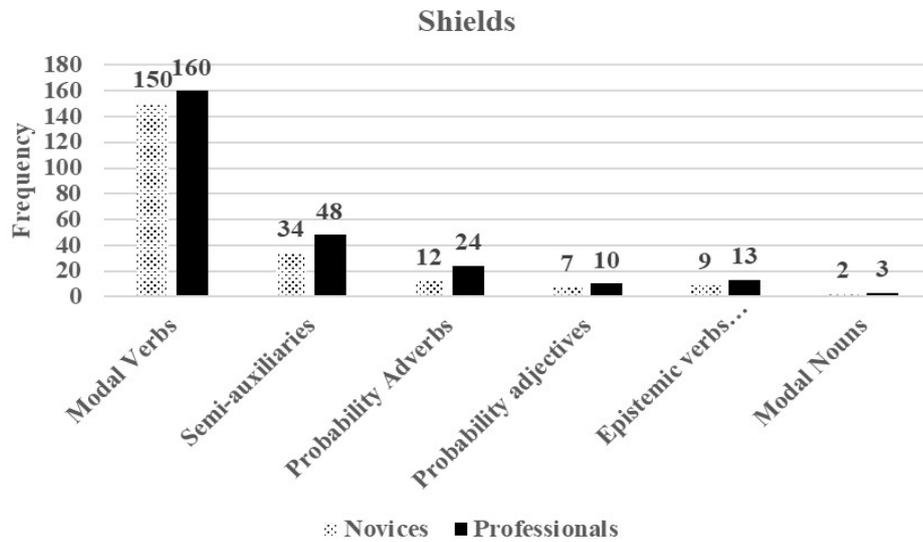


Figure 3. Occurrences of subcategories of Shields between Thai academic novices and Thai academic professionals.

By comparing the frequency of the single-hedging markers and the combined-hedging markers used between Thai academic novice writers and Thai academic professionals in academic writings, as exhibited in Table 2, the results showed that there was a significant difference ($p=.002$) regarding the hedging markers used between these two groups of writers. Thai academic professionals employed hedging markers (Shields, Approximators, and Combined-hedging markers) in order to convey their messages to the academic community members more frequently compared to novices.

Table 2

Overall frequency of Single-hedging markers and Combined-hedging markers used by Thai academic novice writers and Thai academic professionals

Hedging Markers	Novices	Professionals	Sig.
I. Single-hedging markers	235	291	<i>p</i> =.002*
1. Shields	214	258	
a) Modal Verbs	150	160	

<i>b) Semi-auxiliaries</i>	34	48
<i>c) Probability Adverbs</i>	12	24
<i>d) Probability adjectives</i>	7	10
<i>e) Epistemic verbs expressing possibility</i>	9	13
<i>f) Modal Nouns</i>	2	3
2. Approximators	21	33
II. Combined-hedging markers	5	13
Total	240	304

* $p < .05$

Discussion and Conclusion

Data analysis of hedging markers in terms of Shields, Approximators, and Combined-hedging markers, used by Thai academic novices and Thai academic professionals, revealed that there were no differences between the types of hedging markers used in the research articles between these two groups of writers. Thai academic novice writers employed all types of hedging markers similar to Thai academic professionals.

However, the results were different when the focus was placed on the frequency of occurrences of hedging markers used between these two groups. The results showed that there was a significant difference ($p = .002$) (see Table 2) in respect to the hedging markers used between these two groups of writers. Thai academic professionals utilized all hedging markers more frequently compared to the novice writers (Thai academic professionals = 304 times, Thai academic novices = 204 times). It can be assumed that the academic professionals are generally more exposed to and experienced with academic writing conventions, and this is indeed reflected in their writing styles. Thus, those sentences, containing hedging markers written by academic writers, could be used as practical examples in academic writing lessons in order to help student writers promote their awareness for utilizing hedging markers in their academic writing.

In this study's corpus, "Shields" markers were the most frequent hedging markers used by both groups of writers, so it could be considered as the prime element of hedging that Thai academic writers are familiar with. This study obtained the similar results as a study of Rezanejad, Lari and Mosalli (2015) and Nasiri (2012) that "Shields" were the most frequently used hedging markers by both native English speakers and non-native English speakers.

Considering the subcategories of Shields, we can find that modal verbs showing possibility were the most frequent type that was used in the academic writing as in (7), (8), and (9). Therefore, it could be assumed that most Thai academic writers do not have any difficulties using modal verbs as a means of conveying the possibility of their claims and the uncertainty in their statements. Nevertheless, Thai academic novices may face some limitations when using probability adverbs, one subcategory of Shield. The findings of this study showed that they operated this type of hedges fifty per cent (12 times) lower than Thai academic professionals (24 times) (see Table 2). Moreover, they employed the combined-hedging markers, which are more complicated than the single lexical markers, only 5 times, while the professionals used more than one hedging markers for 13 times, as in (26)- (30). The idea that the novice writers were less aware of the fact that they were too assertive, when expressing their claims, could be a possible reason why they utilized fewer hedging markers, both single lexical markers and combined-hedging markers in their academic writing. Therefore, the results could indicate that novice writers have more rooms to develop the use of combined-hedging markers.

