


Gender and the Use of Hedges in Doctoral Theses Writing: Evidence from a Ghanaian University



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ABSTRACT

This academic writing-based study turns its attention to analysing the gender-based use of hedges in doctoral theses written in the Humanities at the University of Ghana. The study aimed to answer the research question: What are the gender-based uses of hedges in the doctoral theses at the University of Ghana? Using the simple case study design, the Literature Review (LR) chapters of forty (40) theses written by doctoral students over five academic years were purposively selected from the College of Humanities were analysed using Ken Hyland's (2005) hedging device categorisations. The analyses reveal the utilisation of different types of hedges, namely: modal auxiliary verbs, adverbials, adjectives and approximators. Males used more modal auxiliary verbs than females. A similar trend was registered for approximators, adverbials, introductory verbs, adjectives and probability adjectives. It was concluded that there are gender differences in the number of hedging devices used by males, compared to their female counterparts. It is recommended that lecturers handling English language, Academic Literacy (Communication Skills) and Research Methodology should train students more on applying hedges to achieve more impactful writing. This study contributes to scholarship by highlighting the gendered use of hedges within the Ghanaian higher education space – a basis for enhanced andragogical approaches in language research and supervision.

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Publication History

Received:

5th February, 2025

Accepted:

29th May, 2025

Published:

20th June, 2025

Keywords: *Academic writing, Discourse analysis, Gender, Hedging, Humanities*

INTRODUCTION

Ken Hyland defines hedges as linguistic tools that indicate a lack of full commitment to the truth or accuracy of a statement or reflect a reluctance to express that commitment in an absolute manner.¹ Vold avers that hedges are linguistic devices used in academic writing to present a writer's opinion as distinct or vague.² On the part of Dobakhti, hedges are rhetorical strategies writers use to persuade readers to agree with new research claims.³ Hedges are, therefore, words that a writer can use to present a proposition as an opinion rather than a fact. According to Hinkel, hedges are linguistic tools that writers

¹ Ken Hyland, "Talking to the Academy: Forms of Hedging in Science Research Articles," *Written Communication* 13, no. 2 (1996): 251–81.

² Eva Thue Vold, "Epistemic Modality Markers in Research Articles: A Cross-linguistic and Cross-disciplinary Study," *International Journal of Applied Linguistics* 16, no. 1 (2006): 61–87.

³ Leila Dobakhti, "The Use of Hedges in the Discussion Section of Qualitative and Quantitative Research Articles," *The Asian ESP Journal* 10, no. 2 (2014): 163–90.

use to lessen their responsibility for the strength of their propositions or claims, as they convey hesitation or uncertainty.⁴ These devices also demonstrate politeness and indirectness, helping to avoid imposing a particular viewpoint on either the writer or the reader. Similarly, Salager-Meyer suggests that hedges function as face-saving mechanisms, particularly when a writer's understanding of the topic is unclear.⁵ By using hedges, writers can soften their commitment to a claim and maintain the acceptance of their peers.

According to Dobhakti, "hedges have been the object of analysis in conversation analysis and written discourse, especially academic and scientific discourse."⁶ Some student writers still face some challenges in the construction of text in their academic writings, particularly in developing their Literature Review (LR) chapters and in making use of borders to pledge to the truth of their propositions or claims to create a relationship with their readers. Hyland avers that some writers (non-native language learners) still hesitate to construct texts and contribute to their texts due to the many meanings that are conveyed through hedges such as hedges acting as indicators of a writer's stance and contributing to the writer-reader relationship, writers using hedges to convey meanings with the help of many distinct devices and some student writers being unable to use hedge devices appropriately.⁷ Other reasons are that the feature of academic writing being impersonal and objective does not promote the use of hedges,⁸ that examples are scarce in the literature regarding the use of hedges, and that some non-native writers struggle to choose the appropriate level of hedging devices to maintain credibility, modesty and respect towards readers, peers and experts.⁹

In summary, many non-native students struggle to articulate their arguments in academic writing. Hedge words like "perhaps", "possible", "probable", "about", "be worked", "be thought" and "seem" are commonly used, along with morphemes such as "can" and "be". Table 1 contains a list of these hedge words categorised into groups. The use of such cautious language helps authors narrow down choices, resolve conflicts and convey a level of certainty in their statements.¹⁰

Table 1: Hedge Words, Category and Function

Category	Item	Function
Modal auxiliary Verbs (epistemic modal verbs)	could / can	Root possibility
	might/may	Lack of confidence
	would / will	Assertion weaken & softener
	must	Necessity and assurance justifier
	should/shall	Hypothetical necessity
Introductory verbs (lexical epistemic verbs)	believe, suggest, <i>indicate</i> , <i>propose</i> , think, appears, seems, <i>assume</i>	Lack of commitment /lack of confidence / claim softener
Probability adjectives (epistemic adjectives)	potential/possible, <i>likely</i> , <i>unlikely</i> , <i>probable</i> , <i>apparent</i> , <i>improbable</i>	Ambiguity
Adverbials (epistemic adverbs)	probably, possibly, usually, occasionally, <i>apparently</i> , <i>relatively</i> , <i>slightly</i> , <i>rather</i>	Doubt and uncertainty

⁴ Eli Hinkel, *Second Language Writers' Text: Linguistic and Rhetorical Features* (Routledge, 2002).

⁵ Françoise Salager-Meyer, "Procrustes' Recipe: Hedging and Positivism," *English for Specific Purposes* 19, no. 2 (2000): 175–87.

⁶ Dobhakti, "The Use of Hedges in the Discussion Section of Qualitative and Quantitative Research Articles," 165.

⁷ Ken Hyland, "Hedging in Scientific Research Articles," 1998; Ken Hyland, "Metadiscourse: Exploring Interaction in Writing," *Continuum*, 2005.

⁸ Hyland, "Hedging in Scientific Research Articles."

