Hedging Strategies in Non-Science Theses: A Corpus-Based Analysis of Discussion Sections

1Antonius Suratno, 2Emilia Ninik Aydawati
Soegijapranata Catholic University
Semarang, Indonesia
a.suratno@unika.ac.id, emilianinik@unika.ac.id

Abstract. This study aimed to investigate the academic writings of students, which were stored in the students' theses repository. The primary goal was to explore how students employ politeness and caution strategy, often referred to as academic hedging when articulating their academic opinions in Chapter IV of the discussion section within their theses. Utilizing a corpus-based approach, the study analyzed 30 theses comprising over 100,000 words. The Antconc electronic analysis application was deployed to identify patterns of sentence expression and explore how students employed hedging techniques to present their academic ideas. The results indicate that student writers tended to rely heavily on the modal "*dapat*" compared to other hedging devices, suggesting a potential lack of familiarity with diverse hedging methods and their appropriate use in academic writing. It is postulated that this overreliance on "*dapat*" might be attributed to limited exposure to alternative hedging devices in academic writing. This indicates a need for academic writing teachers in universities to equip students with comprehensive knowledge of hedges for more appropriate expression of academic ideas.

Keywords: digital analysis, hedging strategy

Introduction

Recently, linguistic researchers, particularly those focused on discourse and academic discourse, have displayed an increasing interest in the hedges deployment in writing (e.g., Hyland & Tse, 2004; Peterlin, 2005; Gillaerts & Van de Velde, 2010;). This interest is well-founded since Hedges are of utmost importance in academic discourse, as texts are essential for disseminating scientific knowledge. As integral parts of academic endeavours, the final research papers produced by students serve as crucial means for academic members to document and communicate their scholarly accomplishments. These papers present new findings and knowledge that require validation and acceptance from the academic community members.

Research in this area is valuable for understanding the fundamental elements of academic argumentation. Writers use hedges to present opinions and propositions, including knowledge claims and reasoning in the texts (e.g., Hewings, 2006; Hyland, 1998;). This knowledge-sharing employs scholarly communications within specific discourse communities that involve members of diverse disciplines. These interactions encompass a range of discourse strategies that are specifically designed to suit the topic matter, intended audience, and the widely recognised genre and ideology within the academic field or community of discourse analysts (Bazeman, 1988).

*Antonius Suratno, a.suratno@unika.ac.id

A difficulty that students encounter in academic writing entails the incorporation of boosters and hedges. They often lack specific training in academic writing styles and may not fully grasp the importance of hedges in their texts (Macintyre, 2013). Hedges refer to linguistic devices that show a writer's confidence level in the accuracy of academic propositions while conveying an attitude to the audience (Hyland, 2004). They can convey politeness in the academic realm and tone down academic assertions.

Effective deployment of hedges enables writers to articulate the intensity and validity of their opinions and perspectives, prudently present unverified claims, and conversation with their audience (Hyland, 2005). Consequently, hedges has an important role in elevating the acceptance of academic messages among readers in the academic discourse. They serve as rhetorical tools and means of interactive communication, showing epistemic (knowledge-related) and affective (emotional) meanings. Hyland (2005) claims that they serve as a means of delivering *ethos* and *pathos*, reflecting both the author's level of assurance in the veracity of the proposition and their stance towards concepts and the audience. Existing studies and literature on hedges in academic discourse find that many novices lack a proper grasp of hedges. Consequently, they often fall into the trap of overusing, underusing, or misusing these crucial rhetorical devices in writing, revealing their limited comprehension and familiarity with displaying them effectively. Despite their significance, students often lack sufficient knowledge of hedges' use and function, making it challenging to incorporate them effectively into their writing.