Utilizing hedging in academic writing can tone down authors' statements, and it can reduce the risk of being refuted due to the author's statements. In addition, hedging can show the authors' uncertainty when presenting the truth about the information (Salager-Meyer, 1995). Salager-Meyer (1995) also states that English foreign language readers and writers tend to have some obstacles interpreting and using hedges. The findings of this study could possibly confirm that Thai academic novice writers may find some limitations to use hedging markers in their academic writing in order to lessen their commitment or show some possibilities of their claims by observing the occurrence and frequency of hedging markers. According to Hyland (1995), EFL novice writers might encounter this problem when they attempt to assert their propositions. However, since Thai academic professionals have been part of the academic community for a longer time, it can be assumed that they are more experienced with the usage of hedging markers in their academic papers. Therefore, it could be argued that practicing hedges in academic writing could be beneficial to Thai students who are novice writers in order to assist them to get familiar with rules and conventions of academic writing. Furthermore, English language learners should be reminded of these academic writing conventions regarding the use of hedging markers in order to prepare them to be part of the academic community in the future.

References

- Chen, Y.H., & Baker, P. (2010). Lexical bundles in L1 and L2 academic writing. *Language Learning & Technology, 14*(2), 30-49.
- Crompton, P. (1997). Hedging in academic writing: Some theoretical aspects, *English for Specific Purposes, 16*, 271-289.
- Csongor, A., & Rébék-Nagy, G. (2013). Hedging in popular scientific articles on medicine. *Acta Medica Marisiensis, 59*(2), 97-99.
- Demir, C. (2018). Hedging and academic writing: an analysis of lexical hedges. *Journal of language and linguistic studies, 14*(4), 74-92.
- Duman, Z.Ö. (2016). Hedging in academic writings of EFL students: ChemCorpus. *The Journal of Narrative and Language Studies, 4*(6), 45-55.
- Elheky, M.A. (2018). Hedging in scientific and social texts: A comparative analysis of business and social texts. *Scholar Journal of Applied Sciences and Research, 1*(7), 94-103.
- Hyland, K. (1995). The author in the text: Hedging scientific writing. *Hong Kong Papers in Linguistics and Language Teaching, 18*, 33-42.
- Hyland, K. (1998). *Hedging in scientific research articles*. Amsterdam: John Benjamins.
- Lakoff, G. (1973). Hedges: A study in meaning criteria and the logic of fuzzy concepts. *Journal of Philosophical Logic, 2*(4), 458-508.
- Loi, C.K. & Lim, J. M.H. (2019). Hedging in the discussion sections of English and Malay educational research articles. *Journal of Language Studies, 19*(1), 36-61.
- Martin-Martin, P. (2003). The pragmatic rhetoric strategy of hedging in academic writing. *Vigo International Journal of Applied Linguistics, 1*, 57-72.
- Nasiri, S. (2012). Utilization of hedging devices by American and Iranian researchers in the field of civil engineering. *International Journal of Linguistics, 4*(2), 124-133.
- Pan, F., Reppen, R., & Biber, D. (2016). Comparing patterns of L1 versus L2 English academic professional: Lexical bundles in telecommunications research journals. *Journal of English for Academic Purposes, 21*, 60-71.
- Prasithratsint, A. (2015). Linguistic markers and stylistic attributes of hedging in English academic papers written by native and non-native speakers of English. *Manussaya: Journal of Humanities Regular, 18*(1),1-21.
- Petchkit, W. (2016). Hedges in research articles written in English and writing problems of non-native writers. *Journal of Humanities, Naresuan University, 12*(3), 45-51.

- Rezanejad, A., Lari, Z., & Mosalli, Z. (2015). A cross-cultural analysis of the use of hedging devices in scientific research articles. *Journal of Language Teaching and Research*, 6(6), 1384-1392.
- Salager-Meyer, F. (1994). Hedges and textual communicative function in medical English written discourse. *English for Specific Purpose*, 13(2), 149-170.
- Salager-Meyer, F. (1995). I think that perhaps you should: A study of hedges in written scientific discourse. *The Journal of TESOL France*, 2 (2), 127-143. Retrieved from https://www.tesol-france.org/uploaded_files/files/TESOL%20V2N2%20C8%20I%20think%20that%20Perhaps.pdf.
- Salichah, I.M., Iraeati, E., & Basthomi, Y. (2015). Hedges and boosters in undergraduate students' research articles. *Jurnal Pendidikan Humaniora*, 3(2), 154-160. Retrieved from <http://journal.um.ac.id/index.php/jph>.
- Samaie, M., Khosravian, F., & Boghayeri, M. (2014). The frequency and types of hedges in research article introductions by Persian and English native authors. *Procedia-Social and Behavioral Sciences*, 98, 1678-1685. doi:10.1016/j.abapro.2014.03.593.
- Yüksel, H. G., & Kavanoz, S. (2015). Expressing claim: Hedges in English language learners' writing. *Journal of Teaching and Education*, 4 (1), 263-269.
- Zanina, E. (2016). Strategies hedging: A comparative study of methods, results and discussion (and conclusion) sections of research articles in English and Russian. *Journal of Language and Education*, 2(2), 52-60.