⁹ Ken Hyland and John Milton, "Qualification and Certainty in L1 and L2 Students' Writing," *Journal of Second Language Writing* 6, no. 2 (1997): 183–205.

¹⁰ Hyland, "Metadiscourse: Exploring Interaction in Writing."

One way to understand the use of hedges in the academic discourse community is by examining how students apply them in practice.¹¹ Researchers, globally, have paid attention to understanding the application of hedges mainly to use such knowledge to help improve academics, including non-native students writers', overall use of hedges in their academic writings, especially in their dissertations and theses.¹² For instance, Shafqat *et al.* conducted a corpus-based analysis to compare the use of hedges and related linguistic elements in linguistic research articles written by Pakistani English authors and native English speakers.¹³ They found that both groups predominantly employed lexical and hedge strategies, avoiding the use of hedges like adverbs of frequency. In a separate study, Tran and Tang investigated the use of hedges in the Results and Discussion sections of English Applied Linguistics research articles by Vietnamese writers and their foreign counterparts, discovering that both groups used hedges at a similar rate in these sections.¹⁴

In Ghana, existing literature shows that considerable focus has been placed on academic writing and the use of hedging by students.¹⁵ For example, Musa examined the discourse functions of hedges in English and Chemistry Masters' theses at the University of Cape Coast, identifying differences in the roles hedges play in each discipline.¹⁶ Musa found three main pragmatic reasons for using hedging devices: to express claims accurately, to protect oneself from potential future criticism, and to present claims modestly. Similarly, Oyewale-Johnson investigated hedging in postgraduate theses in seven disciplines at a selected Ghanaian university, discovering that the most frequently used hedging categories were modal auxiliaries and compound hedges.¹⁷ Arthur and Fenyi explored hedging devices used in classroom interactions, focusing on the metadiscourse markers or linguistic elements that facilitate hedging and their pragmatic functions.¹⁸ Arthur and Fenyi found that ten categories of hedging devices were employed, with modal auxiliary verbs, modal lexical verbs and adverbial phrases/approximates being the most prominent. These findings suggest that research on gender-based hedge use in doctoral theses within the Humanities at Ghanaian universities is largely absent. As a result, this study aimed to analyse gender-based hedging in doctoral theses in the Humanities at the University of Ghana, guided by the research question: (1) What are the gender-based uses of hedges in these doctoral theses?

This study is driven by three key reasons. First, it addresses a gap in the academic writing landscape of Ghanaian higher education (HE). While research on students' academic writing in Ghanaian HE is not new, there is a notable lack of studies focused on gender-based use of hedges in doctoral theses in the Humanities at the University of Ghana. Therefore, this research makes a significant contribution by exploring this aspect. Second, as the first of its kind on this topic at the University of Ghana, the study aims to serve as a foundation for future research into related areas, such as the impact of gender-based

¹¹ Arina Yulianti and Warsono Warsono, "Hedges in Classroom Speeches by English Students in Graduate Program," *English Education Journal* 6, no. 1 (2016); Cüneyt Demir, "Hedging and Academic Writing: An Analysis of Lexical Hedges," *Journal of Language and Linguistic Studies* 14, no. 4 (2018): 74–92; Vincenzo Dheskali, "A Corpus-Based Comparison of Albanian and Italian Student Writing in L1 and English as L2: Hedges and Boosters as Modalization by Degree," 2020.

¹² Chek Kim Loi and Jason Miin-Hwa Lim, "Hedging in the Discussion Sections of English and Malay Educational Research Articles.," *GEMA Online Journal of Language Studies* 19, no. 1 (2019); Tayyabba Yasmin *et al.*, "Hedging as a Marker of Variation in Pakistani Research Dissertations of Sciences and Social Sciences," *Review of Applied Management and Social Sciences* 3, no. 3 (2020): 361–68; Asmara Shafqat, Rafique Ahmed Memon, and Tafseer Ahmed Khan, "Do Pakistani English Writers Hedge More in Linguistics Research than Native English Writers?," *Journal of Humanities, Social and Management Sciences (JHSMS)* 3, no. 1 (2022): 243–57; Thao Quoc Tran and Thiep Ba Tang, "Hedging in the Results and Discussion Section of English Applied Linguistics Research Articles by Vietnamese and Foreign Writers," *Journal of Language Teaching and Research* 13, no. 1 (2022): 119–24; Ade Windiana Argina and Nur Ijubah, "Hedging Strategies in Research Articles: A Comparative Analysis of Indonesian Male and Female English Students," *Acitya: Journal of Teaching and Education* 4, no. 1 (2022): 285–96; Diaz Adrian and Muchamad Sholakhuddin Al Fajri, "Hedging Practices in Soft Science Research Articles: A Corpus-Based Analysis of Indonesian Authors," *Cogent Arts & Humanities* 10, no. 1 (2023): 2249630.

¹³ Shafqat, Memon, and Khan, "Do Pakistani English Writers Hedge More in Linguistics Research than Native English Writers?"

¹⁴ Tran and Tang, "Hedging in the Results and Discussion Section of English Applied Linguistics Research Articles by Vietnamese and Foreign Writers."

¹⁵ Adamu Musa, "Hedging in Academic Writing: A Pragmatic Analysis of English and Chemistry Masters' Theses in a Ghanaian University," *English for Specific Purposes* 42, no. 15 (2014): 1–26; Rebecca Arthur and Daniel Arkoh Fenyi, "Metadiscourse Markers of Hedging in Classroom Interaction: A Descriptive Analysis," *International Journal of Education, Technology and Science* 2, no. 3 (2022): 288–309; Dorian Odolina Oyewale-Johnson, "Hedging in the Multidisciplinary Postgraduate Theses of Students in a Ghanaian University" (2021).

¹⁶ Musa, "Hedging in Academic Writing: A Pragmatic Analysis of English and Chemistry Masters' Theses in a Ghanaian University."

¹⁷ Oyewale-Johnson, "Hedging in the Multidisciplinary Postgraduate Theses of Students in a Ghanaian University."