In dealing with this issue, the current study seeks to examine the final academic papers of undergraduate students from non-science subjects. This research endeavour has the potential to contribute significantly by offering a valuable resource for scientists and academics who intend to improve their academic writing quality. Additionally, it can expand the scope of research by leveraging the sophisticated electronic tools available for text analysis, thereby enriching the emerging study of corpus and discourse. Notably, this study offers the opportunity to shed new light on text analysis, allowing for a comprehensive assessment of text portrayals and an exploration of general textual features across various disciplines. The findings can then be utilized for learning purposes and facilitate comparisons of texts from diverse disciplinary backgrounds.

Existing studies on hedges in academic discourse highlight a common issue: i.e. many beginners lack sufficient knowledge of what hedges are and how they can be used appropriately. Consequently, they tend to overuse, underuse, or misuse these vital rhetorical devices in their writing due to their limited grasp and experience in employing them effectively. To tackle this challenge, this current study aims to examine the final academic papers of undergraduate students majoring in non-science subjects.

One of the key strengths of this type of research lies in utilizing computer sophistication to scrutinize and portray texts based on specific aspects relevant to the research focus. It serves as a versatile analyzer that is adaptable to various research purposes.

This study is expected to contribute significantly and provide a valuable reference for academics and scientists seeking to enhance their academic writing' s quality. Moreover, it can expand the research horizons by harnessing sophisticated electronic tools for text analysis, enriching the burgeoning study of corpus and discourse. This study illuminates newer perspectives on text analysis, enabling a comprehensive assessment of text portrayals and exploring general textual features across diverse disciplines. The findings can be employed for educational purposes, allowing for comparisons of texts from various disciplinary backgrounds.

The motivation behind this research stems from the observation that many undergraduate students lack understanding about hedges and often struggle with overusing, underusing, or misusing them in their writing. Hence, this study is expected to provide valuable input and feedback to address this issue and aid students in improving their academic writing skills.

This study differs from previous ones in that the writers expand the scope of hedging research to underexplored contexts and disciplines and demonstrate the utility of advanced electronic tools for text analysis in academic writing research. The primary focus of this study is to examine how non-science students use hedges in their final project writing, particularly in the Data Analysis Chapter, where they present the research findings. By doing so, the study may shed light on how varied or similar usage patterns are and their effectiveness in the relevant contexts.

Academic Discourse

Academic writing, which encompasses forms such as research reports, essays, theses, and dissertations, is a critical medium for the dissemination of knowledge within scholarly communities. Recent debates have underscored its classification as a distinct "genre," underscoring the disparities in conventions and expectations among various fields (Tardy 2016). This emphasizes the necessity of a more profound comprehension of the unique characteristics of a particular genre in order to enhance academic communication.

Although writing has gained importance in education, it remains a relatively recent area of study within language research (Bazerman, 2020). This phenomenon can be partially explained by the enduring perception that writing is subordinate to speaking, with spoken language frequently considered primary and writing merely a reflection of speech (Prior, 2019). Consequently, writing has traditionally been viewed as peripheral to linguistic research, gaining less focus than spoken language.

However, the distinction between written and spoken language is no longer a significant debate. Because literacy is intrinsically embedded in the social context, the distinction between the two forms of communication has blurred, especially with the influence of communication technology. Both written and spoken language serve similar social purposes and involve interpersonal relationships, making them equally important in human discourse. Linguists, discourse analysts, and educators now recognize the equal importance of both modes of communication and give them due attention in their respective fields.

In today's information and technology age, writing plays a crucial role in the academic realm, shaping individuals and society (Sperling & Freedman, 2001; Ong, 1982). Through writing, we acquire many concepts, skills in language analysis, and rhetorical strategies, allowing us to recognize and employ various styles and arguments. Moreover, writing enables dissemination of knowledge and information to the academic community and the broader society. Additionally, writing helps shape our understanding, visualize our thoughts, and reflect our nature as social beings.

Academic writing holds equal significance, though there is still a need to strengthen the conceptual theories and methods that guide research in this area (Matsuda & Atkinson, 2008). The role of academic writing in teaching also warrants examination.

