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

Thu Nguyen Thi Thuy [1,2] (ID)

1   Faculty of Foreign Languages, Vietnam Maritime University, Haiphong 181810, Vietnam
2   Department of English Education, Graduate School, Hanyang University, Seoul 04763, Korea;
    nguyenthuythu83@gmail.com; Tel.: +82-105-179-1983

check for
updates

Abstract: As an interpersonal meta-discourse device, hedges have a significant role in academic writing, especially in research articles (RAs) of various fields. The use of hedges in academic writing helps writers represent their ideology, opinion, and evaluation of issues, as well as to persuade readers to accept their claims. This study examined the cultural divergence in the use of hedges in the results and discussion sections of RAs written by Vietnamese and native English-speaking authors, analyzing the variation in the frequency and types of hedges within the rhetorical structure of RAs. The study was based on the data of two corpora, which were collected from 100 RAs that were judged by the authors' names and affiliations in the field of applied linguistics, consisting of 50 RAs that were written by Vietnamese writers (VNRAs) and published in Vietnamese national journals, and 50 RAs that were written by native English-speaking authors (NESRAs) and published in international journals. Contrastive analysis of the frequency and types of hedges used in RAs written by Vietnamese and native English-speaking authors revealed that there were variations and similarities in the way they utilized hedges as interpersonal meta-discourse devices to guide, negotiate, and persuade readers to accept their assertions and viewpoint, and in the way the negative politeness strategy was used to respect the readership and give more room for the readers' alternative interpretations. The difference between the VNRA and NESRA corpora was in the frequency of the occurrence of hedges, which was relatively lower in the RAs written by Vietnamese authors. The reason for this divergence could be due to the culturally diverse backgrounds, the intended readers, and the conventional rules of two discourse communities.

Keywords: hedges; meta-discourse; interpersonal meta-discourse; cross-cultural divergence; research articles

1. Introduction

Hedges, as an interpersonal meta-discourse device, have gained much attention from researchers in both spoken and written discourse, such as in Hyland (1998a, 2002), Hyland and Tse (2004), Salager-Meyer (1994), Gillaerts and Velde (2010), and Rezanejad et al. (2015). Hyland (1998a) considered hedges a crucial means of "presenting new claims for ratification and are among the primary features which shape the research article as the principal vehicle for new knowledge". Thus, hedges have a significant role in academic writing, especially in the research articles (RAs) of various fields.

As stated by Hyland (2005), one important way to assist writers to express a viewpoint, to persuade and lead readers to have an insight into their perception, to evaluate the content, and to engage in the text, is through the authors' use of meta-discourse, including interactive and interpersonal

resources. Since hedges are interpersonal meta-discourse markers, the use of hedges in academic writing helps writers represent their ideology, opinion, evaluation of the issues, and persuade their readers to accept their claims.

Through discourse, people build up and maintain their relationships and communication within and across communities and cultures. In such cases, "discourse relationships are not only fashioned by the authorized structures they are also shaped by the ways individual writers interact with readers through specific rhetoric choices" (Hyland 2002) in a specific discourse community governed by its own socio-cultural disciplines or "particular sets of values, practices, and beliefs" (Hyland 1998a). As one form of written discourse, RAs involve an interpersonal relationship between the author and the reader "in an academic discourse governed by certain conventions" (Bonyadi et al. 2012). These conventions guarantee that the writers' works are acknowledged by the readers and accepted by their colleagues in their discourse community. Drawing attention to the socio-cultural factors affecting writers' written discourses, a large amount of cross-cultural research focuses on different aspects of the interpersonal dimensions of academic interactions, including *authorial reference,* as in the studies of Hyland (2002) and Vassileva (2001); *hedges and boosters,* as in the works of Vázquez Orta and Giner (2008), Dontcheva-Navratilova (2016), Hu and Cao (2011), Rezanejad et al. (2015), and Bonyadi et al. (2012); and *inflating and persuading,* as in Hinkel (2005) research. These studies' findings indicate that the ways that academic writers use interpersonal meta-discourse are influenced by several factors "comprising the social and cultural background of the writer, the epistemological and literacy tradition he/she is associated with, and the genre and disciplinary conventions" (Dontcheva-Navratilova 2016), along with the beliefs, attitudes, and expectations of the intended readers.

Accordingly, in his study on hedges in second language (L2) academic writing, Hinkel (2005) indicated that Chinese, Korean, and Vietnamese writers used hedges to mark their attitude to a proposition or claim, to diminish "writers' responsibility," and to "shift the responsibility for inferring contextual meanings to the reader". Nguyen and Nguyen (2016) also claimed that Vietnamese is a high-context culture, in which very little information is explicitly stated, but is instead embedded deeply in texts or talks. Vietnamese people prefer communicating in a delicate, considerate, indirect, and harmonious way, which shapes the Vietnamese habit of talking or writing around a topic. Additionally, the result and discussion sections in RAs are considered important parts where writers present and discuss their findings, express their views, and answer the research questions. These parts are "usually feature[d] with the frequent use of hedges" (Rezanejad et al. 2015). Therefore, this study focused on examining cultural variation in the use of hedges in the results and discussion sections of academic research articles (RAs) written by Vietnamese and native English-speaking authors, analyzing the variation in the frequency and the types of hedges through the rhetorical structure of RAs to isolate the ways in which Vietnamese and native English-speaking writers express different degrees of "commitment" to their claims in order to "provide more open room for the possibilities of interpretation" (Salager-Meyer 1994), as well as to show their respect and politeness to their colleagues and readers (Bonyadi et al. 2012).