¹⁸ Arthur and Fenyi, "Metadiscourse Markers of Hedging in Classroom Interaction: A Descriptive Analysis."

hedge usage on the quality of theses in Ghanaian HE and beyond. Finally, understanding the gender-based use of hedges in doctoral theses in the Humanities will equip stakeholders, including students, researchers, English language lecturers, university administrators and policymakers, to develop strategies that enhance academic writing.

Hedging and Gender

The issue of using cautious language or hedging by men and women has been a topical issue that spans nearly a century. Revillard and Bereni highlight that the women's rights revolution of the early 20th century, along with the feminist movements of the 1970s, significantly contributed to shaping gender studies.¹⁹ These fields explore the roles of men and women in social, political and linguistic contexts. Numerous scholars have conducted research on gender studies, including studies on gender-specific use of hedges.²⁰ However, most of these studies have concentrated on spoken discourse, and a few on written discourse, such as Clark, who emphasises that English Language textbooks reinforce gender bias.²¹

Goddard and Patterson emphasise the differences in how men and women use language, arguing that women's vocabulary is often limited, and women tend to use more refined and indirect expressions.²² Mohajer and Jariah Mohd also studied these language differences, finding that women use more hedging devices than men, as they are more concerned with maintaining social harmony and fostering connection.²³ Women's language is typically more indirect, featuring hedges, tag questions, adjectives and intensifiers, while men are more likely to use directives and commands, which convey authority.²⁴ In Japanese society, men are portrayed as adventurous, confident and knowledgeable, whereas women do not hold the same status.²⁵

Writers consider uncertainty and politeness when using cautious language about others' works. When quoting another scholar, a writer might agree, disagree, or express reservations about a claim. According to Francis *et al.*, women tend to show affiliation rather than competition or objection to others' views.²⁶ This approach makes their writing less confrontational and more likely to be accepted by peers. In contrast, men's writing often reflects a more aggressive and competitive stance, which may not accommodate differing opinions. When writers use hedges in their texts and the propositions are later proven incorrect, they may face direct criticism from peers and struggle to protect their reputations. Thus, hedges are seen as crucial linguistic tools, particularly in academic writing.

METHODOLOGY

Study Area

This research examined doctoral theses authored by Humanities students at the University of Ghana. The University of Ghana was selected for this study due to its status as the foremost and largest university in the country, making its findings highly relevant to other higher education institutions in Ghana. Established by ordinance in 1948, the University was originally affiliated with the University of London for the provision of tertiary education, oversight of academic programmes and degree awarding. It currently hosts a student body of around 40,000, including local and international students enrolled in undergraduate and graduate programmes through regular, sandwich and distance education formats. The University employs English as the language of instruction and follows a collegiate system with four colleges: the College of Humanities, the College of Education, the College of Basic and Applied Sciences and the College of Health Sciences.

¹⁹ Anne Revillard and Laure Bereni, "From Grassroots to Institutions," *Social Movement Studies in Europe*, 2016, 156–72.

²⁰ Leila Mohajer and Jariah Jan Mohd, "Preserving Face and the Use of Hedges in Masculine World of Men," *Procedia - Social and Behavioral Sciences* 208 (November 2015): 13–20, <https://doi.org/10.1016/j.sbspro.2015.11.176>.

²¹ Ian Clark, "Anyone for Tennis?--A Case-Study on Gender Bias in a Japanese Junior High School English Language Textbook.," *Journal of English as an International Language* 10, no. 2 (2015): 117–31.

²² Angela Goddard and Lindsey Meân Patterson, *Language and Gender* (Psychology Press, 2000).

²³ Mohajer and Mohd, "Preserving Face and the Use of Hedges in Masculine World of Men."

²⁴ Goddard and Patterson, *Language and Gender*.

²⁵ Kimberly Clark, "A Feminist Investigation of Gender Performance through a Reflection on the Process of Certification in a Nontraditional Educational Leadership Program," 2014.

²⁶ Becky Francis, Jocelyn Robson, and Barbara Read, "An Analysis of Undergraduate Writing Styles in the Context of Gender and Achievement," *Studies in Higher Education* 26, no. 3 (2001): 313–26.

The College of Humanities was chosen for this study because it has the highest number of students engaged in soft skill programmes. Consequently, students in this College are more likely to use hedges compared to those in other colleges. The College encompasses six schools: the University of Ghana Business School (UGBS), the School of Arts, the School of Performing Arts, the School of Languages, the School of Social Sciences, and the University of Ghana School of Law. It also houses three research institutes: the Institute of Statistical, Social and Economic Research (ISSER), the Institute of African Studies (IAS), and the Regional Institute for Population Studies (RIPS). Additionally, the College features five Centres: Centre for Social Policy Studies (CSPS), Language Centre, Legon Centre for International Affairs and Diplomacy (LECIAD), Centre for Gender Studies and Advocacy (CEGENSA) and Centre for Migration Studies. The College offers a wide range of academic programmes, including Dance, Music, Theatre Arts, Political Science, Sociology, Economics, Geography, Psychology, Social Work, English, Linguistics, Modern Languages, Archaeology, History, Religions and Philosophy/Classics. These programmes aim to improve students' knowledge, analytical skills, research abilities and creativity.²⁷

Research Design

The simple case study approach was chosen because it enhances understanding of social dynamics by focusing on specific target groups.²⁸ This design was suitable for the study's objective, which was to analyse gender-based use of hedges in doctoral theses within the Humanities at the University of Ghana. This research question guided the direction of the investigation:

- 1) What are the gender-based uses of hedges in the doctoral theses?