Recent years have witnessed notable advancements in the field of academic writing research. Tardy (2017) emphasizes the significance of academic writing as a socially situated practice, underscoring its role in shaping students' identities and ideologies within diverse knowledge-making processes. The concepts are closely aligned with the focus of the current study. Academic literacy as a communal practice has been examined in the studies by Lea and Street (2014) and Lillis and Scott (2015), highlighting the significance of writing in the social construction of knowledge. Academic writing is essential for familiarizing students with disciplinary practices, allowing them to cultivate suitable methods for conveying and applying knowledge to engage in the academic discourse community.

The socio-constructivist viewpoint on writing views individuals as meaning-makers and constructors of their surrounding realities and objectives (Bazerman, 2016). Writing is a significant activity characterized by individual and social dimensions, involving the interaction among writers, the writing process, and its contextual factors. This perspective includes the authors and

their (often hypothetical) audience, the contextual nature of the writing process, and the creation of significant texts. Writing, particularly academic writing, holds immense significance as it shapes knowledge, communication, and social interactions in the contemporary world. Embracing the socio-constructivist perspective can deepen our understanding of writing as a dynamic and multi-dimensional process involving various actors and contexts.

This connectedness aligns with the views of Halliday and Hassan (1985), who argue that texts are not entirely linguistic entities. They highlight the semiotic role in discourse and the generation of meaning in society's contexts. Halliday's legacy, transferred to the mainstream discourse investigation, contends that language in use is not exclusively psychological or cognitive processes but an integral element of sociology (Halliday, 1978). In this view, language serves as a tool to construct meaning within the social experiences of language users.

In contrast to structuralism (Saussure, 1983), which interprets meanings arising from internal connections among signifiers and often neglects the role of agents, the constructivist outlook on discourse is symbolic, representing personal beliefs and values, and situated, occurring within a social context. The correlation between context and discourse can be illustrated as follows: the foundation for interpreting discourse is laid by the context, while discourse, through linguistic devices like hedges, reflects the speakers' roles, making the context visible (Van Dijk, 2008, p. 131). Thus, such a connectedness acknowledges that language and discourse play crucial roles in shaping and expressing meaning within social contexts, representing language users' beliefs, values, and social roles.

Hedges

Hedges belong to linguistic devices that signal a decision made by writers to avoid absolute claims about propositions, preventing ideas from being presented as facts (Hyland, 2005). In academic writing, they play a crucial role in enhancing the trustworthiness and credibility of academic opinions, assuring that the statements are academically convincing and acceptable. They serve as strategies of communication that convey the writer's level of confidence in the truth value of opinions and are capable of displaying an appropriate attitude to the potential relevant audience (Hyland, 2004).

Properly using hedges enables writers to present their perspectives on shared knowledge and engage in a cautious dialogue with potential readers (Hyland, 2005). They can also be used to down-tone the knowledge claim, particularly when the complete verification of the proposition's accuracy is unattainable. As a case in point, hedges indicate varying levels of writers' confidence, ranging from considerate avoidance of overconfidence to modesty in making claims. Examples like *"mungkin"* (may/maybe) and "may" from the corpora exemplify this practice.

Method

In this study, a corpus-based electronic analysis is conducted using the Anconc Software Corpus Analyzer, which relies on machine-generated data that can be analyzed quantitatively and qualitatively. Given the research objectives, a corpus study can be qualitative, quantitative, or a combination of both. The analysis will primarily focus on generating quantitative data, such as text keywords, concordances, and collocations. However, the language context revealed in the data also allows for qualitative analysis, showcasing how relevant information is used within the discourse contexts. As a result, this research can be classified as a mixed-method approach, combining quantitative and qualitative elements.

This can be called a descriptive study in that it employs a simple frequency count to map out the data distribution and identify the variations in using hedging devices in the investigated texts.