This study aimed to answer the following research questions:

(1)　*How much do Vietnamese and native English-speaking authors use hedges in their academic RAs?*
(2)　*Is there any differences between academic RAs written by Vietnamese and native English-speaking authors in terms of the frequency and types of hedges used in the results and discussion sections?*

2. Literature Review

2.1. Hedges in Academic Discourse

Writers of RAs use hedges as interpersonal meta-discourse markers with the intention of presenting their research findings with "caution and modesty, and leave more room to [the] audience for negotiation" (Tran and Duong 2013). Hedging has been "a subject of interest to linguists" (Hyland 2006); however, it is

not easy to define because in the past it has been viewed from different perspectives by a large number of researchers.

Lakoff (1972) first used the term "hedge" to describe "words whose job [it] is to make things more or less fuzzy." Hyland (1998a) defined hedges as "any linguistic item or strategy employed to indicate either (a) a complete commitment to the true value of an accompanying proposition, or (b) a desire not to express that commitment categorically." He also claimed that hedges help acknowledge alternative views, rather than a fact or certain knowledge: "items are only hedges in their epistemic sense and only when they mark uncertainty". Hyland and Tse (2004) considered hedges to be a subcategory of interpersonal meta-discourse, which "involves readers in the argument by alerting them to the writers' perspectives towards both propositional information and readers themselves". By using hedges as key interactional devices, writers of RAs are able to "negotiate their credibility, to modify the truth-value of the knowledge conveyed", and to persuade their readers "of the relevance, novelty, and validity of their claims and views" (Dontcheva-Navratilova 2016).

Nikula (1997) points out that hedges are used as one form of communicative strategy, which assists writers to "soften the force of their utterances to make them more acceptable in interpersonal relationships." Sharing the same view, Brown and Levinson (1987) propose their politeness theory, based on the notion of "face", which can be interpreted as the public self-image that everyone in society tries to protect. Face refers to wants, and Brown and Levinson (1987) argue that we have two types of wants, *ego-preserving wants* and *public self-preserving wants*, which refer to the desire to be considered a contributing member of society. The former produces negative face, with the desire for "freedom of action and freedom from imposition", and the latter generates positive face, with the want to be respected, appreciated, and recognized by others. According to Brown and Levinson (1987), negative politeness strategies, including *hedges, questions,* and *minimizing imposition,* for example, are used to reduce or eliminate face-threatening acts (FTAs) involved in social interactions between writers/speakers and readers/hearers in order to make them feel less imposed. Since freedom of choice and action are impeded when negative face is threatened, Myers (1989) contends that making claims or assertions in academic writing discourse threatens the negative face of other researchers and readers due to the restriction on their freedom to interpret the claims based on their own perspective. Alternatively, if writers of academic writing or RAs affirm their findings and views with a high level of certainty and do not leave any room for the readers' negotiation, they thereby position readers, and at the same time "invade the readers' realm" (Myers 1989), and constrain them to accepting the claim, threatening the readers' negative face. Consequently, the use of hedges in academic discourse, especially in RAs, as a negative politeness strategy, as well as an interactional device, plays an important role in repairing potential threats and providing the audience with more freedom of choice and possibilities of interpretation in order to have a better insight into what the writers wanted to represent.

2.2. Hedges in Previous Cross-Cultural Studies

The notion of culture has been observed differently by different researchers. Hyland (2005) sees culture "as historically transmitted and systematic patterns of meanings which allow us to understand, develop, and communicate our knowledge and beliefs about the world." Knowledge, by all means, is a cultural product constructed and governed by the "practices of discourse communities and constituted, not just conveyed, by rhetoric" (Hyland 1998b). Therefore, cultural factors shape people's perceptions and perspectives and influence the way they write and organize their writing. Culture and language are inseparable; cultural values are embedded in and carried by language, and "provide us with taken-for-granted ways of engaging others in writing. They can affect perception, language, learning, communication and, particularly, the use of meta-discourse" (Hyland 2005). In a writer-responsible culture like English, writers are responsible for guiding readers through the text, that is, for the effective communication between themselves and readers. Conversely, "in reader-responsible culture[s] like Japanese,

connections between various parts of a text are more commonly left implicit" (Hyland 2005). Accordingly, "other than acquiring a full understanding of the linguistic knowledge of hedging devices in academic writing, it is equally important to consider both social and institutional contexts" (Hyland 1996).

Hyland (2005) also states that first language (L1) and L2 writers tend to choose different ways and patterns to organize their ideas and to engage readers in their works. Each culture seems to have its own norms, values, language, and particular ways of communication; thus, "what makes a written text well-organized and coherent is different across different cultures". Further supporting this view, Dontcheva-Navratilova (2016) investigated the use of hedges and boosters in research articles written by anglophone and Czech linguists published in The International Journal of Applied Linguistics and the national English-medium Czech journal Discourse and Interaction. The study's findings showed a lower rate of hedges and boosters in RAs written by Czech linguists, which indicates that "the tendency towards symbiosis in the small Czech linguistics community is still significant and tends to affect their rhetorical choices even when they write English medium-texts." Other cross-cultural studies on hedges, such as those of Vázquez Orta and Giner (2008), Hu and Cao (2011), Jalilifar (2011), and Rezanejad et al. (2015), also point out that the way in which writers use hedges tends to be affected by several factors "comprising the social and cultural background of the writer, the epistemological and literacy tradition he/she is associated with, and the genre and disciplinary conventions" (Dontcheva-Navratilova 2016). In a similar attempt, the cross-cultural and cross-generic study by Lorés-Sanz et al. (2010) on interpersonality in written academic discourse, with a focus on the Spanish and English research article corpus, showed that the frequency of the use of hedges was "especially higher in the English subcorpus when compared with the Spanish subcorpus". The hypothesis for this difference was that "since the RAs are addressed to an international, potentially very heterogeneous, readership," the native English writers may have been more aware of their multiple and diverse readers, as well as "the critical role of the gatekeepers (for example, reviewers, editors, or publishers)" (Lorés-Sanz et al. 2010). Therefore, it is worthwhile looking into the cross-cultural variation in the use of hedges in RAs written by Vietnamese and native English-speaking authors to better understand whether differences exist across the cultures.