The interpretivist paradigm shaped this research by concentrating on how students perceived and utilised hedges in the LR sections of their doctoral theses. According to Pulla and Carter, understanding and realisation are developed through social interactions.²⁹ Myers argues that interpretive scholars believe that reality—whether inherent or socially constructed—can only be comprehended through social constructs such as language, consciousness and shared meanings.³⁰

Population and Sampling

The study population consisted of all doctoral theses produced by students at the University of Ghana. Specifically, the focus was on doctoral theses from the academic years Humanities during 2017/2018 to 2021/2022. This time frame was chosen to ensure that the researchers could gather current information on the use of hedging by doctoral students. Additionally, the use of hedges in theses within the Humanities at the University of Ghana had not been adequately explored, particularly in relation to gender differences among students. The theses from each academic year were conveniently downloaded in electronic format from the University's website (www.ug.edu.gh), and the LR sections were selected purposefully. The LR sections were chosen because they are critical parts of thesis writing where hedges are frequently used to express the writer's stance. According to Hartley, the LR section integrates and synthesises research from various fields, evaluates the strength of evidence for particular viewpoints, identifies literature gaps and suggests areas for further research.³¹

Data Collection Procedures

To maintain confidentiality and anonymity, the names of the students who authored the dissertations were not disclosed. Instead, the LR sections from the theses were extracted and coded. Codes like MDT1, MDT2 and MDT3 were designated for male-authored theses, while FDT1, FDT2 and FDT3 were used for female-authored theses. The researchers collected eight theses (four authored by males and four by

²⁷ Shirley Eli Banini, "Range and Variability of Reporting Verbs in Doctoral Theses of Humanities Students" (University of Venda, 2021); Oyewale-Johnson, "Hedging in the Multidisciplinary Postgraduate Theses of Students in a Ghanaian University."

²⁸ John Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, SAGE, California (California: Sage Publications, 2013); A Crossman, "An Overview of Qualitative Research Methods: Direct Observation, Interviews, Participation, Immersion, Focus Groups," 2019, <https://www.thoughtco.com/quality-research-methods>.

²⁹ Venkat Pulla and Elizabeth Carter, "Employing Interpretivism in Social Work Research," *International Journal of Social Work and Human Services Practice* 6, no. 1 (2018): 9–14.

³⁰ Michael D Myers, *Qualitative Research in Business and Management* (California: SAGE publications Ltd, 2019).

³¹ James Hartley, *Academic Writing and Publishing: A Practical Handbook* (Routledge, 2008).

females) from the University’s website for the academic years 2017/2018 to 2021/2022, focusing on those that were easily accessible. No ethical clearance was sought from the university because the selected theses are available in the public domain and, as such, public documents. In total, forty theses were conveniently gathered—twenty by female students (with a total word count of 35,388) and twenty by male students (with a total of 58,520 words). This number was considered adequate because the LR sections provided sufficient data to address the research questions of the study. The theses were written in English and followed a structure that included the introduction, literature review, methodology and materials, results, discussion and conclusion sections. Two corpora were created for the study. Using LR chapters of twenty female theses, a female corpus (F) in text format was created, and, using the LR chapters from twenty (20) theses written by male students, a male corpus (M) was created. The titles, tables and figures in the LR sections were all removed, as these were not of interest to the analysis. What were of interest was the hedge words employed in the LR sections.

Data Analysis

Mugenda and Mugenda note that analysing raw data from fieldwork is difficult and requires effective data management.³² Creswell adds that data management involves making assumptions and extrapolations based on the data collected from experiments or surveys.³³ All selected texts were analysed with the help of the 2019 version of the concordance programme AntConc 3.5.8.³⁴ The distinct corpus was loaded and parsed for hedging words. The classifications provided by Hyland formed the foundation for analysing the hedging devices in this study.³⁵ To confirm that all the hedge terms listed in Table 1 (especially lexical epistemic and epistemic modal verbs) were utilised to convey the writers’ uncertainty or tentativeness, each verb was contextually examined . The frequency of these selected tentative expressions is detailed in the results and discussion section of this paper.

PRESENTATION OF FINDINGS AND DISCUSSION

This section of this paper details the gender-based uses of hedges in the doctoral theses of Humanities students in the University of Ghana.

Gender-Based Uses of Hedges in the Doctoral Theses

Mohajer and Jariah Mohd opine that women use hedging devices more than men because women are more centred on face-saving to create commonality.³⁶ To determine the situation, as it pertains to the University of Ghana, this domain was explored. The results are presented in Table 2.

Table 2: Hedging Devices Sighted in the Male and Female Corpus (corpora)

Category	Frequency		Percent (%)		f/10,000 words	
	Male corpus	Female corpus	Male corpus	Female corpus	Male corpus	Female corpus
Modal auxiliary verbs	1948	1585	55.1	44.9	68.1	55.4
Approximators	987	907	52.1	47.9	34.5	31.7
Adverbials	264	171	60.7	39.3	9.2	6.0
Introductory verbs	179	144	55.4	44.6	6.3	5.0
Probability adjectives	125	99	55.8	44.2	4.4	3.5
Overall hedges used	3503	2906			122,5	101.6
Average			55.8	44.2		

Source: Fieldwork (2024)

³² Olive Mwhaki Mugenda and Abel Gitau Mugenda, *Research Methods: Quantitative & Qualitative Approaches*, vol. 2 (Acts press Nairobi, 2003).

³³ John W. Creswell, *Qualitative Inquiry and Research Design: Choosing Among Five Approach* (California: Sage Publication, Inc., 2007).

³⁴ Laurence Anthony, “AntConc 3.5.8 ,” 2019, <https://www.laurenceanthony.net/software/AntConc>.

³⁵ Hyland, “Metadiscourse: Exploring Interaction in Writing.”

³⁶ Mohajer and Mohd, “Preserving Face and the Use of Hedges in Masculine World of Men.”