Data source

For this study, academic writing is defined as students' final research papers, representing an integral part of the Indonesian undergraduate degree completion requirement. As a formal part of

academic etiquette, writers are supposed to adhere to academic rules by being cautious not to assert absolute truth in their claims of knowledge. To achieve this, they are expected to know and be aware of the roles of hedges—a means of academic politeness and caution—when sharing knowledge within the academic community.

The data were taken from the students' theses in the campus library repository. The study examined over fifty (50) undergraduate theses of the non-scientific disciplines: economics, psychology, and communication. Discussion sections of the final project reports were randomly selected. Only theses written and submitted between the academic years 2015-2018 were selected, constituting more than one hundred thousand (100,000) words corpus. Specifically, only the research discussion sections were collected and prepared for examination prior to analysis.

Stages of Research

A corpus study requires a substantial amount of data, commonly called text corpora, which constitutes a collection of texts. The researcher set inclusion and exclusion criteria in this phase to sort out the investigated data. Criteria were set out prior to corpus creation, and the genre of texts, the corpus's size, and the texts' genre was determined to ensure similarity in characteristics and text purity for accurate machine analysis. For example, certain elements like references, images, tables, graphs, or indexes, which do not form part of the primary body of text, are excluded from the analysis.

Hundreds of texts were obtained, irrelevant sections were omitted, and the refined data were amalgamated to form a readily analyzable corpus. After that, all the texts were reformatted into the RTF format as required by *AntConc* Application, ready for analysis. The ultimate goal was for the electronic analysis outputs to depict the examined text's characteristics accurately.

This study adopts modifications of hedges proposed by Mojica's (2005) and Hyland's (2004) definitions. Modal auxiliaries encompass verbs like may, might, can, could, will, would, as well as phrases combining these verbs, such as " it might be suggested." or " it may seem to appear " 'Should' is treated as a booster, following Mojica's (2005) classification. The electronic data analysis in this study primarily focuses on three key aspects of hedges (excluding boosters), which are as follows:

Modal Auxiliary: This analysis involves conducting word searches to examine the frequency and context whereby auxiliary verbs in the corpora are used.

Epistemic Lexical Verbs: For this, the function of word search is utilized to identify phrases or words that express writers' beliefs, hopes, expectations, predictions, assumptions, and projections.

Epistemic Adjectives and Adverbs: The analysis in this category revolves around phrases or words expressing attitude and feelings in the form of adjectives or adverbs. The two parts of speech may indicate the evaluative degree of knowledge or propositions, revealing intensity, quantity, frequency, and more.

Additionally, a miscellaneous category encompasses expressions related to extent, assumption, indicators, and other relevant factors.

The table below is an overview of the investigated aspects within the corpora of the students' final project report written in Indonesian.

Table 1. Four distinct types of hedges

Types	Samples
1. Modal auxiliary	would, might, could, etc.
2. Epistemic lexical verbs	suggest, seem, assume, etc.

3. Epistemic adjectives and adverbs	Likely perhaps, mainly, etc.	
4. Miscellaneous	certain extent, indicator, assumption	

Findings and Discussion

The research has been completed, and the subsequent section analyzes the data and discusses the results. The data is presented in two parts: its presentation and discussion.

After conducting a corpus analysis via keyword search, here is a summary of the hedges devices utilized across the entirety of the analyzed corpora.

Table 2. Summary of data distribution

Types	*Frequency*	*Percent (%)*
1. Modal auxiliary	1458	62.6
2. Epistemic lexical verbs	459	19.8
3. Epistemic adjectives and adverbs	410	17.6
4. Miscellaneous	0	0 (%)

The table illustrates that the highest frequency of hedges primarily stems from the use of Modal Auxiliary, constituting 62.6% of the total hedges. On the other hand, Epistemic Adverbs and Adjectives are the devices least frequently used by the student writers. Surprisingly, there were no words or phrases in the miscellaneous category expressing extent of certainty, assumption, or indicators used by the writers. This observation might suggest that student writers possess a high degree of self-confidence, although it could also imply a potential over-confidence in their research findings and propositions.