2.3. Types and Functions of Hedges

A number of researchers have attempted to present and revise different taxonomies of hedges, such as Hyland (1998a, 2000), Salager-Meyer (1994), Vande Kopple (2002), and Crompton (1997), among others. It is remarkable that the two taxonomies of Hyland (1998a) and Salager-Meyer (1994) are widely used in various studies of hedges (for example, Rezanejad et al. (2015), Bonyadi et al. (2012), Vázquez Orta and Giner (2008), Tran and Duong (2013)) due to their influence and sufficiency.

Salager-Meyer (1994) classified hedges in terms of their functions, including shields; approximators of degree, quantity, frequency, and time; expressions of authors' personal doubt and direct involvement; emotionally charged intensifiers; and compound hedges.

Hyland (1996) divided hedges into two main categories, namely, content-oriented and reader-oriented. The content-oriented category, involving accuracy-oriented and writer-oriented hedges, assists writers "to present claims with precision relating to both the terms used to describe real-world phenomena and the degree of reliability the writer invests in the statement as well as signal reservations in the truth of a claim to limit the professional damage which might result from bald propositions" (Hyland 1996). The reader-oriented category "gives deference and recognition to the reader and avoids unacceptable over-confidence" (Hyland 1996). Later, Hyland (2005) classified hedges into three main functions, including "reducing [the] force of statements by using *fairly, partly, at least*; making statements indefinite by means of frequency adverbs such as *usually, sometimes*; and decreasing [the] responsibility for [the] truth by using *perhaps, might, may, probably, seem*". Hyland (1998a) presented a taxonomy of hedges, which included modal auxiliaries (for example, may, would, could, should, might); epistemic adverbs and adjectives (for example, possibly, possible, about, perhaps, (un)likely,

apparent); and epistemic lexical verbs (for example, indicate, suggest, seem, assume, propose). Besides the lexical items, scientific claims and views can be mitigated by referring to limited knowledge; referring to the limitations of the model, theory, or method; referring to the experimental limitations; or by using passives to imply that "rhetorical acts can be accomplished without human volition" (Hyland 1998a). Hyland (1998a) also demonstrated that the lexical verbs, modal verbs, modal adverbs, and adjectives used in expressing hedging were used frequently in RAs, especially that "the items *indicate, suggest, could, propose* and *should* are far more frequent in the RAs".

There are various ways to categorize hedges. However, this study adopted Hyland (1998a) study of hedges since it presents the discourse function of hedges and involves a number of discourse strategies performing hedging functions. Most importantly, it gives "a better understanding of how hedges are used in scientific research articles" (Hyland 1998a). In order to investigate the use of hedges in RAs written by Vietnamese and native English-speaking authors, this study utilized the taxonomy of hedges proposed by Hyland (1998a), focusing on the three categories of lexical items, *modal auxiliaries; epistemic adverbs and adjectives;* and *epistemic lexical verbs,* since they are the strategies used to moderate the degree of authorial certainty, as well as the most frequent realizations of hedges (Hyland 1998a, 2000).

3. Methodology

3.1. Data Collection and Procedures

The study on cross-cultural variation in the use of hedges is implemented based on two corpora. The data of the two corpora were collected from 100 RAs, using the authors' names and affiliations in the field of applied linguistics. The first corpus consisted of 50 RAs written in English by Vietnamese writers (VNRAs); these were published in the Vietnam National University journal of Foreign Studies and were English blind-review research articles on linguistics, language/foreign language teaching, international studies, and related social sciences and humanities. The other corpus included 50 RAs written by native English-speaking authors (NESRAs); these were published in international journals, including the *International Journal of Intercultural Relations, Language Learning: A Journal of Research in Language Studies, Applied Linguistics, English for Specific Purposes, The Journal of Pragmatics, The Linguistic Journal, Communication Education, Discourse and Society, Language Testing,* and *Journal of English as an International Language.* In order to make sure that the 50 RAs were written by native English-speaking authors, the researcher also used Google Scholar, Linkedln, and ResearchGate to search for the authors' biographies. All the RAs selected were published during the period 2013–2017. Only the texts in the results and discussion sections were compiled to contribute to the two corpora, which were constructed with comparability of genre, field, and composition (the number of words) being guaranteed. The VNRA corpus included 696,088 words, the NESRA corpus included 698,420 words, and the two corpora contained 1,394,508 running words. In order to conduct a contrastive analysis to illustrate the differences in the use of hedges, the difference in word count was neutralized by normalizing the raw number of the frequency of hedges used in each corpus into the frequency per 1000 words.