From Table 2, generally, the males hedged more than the females (males = 3503; females 2906). Specifically, in almost all categories, the male doctoral students used more hedging devices than their female counterparts. The most frequently used hedging device was the modal auxiliaries (male = 1948; female = 1585). The large proportion of these devices relative to other categories is *likely* because modal verbs like *would*, *might*, *should*, and *could* are frequently used in forming statements. This is because the function of modal auxiliary verbs as helping verbs supports writers to make claims or statements for different implicit and explicit purposes. Salager-Meyer emphasises that modal auxiliary verbs convey the speaker's attitude and assist in expressing ideas more indirectly.³⁷

Approximators were found to be the second most used group of hedging devices by both groups (male = 987; female = 907). Approximators (*almost*, *virtually*, *over*, *roughly*, *around*, *about* and *between*) were used in different instances in the analysed texts. Adverbials (*probably*, *possibly*, *usually*, *slightly*, *rather*, *apparently*, *relatively* and *occasionally*), come in next as the most frequently used hedging devices. The least common hedging device was probability adjectives (such as *potential*, *possible*, *likely*, *unlikely*, *probable* and *apparent*). The analysis reveals that modal auxiliaries are used more frequently than other hedging devices. This pattern is consistent not only in this study but also in everyday conversations, where they play a significant role in expressing ideas both directly and indirectly.³⁸ Figure 1 shows the percentage variation of the various hedge devices used according to gender.

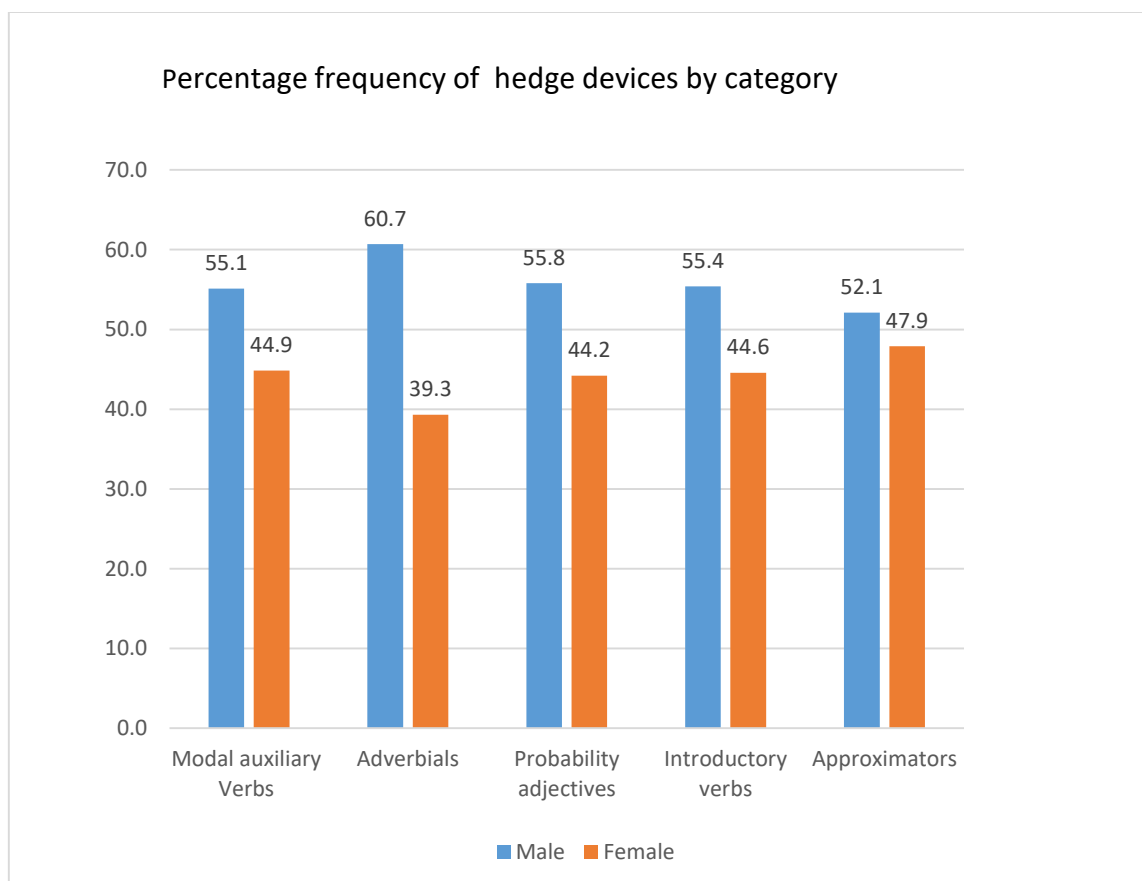


Figure 1: Frequency of hedging devices used by males and females

Source: Fieldwork (2024)

Figure 1 clearly shows that the application of hedging devices differs between genders. Male doctoral students used modal auxiliaries more frequently than female students. Specifically, male students accounted for 55.1% of the modal verbs, while female students used 44.9%. A similar pattern is observed with approximators, where 52.1% were used by male students and 47.9% by female students.

³⁷ Françoise Salager-Meyer, "I Think That Perhaps You Should: A Study of Hedges in Written Scientific Discourse," *Functional Approaches to Written Text: Classroom Applications 1* (1997): 127–43.

³⁸ Geoffrey N Leech, *Meaning and the English Verb* (Routledge, 2014).

There was also a noticeable difference in the use of adverbials, with males using 60.7% and females using 39.3%. That is, the male doctoral students used adverbials one and a half times more than their female counterparts. The results also show that male students (55.4%) tend to use introductory verbs more than their female (44.6%) counterparts. Finally, pertaining to the use of probability adjectives, the percentage values were 55.8% (male) and 44.2% (female).

Specific Distribution of Hedges in the Doctoral Theses

Hyland suggests that hedging is a vital rhetorical tool that plays a key role in the social negotiation of knowledge.³⁹ It assists writers in persuading readers of their claims' validity and gaining acceptance within their community. For this reason, the domain of distributions of hedges in the doctoral theses was explored in this study; the results are found in Table 3. The first column contains the category of the hedged item, the second column contains the words that belong to the category of the hedge while the third and fourth columns cover the frequency of the occurrence of the words in the male and female corpus, respectively.

The fifth and sixth columns provide, respectively, the percentage of the word in the corpus. The occurrence of these various forms of hedge words is an indication that the students are aware of these devices. Specifically, for the modal auxiliary verb, *can* (7.67%) was identified as the leading hedging device used by the males while *may* (6.45%) was identified as the most used hedging device by their female counterparts. Of the adverbials, the results suggest that *rather* (male = 1.72%; female = 1.13%) was the most preferred hedging device of both groups. A similar pattern was registered for the probability adverb category, as *likely* (male = 2.06%; female = 1.70%) was identified as the most preferred hedging device by both groups. Like the modal auxiliary verb category, different hedging devices in the introductory adverb category were preferred by both groups. That is, whereas the males used *believe* (0.40%) the most, their female counterparts preferred *indicate* (0.66%) the most. Like the adverbials and probability adverb categories, both males (7.34%) and females (7.29%) applied *between* the most in their theses. The finding that the males hedged more than their female counterparts supports the supposition of Goddard and Meân Patterson (2000), who highlight the differences in language use between men and women. This finding, however, opposes the position of Mohajer and Jariah Mohd (2015) who argue that women use hedging devices more than men because women are more centred on face-saving to create commonality.

Table 3: Distributions of Hedges

Item	Item	Frequency		Percent (%)	
		Male	Female	Male	Female
Modal auxiliary verbs	Could	222	142	3.26	2.09
	Can	522	379	7.67	5.57
	Might	40	39	0.59	0.57
	May	408	439	5.99	6.45
	Would	162	146	2.38	2.14
	Will	303	266	4.45	3.91
	Must	102	71	1.50	1.04
	Should	175	99	2.57	1.45
	Shall	14	4	0.21	0.06
Adverbials	Probably	17	7	0.25	0.10
	Possibly	12	15	0.18	0.22
	Usually,	84	46	1.23	0.68
	Slightly	2	4	0.03	0.06
	Rather	117	77	1.72	1.13
	Apparently	2	7	0.03	0.10
	Relatively	29	14	0.43	0.21

³⁹ Ken Hyland, "Disciplinary Discourses: Social Interactions in Academic Writing" (Longman, 2000).

	Occasionally	1	1	0.01	0.01
Probability adjectives	Potential	60	40	0.88	0.59
	Possible	65	59	0.95	0.87
	Likely	140	116	2.06	1.70
	Unlikely	4	1	0.06	0.01
	Probable	1	1	0.01	0.01
	Apparent	4	10	0.06	0.15
Introductory verbs	Believe	51	27	0.75	0.40
	Suggest	47	43	0.69	0.63
	Think	31	14	0.46	0.21
	Appears	36	12	0.53	0.18
	Seems	14	27	0.21	0.40
	Sounds	0	21	0.00	0.31
	Indicate	47	45	0.69	0.66
	Propose	6	1	0.09	0.01
	Assume	9	14	0.13	0.21
Approximators	Almost	17	14	0.25	0.21
	Virtually	11	2	0.16	0.03
	Over	176	123	2.59	1.81
	Roughly	1	5	0.01	0.07
	Around	26	34	0.38	0.50
	About	256	233	3.76	3.42
	Between	500	496	7.34	7.29

Source: Fieldwork (2024)

Some illustrative excerpts of how these modal auxiliary verbs (excerpts 1, 2 and 3) and approximators (excerpts 4 and 5) are used in the male doctoral students' corpus are provided. There were multiple uses of hedge words in the same sentences, as evidenced in the ensuing excerpts:

1. Pagano and Bowman (1995), for example, suggested that local government units facing financial crises from revenue interruptions will inherently engage in local economic development efforts to find suitable solutions.... [MDT1]
2. The implication [of these norms] is that households that experience challenges **will** not be able to utilise social support mechanisms as they **will** not be able to return to acts of kindness. [MDT9]
3. It **must** be admitted that Scott and Barnes (2011) recommended that studies involving emotional labour **must** consider how it affects worker productivity, health as well as coping mechanisms. [MDT11].
4. It is estimated that there are **between** 5000 and 10,000 commercial toxic chemicals of which **between** 150 and 200 are known as possible causes of cancer (Vu Nam, 2000). [MDT17]
5. For example, in the year 1982, establishments employing **between** 100 and 247 workers recorded an injury incidence rate of about 10.7 while companies employing **between** 250 and 499 workers had a rate of about 9.9 injuries per 100 ... [MDT17].

The use of more than one hedge word per (approximators) sentence was equally observed in the female corpus, as seen in excerpts 6-8:

6. Other identified barriers to weight management include social norms **about** body size, social norms **about** physical activities (Chang *et al.*, 2008), and lack of accountability to someone else ... [FDT8].
7. Empowerment, and for that matter women's empowerment, therefore, is **about** creating awareness **about** oppressive conditions, helping women to acquire the needed tools to overcome the oppression and building on that to transform their own lives [FDT7]
8. Body image develops **over** time and may change **over** a period of time. [FDT8].

In 6, for example, the writer refers to three authors regarding activities connected to weight loss management and cites a source to buttress the argument. In excerpt 7, the writer writes about empowerment without citing a source and uses *about* as a hedging tool. The writer does not want to be categorical in writing that empowerment is the creation of awareness of oppressive conditions. By using *about*, the writer creates the space, seeking consensus before expanding on the statement. In excerpt 8, the writer uses the approximator *over* two times in the same sentence for effect. The import of the statement is that the body image develops gradually in time, and that, once developed, it may then change in a longer period.

There was a triple use of hedge words, as well, in the female student corpus, as illustrated in excerpt 9. These words enabled the writer to make/present a statement of claims tentatively, thereby enabling association or comparison of one fact to another. The use of the same word three times in a row within the same sentence is, however, quite rare.

9. The first classification of Trubetzkoy's (1939) distinctive opposition, which is based on the relation **between** members of the opposition, makes a distinction **between** bilateral and multilateral, and **between** proportional and isolated oppositions [FDT5].