3.2. Data Analysis

The Wordsmith 7 software was used to produce the wordlists from the VNRA corpus and the NESRA corpus according to the number of occurrences. Based on the two wordlists extracted from the two corpora and the categories of hedges (Table 1) adopted from Hyland (1998a), the hedges were determined by the researcher in terms of the three types of hedges. Then, Wordsmith 7 was used to count the frequency of occurrence of the hedges in the two corpora and to search for the concordance of each hedge and the context in which it occured in the two corpora. These concordance lines containing the hedges were investigated and analyzed for a manual filtering of data. The purpose of this analysis was to eliminate the hedges which occurred in the authors' quotation from their own research data and other resources. The manual filtering of the data was also conducted to exclude the cases in which

the words were used with other discourse functions rather than hedging such as the word *should* with its deontic meaning. The researcher then discussed the list of hedges with two other researchers until all researchers agreed on 90% of the list. Subsequently, the raw data was normalized to frequencies per 1000 words for a comparison of the frequency of occurrence of hedges through the rhetorical structure of RAs in the two corpora. After counting the frequency of the hedges and determining the types of hedges used in the two corpora, a contrastive analysis of the frequency of occurrence and the types of hedges in the results and discussion sections in RAs written by Vietnamese and native English-speaking writers was conducted to identify, as well as to give explanation for, the existing variation in terms of writers' use of hedges. Examples from the two corpora were taken into account to demonstrate the variation in hedging strategies preferred by the two groups of authors.

Table 1. The categories of hedges.

Types of Hedges	Examples
Modal auxiliaries	*may, would, could, should, might*, and so forth
Epistemic adverbs and adjectives	*possibly, possible, about, perhaps, (un)likely*, and so forth
Epistemic lexical verbs	*suggest, seem, assume, propose*, and so forth

4. Findings and Discussion

4.1. The Frequency of the Occurrences of Hedges in the VNRA and NESRA Corpora

As presented in Table 2, the frequencies of the hedges used in the results and discussion sections of academic RAs were identified, compared, and contrasted according to Vietnamese and native English writers.

Table 2. The hedges in the corpora of research articles written by Vietnamese writers (VNRAs) and research articles written by native English speakers (NESRAs).

Corpus	Hedges	
	Raw Number	Per 1000 words
VNRAs	1573	2.26
NESRAs	2363	3.38

Drawing from Table 2, the total raw number of hedges used in RAs written by Vietnamese authors is 1573 words within the 696,088 running words (2.26 per 1000 words), whereas the number of hedges used in RAs written by native English-speaking authors is 2363 words within the 698,420 running words (3.38 per 1000 words). Therefore, the frequency of occurrence of hedges in the two corpora shows that native English-speaking writers generally employed more hedges than Vietnamese writers; however, the deviation is not too distinctive (0.79 per 1000 words). These results echo the other cross-cultural research findings on hedging devices, which indicate that the difference in the use of hedges is probably attributable to "the fact that the corpus of the study was from two groups of authors from different linguistic and cultural backgrounds" (Rezanejad et al. 2015), or "many L2 writers employ assertions and claims significantly more frequently" than those of British English at a "similar age and educational level" (Hyland and Milton 1997). These variations also appear to be issued from "the size and dynamics of the respective discourse communities and the intended readership" (Dontcheva-Navratilova 2016). Supporting this point of view, Lorés-Sanz et al. (2010) stated that writers of RAs are the members of different particular cultural academic communities. These differences influence their "writing choices," and "shape their discoursal and rhetorical choices when communicating their research." As mentioned in the literature review, native English authors bear readers in their mind when writing RAs due to their writer-responsible culture. Thus, native English-speaking authors tend to use more hedging devices in their RAs, as illustrated by their attempt

to express uncertainty and cautious commitment to their assertions, and at the same time, guide and persuade readers to accept their claims and viewpoints. This result also reflects Brown and Levinson (1987) view of using negative strategies such as *hedges, questions, minimizing imposition,* and so forth, that is, "when we think of politeness in Western cultures, it is negative politeness behavior that springs to mind. In our culture, negative politeness is the most elaborate and the most conventionalized set of linguistic strategies for face threatening acts redress." In such cases, native English-speaking writers have the tendency to use hedges to avoid imposing on readers and also to save more room for readers to interact and negotiate with the texts.

Vietnamese authors, on the other hand, seem to use fewer hedges in their RAs than native English-speaking writers. The plausible reasons might be that when writing English RAs, Vietnamese writers tend to adopt a native English rhetorical style in order to "reduce the writer's responsibility for the truth-value and factuality of a proposition by attributing the claim to someone else" (Hinkel 2005). However, they are, to some extent, affected by their own cultural conventional rules. That is, "exaggerations and overstatements may be seen as a device of added persuasion" (cited in Hinkel 2005). In the case of persuading readers, Vietnamese authors are inclined to use other such meta-discourse strategies such as boosters and maximizers to corroborate their views since amplification in Vietnamese culture "is seen as a valid and eloquent rhetorical device to convey the writer's power of conviction and/or desirability" (cited in Hinkel 2005). Additionally, as stated in Nguyen and Nguyen (2016), since the Vietnamese culture is a collectivist one, the "Vietnamese mainly focus on prolonging harmony, peace, and close friendship" through communication. Therefore, boosters which "allow writers to express certainty in what they say and to mark involvement with the topic and solidarity with readers" (Hyland 2011) are chosen instead of hedges by Vietnamese writers in such cases.

4.2. The Types of Hedges Used across Rhetorical Structures of RAs in VNRA and NESRA Corpora

By using the Wordsmith 7 software, the types of hedges with their frequency of occurrence were determined, categorized, and presented in the form of raw numbers, percentages, and frequency per 1000 words in Table 3 and Figure 1.

Table 3. The categories of hedges in the results and discussion section of research articles (RAs) in the VNRA and NESRA corpora.