The hedge word *between*, as used in excerpt 9, is an approximator and functions as a linkage relating one thing and another. The statement, as it stands, is quite complex and would need to be read over several times to get its full import. The statement could be separated and recast into two as follows:

Trubetzkoy's (1939) distinctive opposition is based on the relationship **between** members of the opposition. His first classification makes a distinction **between** bilateral and multilateral, and **between** proportional and isolated oppositions.

Academic writing is viewed as a process that depends on ongoing consensus and backing, demonstrating that hedges play a crucial role in persuading readers of the credibility of claims, as in excerpt 9. Hedges show writers' anticipation of the resistance to their propositions; so, by including them in a statement, writers can redeem their image in the presence of their peers, should writers' assertions/propositions turn out to be incorrect.⁴⁰ This is because hedges are communicative devices used for augmenting or lessening the strength of statements. This suggests that hedges carry writers' degree of assurance in the true value of statements and also signify an attitude to the reader or listener. Hedges assist writers in foreseeing potential negative outcomes.⁴¹ As mentioned earlier, hedges serve a face-saving role, allowing writers to soften their assertions. This concept is also known as "shields," which reflect the extent of the author's commitment to the accuracy of the proposition.⁴² Hyland classified hedges as downtoners that soften the impact of a statement/proposition.⁴³ An illustration is given in excerpt 10:

10. *There was also the expectation that this study would show* that moral values, personal morals and religious commitment would have moderating effects on the effects of affect, stereotypic beliefs, and symbolic beliefs on attitudes toward homosexuals (FDT14)

The phrase "there was the expectation that" highlights the writer's hesitancy or carefulness regarding the assertion about attitudes toward homosexuals. These sentences clarify the writer's perspective on the cited text, aiming to bolster their argument. The choice of reporting verb reflects the writer's level of commitment to the peer findings. For instance, the verb "show" conveys a more favourable attitude towards the findings compared to the noun "expectation" used earlier. This observation aligns with the general conclusions drawn by Hyland.⁴⁴ The subsequent extracts will illustrate the use of shields in both male and female corpus researched:

11. Drawing on USA census information from 1990, Palloni (2001) points out that **roughly** 65% of unmarried white women and men live alone. [FDT12]

⁴⁰ Hyland, "Talking to the Academy: Forms of Hedging in Science Research Articles."

⁴¹ Hyland, "Talking to the Academy: Forms of Hedging in Science Research Articles."

⁴² Teppo Varttala, "Hedging in Scientifically Oriented Discourse. Exploring Variation According to Discipline and Intended Audience," 2001.

⁴³ Hyland, "Hedging in Scientific Research Articles."

⁴⁴ Hyland, "Hedging in Scientific Research Articles."

12. Batt and Bolonyai (2011:522) *propose* that CS in the sociolinguistic dimension can be placed in two categories: - the socio-functional model (e.g. Gumperz 1982, Heller 1992, Myers-Scotton 1993) and the conversational/discourse/analytic model (Auer 1984, 88, Li Wei 1994). [FDT20]
13. According to Haddon (2000), the coordinated use of cell phones has made it **possible** for the youth- especially teens- to continuously stay in touch with their friends while at home: reducing the number of times they need to meet at a public place. [MDT19]
14. According to Riddington and Owusu-Ofori (2002), these indigenous names **like** “ahututuo” are characterised by alliteration of letters that **apparently** signifies the persistence and recurrence of pain, and the closest English translations would include ‘body biting’, ‘body chewing’ and ‘beaten up’. [MDT14]

In excerpts 11 to 14, both the female and male doctoral students make use of shields for attribution – an indication of plausibility – by drawing on the statements or findings of other authors. In this way, if the claims are found to be incorrect, the writer has a face-saving strategy to attribute the error to the author being cited.

CONCLUSION

This investigation aimed to examine the gender-based use of hedges in doctoral theses within the Humanities at the University of Ghana from the academic years 2017/2018 to the 2021/2022. These, written in English, were selectively chosen, and the literature review sections were extracted and analysed for hedging devices using the 2019 version of the AntConc 3.5.8 concordance program. The study resulted in six key deductions. Firstly, male doctoral students used more hedging devices compared to female students, with males employing them 3503 times in their literature reviews, while females used them 2906 times. Secondly, the most frequently used hedging device was modal auxiliaries. That is, high frequencies of 1948 were identified for the males while 1585 occurrences were identified for the females. Thirdly, the least frequently used hedging device was probability adjectives, with the males using them only 125 times and the females using them only 99 times in their theses. Moreover, the modal auxiliary verb, *can* (7.67%), was identified as the leading hedging device used by the males, while *may* (6.45%) was identified as the most used hedging device by their female counterparts. In addition, repeated uses of hedging devices were registered for both groups. That is, hedging devices such as *will*, *must*, *between*, *about*, *over* were used more than once in single sentences, as exemplified in excerpts 1 to 8. Lastly, some writers practiced a rare usage of triple-use of hedging devices in their theses. Evidence is found in excerpt 9 where the approximator *between* is employed thrice in a single sentence.

BIBLIOGRAPHY

- Adrian, Diaz, and Muchamad Sholakhuddin Al Fajri. “Hedging Practices in Soft Science Research Articles: A Corpus-Based Analysis of Indonesian Authors.” *Cogent Arts & Humanities* 10, no. 1 (2023): 2249630.
- Anthony, Laurence. “AntConc 3.5.8,” 2019. <https://www.laurenceanthony.net/software/AntConc>.
- Argina, Ade Windiana, and Nur Ijabah. “Hedging Strategies in Research Articles: A Comparative Analysis of Indonesian Male and Female English Students.” *Acitya: Journal of Teaching and Education* 4, no. 1 (2022): 285–96.
- Arthur, Rebecca, and Daniel Arkoh Fenyi. “Metadiscourse Markers of Hedging in Classroom Interaction: A Descriptive Analysis.” *International Journal of Education, Technology and Science* 2, no. 3 (2022): 288–309.
- Banini, Shirley Eli. “Range and Variability of Reporting Verbs in Doctoral Theses of Humanities Students.” University of Venda, 2021.
- Clark, Ian. “Anyone for Tennis?--A Case-Study on Gender Bias in a Japanese Junior High School English Language Textbook.” *Journal of English as an International Language* 10, no. 2 (2015): 117–31.
- Clark, Kimberly. “A Feminist Investigation of Gender Performance through a Reflection on the Process of Certification in a Nontraditional Educational Leadership Program,” 2014.
- Creswell, John. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE, California. California: Sage Publications, 2013.