Hedges	VNRAs			NESRAs		
	Raw Number	Per 1000 Words	Percent	Raw Number	Per 1000 Words	Percent
Epistemic lexical verbs	689	0.99	43.8%	1091	1.56	46.2%
Epistemic adverbs and adjectives	342	0.49	21.7%	547	0.78	23.1%
Modal auxiliaries	542	0.78	34.5%	725	1.04	30.7%
Total	1573	2.26	100%	2363	3.38	100%

A closer look at the incidence of hedges in the VVRAs and NRSRAs corpora in Figure 1 reveals that there is a noticeable difference in the occurrence of the three types of hedges used by Vietnamese and native English-speaking authors. *Epistemic verbs* occur with a frequency of 1.56 per 1000 words in the NESRA corpus, which is markedly higher than the frequency of 0.99 per 1000 words in the VNRA corpus. Similarly, the representation of *modal auxiliaries* and *epistemic adverbs and adjectives* in the VNRA corpus (0.78 and 0.49 per 1000 words) is moderately lower than that in the NESRA corpus (1.04 and 0.78 per 1000 words). Although there is the divergence in the number of hedges used in RAs written by Vietnamese and native English-speaking authors, the tendency towards choosing types of hedging strategies seems to be identical in both groups of authors. It can be seen clearly in Figure 2a,b that *epistemic verbs* account for the highest proportion among the three categories of hedges in both corpora. These results appear to be different from the findings of Getkham (2011), Samaie et al. (2014), Dontcheva-Navratilova (2016), and Tran and Duong (2013), which indicate that *modal auxiliaries* are "the most frequent hedge types" used in applied linguistics RAs.

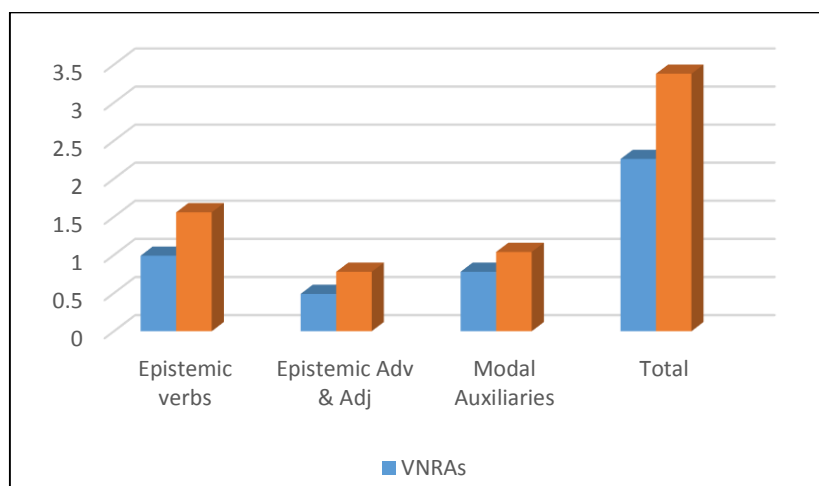**Figure 1.** The hedges used in the results and discussion sections of RAs in the VNRA and NESRA corpora.

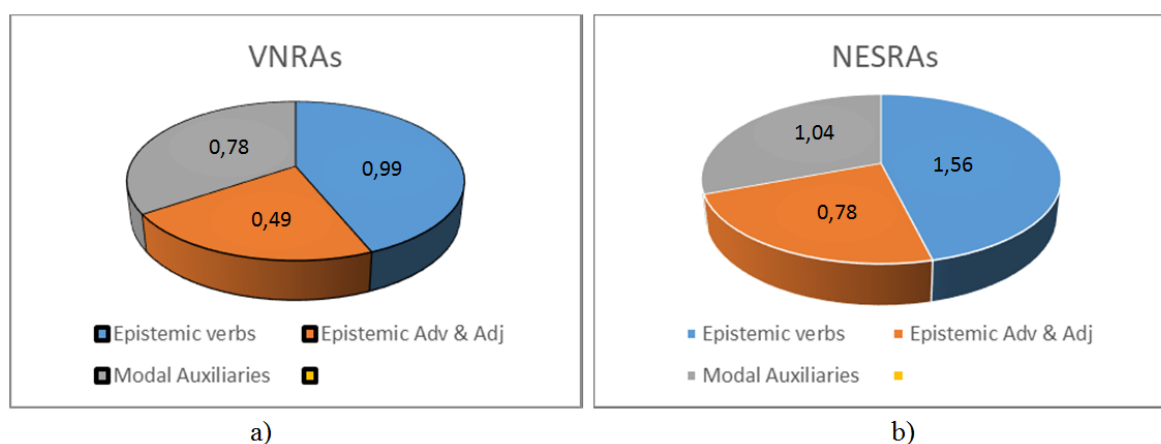a)   b)

Figure 2. (**a**) The types of hedges in the VNRA corpus; (**b**) the types of hedges in the NESRA corpus.

Both native English-speaking authors and Vietnamese authors tend to use *epistemic verbs* such as *show, indicate, seem, suggest,* and so forth to "mitigate claims" and to allow "uncertainty and the tentative assertion of hypotheses" (Hyland 1998a). This choice of hedging strategy can be explained by Hyland (1998a) viewpoint, that epistemic verbs "mark both the mode of knowing and its source (belief, deduction, report, perception), and thereby carry implications about the reliability of the knowledge itself." In a similar attempt, both groups of authors use this hedging strategy to provide more room for readers to figure out the meaning underlying the texts, and at the same time, to diminish the certainty and the imposing force in their claims and views. As shown in the following Examples (1), (2), and (3), the use of the hedges *suggest, indicate*, and *show,* indicate the writers' adoption of a more tentative stance. Particularly, the writers' inclination to provide valid evidence, or to quote other researchers' statements in order to implicitly support their potential assertions. As stated by Hyland (1998a), "it is clear that by varying the support offered to cited statements, writers can effectively hedge their attendant proposition."

(1) Meiring and Norman (op.cit.: 30) ***suggest*** encouraging learners to employ 'coping' strategies whereby they use . . . (NESRAs 8)

(2) Studies by Patkowski (1980) and Johnson and Newport (1989) ***show*** that child learners only have an advantage over older learners in acquiring the native-like pronunciation. (VNRAs 32)

(3)   As these figures already ***indicate***, although speakers of all four languages use this politeness marker, its applicability and illocutionary force are likely to vary across languages (NESRAs 6)

Additionally, both groups of writers in Examples (4) and (5) do not use the rigid claims but employ *epistemic verbs* such as *tend(ed), seem,* and so forth to tone down their propositions.

(4)   The differences in acoustic patterns ***seem*** to emerge from the two languages per se (VNRAs 5)

(5)   The above findings show that lexical bundles with functions ***tend*** to have higher usefulness scores than those without functions (NESRAs 28)

Besides, Vietnamese and native English-speaking authors employ *modal auxiliaries* (*may, would, could, might, should*) and *epistemic adverbs and adjectives* (*possible, possibly, likely, unlikely, often, usually,* and so forth) to mitigate the certainty as well as to minimize the risk of opposition from readers and other researchers. In such cases, hedges bearing ambiguity are used as down-toners with the aim of protecting writers from the "potential anger, contempt, or other humiliation on the part of the addressee" (Markkanen and Schröder 1997). As shown in Examples (6) and (7), these hedging strategies indicate that both groups of writers try to present their reasoning in a plausible way rather than in a certain way.

(6)   One *possible* explanation of the close relationship between the C-test and the measures of receptive skills can be found in the nature of the C-test (NESRAs 31)

(7)   According to Figure 2, 44.8% of students believe that the tasks provided in ASEAN class are very *likely* related to their interests . . . (VNRAs 23)

In line with the findings of Dontcheva-Navratilova (2016), Examples (8), (9), and (10), extracted from the two corpora, illustrate the great tentativeness of both Vietnamese and native English-speaking writers when explicating the results and discussing the findings by using more than one token of hedges in one sentence. This strategy, therefore, anticipates "criticism and alternative views," which helps writers avoid imposing on readers and simultaneously helps to enhance the "persuasive force".

(8)   This small but significant error in word-choice *would probably* not be as transparent to the reader in an email or covering letter and *would* need further clarification, disrupting the negotiation process (NESRAs 38)

(9)   However, it is common practice that ESP teachers are *likely* to be the only ones to be in charge of designing and implementing ESP courses. Without support from and cooperation with the business sector (the working BA professionals), it is *hardly possible* for ESP teachers to succeed in carrying out the tasks by themselves (VNRAs 13)

(10)   This *could* be due to these writers' vocabulary shortage, but a closer look at their texts *showed* that they *tended* to randomly choose an RV without being aware of the rhetorical strategies needed for weaving the reported ***claims*** with their own perspectives through their use of RVs (VNRAs 43)

However, there is a divergence in the choice of the most frequent realizations of *modal auxiliaries* in the two corpora. As can be seen in Table 4, while the most prominent *modal auxiliaries* in NESRAs is *may*, in VNRAs the rate of appearance of *should* is significant.

Table 4. The modal auxiliaries in the VNRA and NESRA corpora.

VNRAs Corpus		NESRAs Corpus	
Modal Auxiliaries	**Raw Number**	**Modal Auxiliaries**	**Raw Number**
Should	185	May	261
May	129	Would	167
Would	91	Could	130
Might	74	Might	91
Could	63	Should	76

The high frequency of *should* in the VNRA corpus might stem from the Vietnamese writers' cultural perception and thinking. According to Hyland (1996), "*should*" can be interpreted as *the necessity*; thus, Vietnamese writers tend to use "*should*" to emphasize the necessity of the issue or the actions in order to avoid imposing their point of view on the readers. The use of "*should*" as a hedging strategy can also be demonstrated by Tse et al. (1994) and Morris et al. (1998), asserting that the Vietnamese are "more willing to compromise or collaborate to preserve the party's relationship" (cited in Ready and Dinh 2011), and that they seem to avoid confrontation to preserve the harmony in their community. Meanwhile, *should* is defined in Hyland (1998a, 2008) studies on hedges to have a "more tentative meaning" and to convey "vagueness and politeness to avoid confrontation between readers and writers." This phenomenon is illustrated markedly in the following example:

(11) Day-to-day assessment *should* be focused on the learning needs of students. Each student *should* feel secure and willing to take risk, knowing that their teacher supports them in achieving their learning goals. All children can experience a sense of success (Vale, [40[) and *should* be given the opportunities to show what they know (VNRAs 27).

In Example (11), it can be recognized that Vietnamese writers used *should* as a hedging strategy with the intention of showing their uncertainty and carefulness of not "conveying [a] rigid proposition" (Hyland 2008) and leaving some room for readers' alternative interpretations, although they seem to be certain in their findings and assumptions. Thus, the writers could build up a relationship with the readers, and at the same time, get the readers involved in their writing.