- Crossman, A. "An Overview of Qualitative Research Methods: Direct Observation, Interviews, Participation, Immersion, Focus Groups," 2019. <https://www.thoughtco.com/quality-research-methods>.
- Demir, Cüneyt. "Hedging and Academic Writing: An Analysis of Lexical Hedges." *Journal of Language and Linguistic Studies* 14, no. 4 (2018): 74–92.
- Dheskali, Vincenzo. "A Corpus-Based Comparison of Albanian and Italian Student Writing in L1 and English as L2: Hedges and Boosters as Modalization by Degree," 2020.
- Dobakhti, Leila. "The Use of Hedges in the Discussion Section of Qualitative and Quantitative Research Articles." *The Asian ESP Journal* 10, no. 2 (2014): 163–90.
- Francis, Becky, Jocelyn Robson, and Barbara Read. "An Analysis of Undergraduate Writing Styles in the Context of Gender and Achievement." *Studies in Higher Education* 26, no. 3 (2001): 313–26.
- Goddard, Angela, and Lindsey Meân Patterson. *Language and Gender*. Psychology Press, 2000.
- Hartley, James. *Academic Writing and Publishing: A Practical Handbook*. Routledge, 2008.
- Hinkel, Eli. *Second Language Writers' Text: Linguistic and Rhetorical Features*. Routledge, 2002.
- Hyland, Ken. "Disciplinary Discourses: Social Interactions in Academic Writing." Longman, 2000.
- . "Hedging in Scientific Research Articles," 1998.
- . "Metadiscourse: Exploring Interaction in Writing." *Continuum*, 2005.
- . "Talking to the Academy: Forms of Hedging in Science Research Articles." *Written Communication* 13, no. 2 (1996): 251–81.
- Hyland, Ken, and John Milton. "Qualification and Certainty in L1 and L2 Students' Writing." *Journal of Second Language Writing* 6, no. 2 (1997): 183–205.
- John W. Creswell. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. California: Sage Publication, Inc., 2007.
- Leech, Geoffrey N. *Meaning and the English Verb*. Routledge, 2014.
- Loi, Chek Kim, and Jason Miin-Hwa Lim. "Hedging in the Discussion Sections of English and Malay Educational Research Articles." *GEMA Online Journal of Language Studies* 19, no. 1 (2019).
- Mohajer, Leila, and Jariah Jan Mohd. "Preserving Face and the Use of Hedges in Masculine World of Men." *Procedia - Social and Behavioral Sciences* 208 (November 2015): 13–20. <https://doi.org/10.1016/j.sbspro.2015.11.176>.
- Mugenda, Olive Mwhaki, and Abel Gitau Mugenda. *Research Methods: Quantitative & Qualitative Approaches*. Vol. 2. Acts press Nairobi, 2003.
- Musa, Adamu. "Hedging in Academic Writing: A Pragmatic Analysis of English and Chemistry Masters' Theses in a Ghanaian University." *English for Specific Purposes* 42, no. 15 (2014): 1–26.
- Myers, Michael D. *Qualitative Research in Business and Management*. California: SAGE publications Ltd, 2019.
- Oyewale-Johnson, Dorian Odolina. "Hedging in the Multidisciplinary Postgraduate Theses of Students in a Ghanaian University," 2021.
- Pulla, Venkat, and Elizabeth Carter. "Employing Interpretivism in Social Work Research." *International Journal of Social Work and Human Services Practice* 6, no. 1 (2018): 9–14.
- Revillard, Anne, and Laure Bereni. "From Grassroots to Institutions." *Social Movement Studies in Europe*, 2016, 156–72.
- Salager-Meyer, Françoise. "I Think That Perhaps You Should: A Study of Hedges in Written Scientific Discourse." *Functional Approaches to Written Text: Classroom Applications* 1 (1997): 127–43.
- . "Procrustes' Recipe: Hedging and Positivism." *English for Specific Purposes* 19, no. 2 (2000): 175–87.
- Shafqat, Asmara, Rafique Ahmed Memon, and Tafseer Ahmed Khan. "Do Pakistani English Writers Hedge More in Linguistics Research than Native English Writers?" *Journal of Humanities, Social and Management Sciences (JHSMS)* 3, no. 1 (2022): 243–57.
- Tran, Thao Quoc, and Thiep Ba Tang. "Hedging in the Results and Discussion Section of English Applied Linguistics Research Articles by Vietnamese and Foreign Writers." *Journal of Language Teaching and Research* 13, no. 1 (2022): 119–24.
- Varttala, Teppo. "Hedging in Scientifically Oriented Discourse. Exploring Variation According to Discipline and Intended Audience," 2001.

- Vold, Eva Thue. “Epistemic Modality Markers in Research Articles: A Cross-linguistic and Cross-disciplinary Study.” *International Journal of Applied Linguistics* 16, no. 1 (2006): 61–87.
- Yasmin, Tayyabba, Muhammad Asim Mahmood, Sadaf Jabeen, and Ghazal Khalid Siddiqui. “Hedging as a Marker of Variation in Pakistani Research Dissertations of Sciences and Social Sciences.” *Review of Applied Management and Social Sciences* 3, no. 3 (2020): 361–68.
- Yuliarti, Arina, and Warsono Warsono. “Hedges in Classroom Speeches by English Students in Graduate Program.” *English Education Journal* 6, no. 1 (2016).

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