On the other hand, the most frequent incidence of *may* in the NESRAs corpus is in line with the findings of Hyland (1998a), which points out that *may* is "the only modal which figures significantly more often in academic than other genres." *May*, employed frequently across the rhetorical structure of RAs written by native English-speaking authors as in Examples (12), (13), and (14), represent their use of "writer- and reader-oriented hedges, which have a protective and reader-involvement function, respectively" (Dontcheva-Navratilova 2016). It seems that native English-speaking authors prefer hedges such as *may*, which could convey a fuzziness to diminish the potential risk of contradiction between writers and readers, and at the same time, provide more choice for possible interpretation. This use of a hedging strategy also reflects Hyland (2011) study that "hedges are devices which withhold complete commitment to a proposition, allowing information to be presented as an opinion rather than fact." This finding also echoes the view of Myers (1989), that using hedges as negative politeness strategies prevent authors from invading the "readers' realm," thus, helping repair potential threats.

(12) This mix, combined with the relatively low recurrence of bundles, *may* prevent learners from encountering relevant functions in sufficient numbers for each register to internalize them successfully. In turn, this may impede register appropriate production as the information available to them lacks clear distinctions of the function used in different registers (NESRAs 28)

(13) Teachers, on the other hand, *may* need to become aware of the pragmatic use of varied utterances and be able to explain them clearly to their students. (NESRAs 18)

(14) Although clarity *may* be an important variable affecting students' academic performance, the results from this study and those from several others seem to indicate that there may be an upper limit on the impact that it (and, indeed, perhaps all instructional communication variables) has on student learning (NESRAs 41)

On a whole, the contrastive analysis of the frequency and types of hedges in RAs written by Vietnamese and native English-speaking authors has revealed that there are variations and resemblances in the way they utilize hedges as interpersonal meta-discourse devices to guide, negotiate, and persuade readers to admit their assertions and viewpoint, and as one of the negative politeness strategies to both respect the readership and give more room for readers' alternative interpretations. The difference between the VNRA and NESRA corpora is in the frequency of the occurrence of

hedges, which is relatively lower in the RAs written by Vietnamese authors. The reason for this divergence could be issued from the authors' culturally diverse background, the intended readers, and the conventional rules of the two discourse communities.

5. Conclusions and Implications

This study is implemented from the cross-cultural perspective in order to identify the similarities and differences between academic RAs written by Vietnamese and native English-speaking authors in terms of the frequency and the types of hedges used in the result and discussion sections. The results point out that while the rates of hedges in RAs written by Vietnamese and native English-speaking authors are relatively different, the choice of hedging strategies appears to be similar to some degree. The choice of hedging devices is essentially strategic since the authors from both groups tend to use appropriate hedging strategies to modify the force of their claims and mitigate the certainty in their claims and views. Besides, the findings of the cross-cultural analysis of hedges unveil the fact that when writing RAs, Vietnamese expert writers attempt to adopt English conventional rules of academic writing by using various types of rhetoric; however, they are influenced by their own socio-cultural experiences to some extent. The effect of indigenous culture on the Vietnamese authors' rhetorical choice is expressed through the way they choose rhetorical strategies to persuade their readers to accept their claims and through the way they use *should* to avoid confrontation and to convey respect to their readership. The influence of Vietnamese cultural/conventional rules leads to the reduced use of hedges by Vietnamese authors. This is because, in the case of persuading the readers, they prefer to employ amplifiers such as boosters and emphasizers in order to support their views. Since the VNRA corpus was comprised of 50 RAs published in the Vietnam National University Journal of Foreign Studies, and the NESRA corpus was constructed based on the data from 50 RAs published in International journals, the divergence in the discourse communities probably led to the difference in the use of hedges in the RAs by the two groups of authors who wished to build an interaction between themselves and their readers.

This study's findings emphasize the importance of cross-cultural studies on hedges and other interpersonal meta-discourse devices such as *boosters, maximizers, flatteries,* and so forth. Additionally, this study calls to attention the way to teach academic writing along with cultural aspects to ESL/EFL learners or novice non-native English-speaking writers to help them be aware of the conventional rules of English rhetoric, and to help them gain a deeper insight into the roles of these rhetorical strategies in the international academic community, "where authorial credibility is enhanced by interacting with different voices and views" (Dontcheva-Navratilova 2016).

Due to time constraints, the sizes of the two corpora are quite small and the cross-cultural investigation is limited to analyzing the variation in the frequency and the types of hedges. It would be worthwhile to conduct a further study in which the corpora for analysis are constructed with a larger size, with different interpersonal meta-discourse variables such as *boosters, maximizers, flatteries,* and so forth being taken into account, and with face-to-face interviews with Vietnamese writers to be conducted to look into the rhetorical preference of the writers from different cultures from multidimensional angles.

Conflicts of Interest: The author declares no conflict of interest.

References

Bonyadi, Alireza, Javad Gholami, and Sina Nasiri. 2012. A Contrastive Study of Hedging in Environmental Sciences Research Articles. *Journal of Language Teaching & Research* 3. [CrossRef]

Brown, Penelope, and Stephen. C. Levinson. 1987. *Politeness: Some Universals in Language Usage.* Cambridge: Cambridge University Press, vol. 4.

Crompton, Peter. 1997. Hedging in academic writing: Some theoretical problems. *English for Specific Purposes* 16: 271–87. [CrossRef]

Dontcheva-Navratilova, Olga. 2016. Cross-Cultural Variation in the Use of Hedges and Boosters in Academic Discourse. *Prague Journal of English Studies* 5: 163–84. [CrossRef]

Getkham, Kanyarat. 2011. Hedging devices in applied linguistics research articles. In *Interdisciplinary Discourses in Language and Communication*. Paper presented at the 3rd International Conference on Language and Communication 2011, Bangkok, Thailand, December 15–16; pp. 141–54.

Gillaerts, Paul, and Freek Van de Velde. 2010. Interactional metadiscourse in research article abstracts. *Journal of English for Academic Purposes* 9: 128–39. [CrossRef]

Hinkel, Eli. 2005. Hedging, inflating, and persuading in L2 academic writing. *Applied Language Learning* 15: 29.

Hu, Guangwei, and Feng Cao. 2011. Hedging and boosting in abstracts of applied linguistics articles: A comparative study of English-and Chinese-medium journals. *Journal of Pragmatics* 43: 2795–809. [CrossRef]

Hyland, Ken. 1996. Writing without conviction? Hedging in science research articles. *Applied Linguistics* 17: 433–54. [CrossRef]

Hyland, Ken. 1998a. *Hedging in Scientific Research Articles*. Amsterdam: John Benjamins Publishing, Vol. 54.

Hyland, Ken. 1998b. Boosting, hedging and the negotiation of academic knowledge. *Text-Interdisciplinary Journal for the Study of Discourse* 18: 349–82. [CrossRef]

Hyland, Ken. 2000. *Disciplinary Discourses: Social Interaction in Academic Genres*. Harlow: Longman.

Hyland, Ken. 2002. *Teaching and Researching Writing*. Harlow: Longman.

Hyland, Ken. 2005. *Metadiscourse: Exploring Writing in Interaction*. London: Continuum.

Hyland, Ken. 2006. *Medical Discourse: Hedges*. Oxford: Elsevier.

Hyland, Ken. 2008. Persuasion, interaction and the construction of knowledge: Representing self and others in research writing. *International Journal of English Studies* 8: 1–23.

Hyland, Ken. 2011. 10 Disciplines and Discourses: Social Interactions in the Construction of Knowledge. In *Writing in Knowledge Societies*. Perspectives on Writing. West Lafayette: Parlor Press and The WAC Clearinghouse, pp. 193–214.

Hyland, Ken, and John Milton. 1997. Qualification and certainty in L1 and L2 students' writing. *Journal of Second Language Writing* 6: 183–205.

Hyland, Ken, and Polly Tse. 2004. Metadiscourse in academic writing: A reappraisal. *Applied Linguistics* 25: 156–77. [CrossRef]

Jalilifar, Ali Reza. 2011. World of attitudes in research article discussion sections: A cross-linguistic perspective. *Journal of Technology & Education* 5: 177–86.

Johnson, Jacqueline S., and Elissa L. Newport. 1989. Critical period effects in second language learning: The influence of maturational state on the acquisition of English as a second language. *Cognitive Psychology* 21: 60–99. [CrossRef]

Lakoff, Robin. 1972. Language in context. *Language* 48: 907–27. [CrossRef]

Lorés-Sanz, Rosa, Pilar Mur-Dueñas, and Enrique Lafuente-Millán, eds. 2010. *Constructing Interpersonality: Multiple Perspectives on Written Academic Genres*. Newcastle: Cambridge Scholars Publishing.

Markkanen, Raija, and Hartmut Schröder, eds. 1997. *Hedging and Discourse: Approaches to the Analysis of a Pragmatic Phenomenon in Academic Texts*. Berlin: Walter de Gruyter.

Myers, Greg. 1989. The pragmatics of politeness in scientific articles. *Applied Linguistics* 10: 1–35. [CrossRef]

Nguyen, Quang Ngoan, and Le To Quyen Nguyen. 2016. Types of Hedges Used by American and Vietnamese Celebrity. *VNU Journal of Foreign Studies* 32. Available online: https://js.vnu.edu.vn/FS/article/view/1540 (accessed on 13 April 2018).

Nikula, Tarja. 1997. Interlanguage view on hedging. In *Research in Text Theory*. Berlin and New York: Walter de Gruyter, pp. 188–207.

Patkowski, Mark S. 1980. The sensitive period for the acquisition of syntax in a second language. *Language Learning* 30: 449–68. [CrossRef]

Ready, Kathryn J., and Van Dinh. 2011. Vietnams Developing Markets: How Do Perceptions and Strategies in the Negotiation Process Differ from the US? *Journal of Diversity Management (JDM)* 1: 49–60. [CrossRef]

Rezanejad, Atefeh, Zahra Lari, and Zahra Mosalli. 2015. A cross-cultural analysis of the use of hedging devices in scientific research articles. *Journal of Language Teaching and Research* 6: 1384–92. [CrossRef]

Salager-Meyer, Françoise. 1994. Hedges and textual communicative function in medical English written discourse. *English for Specific Purposes* 13: 149–70. [CrossRef]

Samaie, Mahmoud, Fereshteh Khosravian, and Mahnaz Boghayeri. 2014. The frequency and types of hedges in research article Introductions by Persian and English native authors. *Procedia-Social and Behavioral Sciences* 98: 1678–85. [CrossRef]

Tran, Thao Q., and Tham M. Duong. 2013. Hedging: A comparative study of research article results and discussion section in applied linguistics and chemical engineering. *English for Specific Purposes World* 41: 1–13.

Vande Kopple, William J. 2002. Metadiscourse, discourse, and issues in composition and rhetoric. In *Discourse Studies in Composition*. Edited by Gail Stygall and Ellen Barton. Gresskill: Hampton Press.

Vassileva, Irena. 2001. Commitment and detachment in English and Bulgarian academic writing. *English for Specific Purposes* 20: 83–102. [CrossRef]

Vázquez Orta, Ignacio, and Diana Giner. 2008. Beyond mood and modality: Epistemic modality markers as hedges in research articles. A cross-disciplinary study. *Revista Alicantina de Estudios Ingleses* 21: 171–90. [CrossRef]