Modal Auxiliary:

Being the most prominent in terms of frequency, Modal Auxiliary encompasses several words and phrases such as "mampu," "dapat," "harus," "bisa," and "dapat." Among these, "dapat" (can) is the predominant modal used by the writers. This reaffirms the earlier observation that the high level of confidence is frequently expressed concerning the ability or capability of individuals or non-person subjects in accomplishing or achieving something. Further analysis of the context in which the word appears will provide more insight (see data of concordance in the upcoming section).

Despite "dapat" being dominant, it is interesting to note that words like "pasti" (must) and "harus" (must), which can also convey strong confidence and assurance about the truth value of an opinion, were relatively rare in the data. There were only 23 and 133 instances of their use throughout the investigated corpora, respectively. Similarly, the almost non-existent use of "boleh" (may) and "bisa/boleh jadi" (can be) by the students is surprising, especially since they are typically considered hedges devices that could be frequently used in the non-science disciplines. Previous research generally agrees that these words or phrases serve as typical hedges devices that non-science writers can utilize to display caution about specific propositions or statements
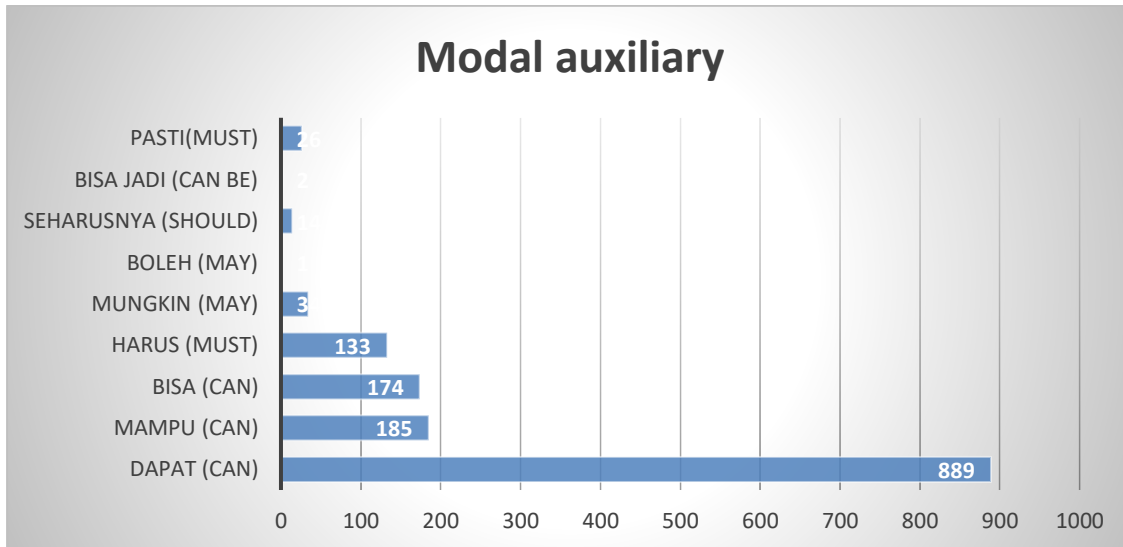
Figure 1. Modal Auxiliary

Among the data presented, a remarkable trend is the overwhelming use of "dapat" (can) compared to other types of modal auxiliaries. This shows that students have a substantial degree of confidence, and it could also be argued that they are being overconfident about their propositions or claims in their writing. On the other hand, they seem to neglect the importance of toning down their statements to make their ideas or propositions more acceptable by potential readers. This becomes more evident in the rarity of modal auxiliaries like "might," "may," or "maybe" in the whole studied corpora.

Epistemic Lexical Verbs

The figure below displays the distribution of hedges devices in the category of Epistemic Lexical Verbs used throughout the investigated corpora. Two devices stand out with notable frequencies: "terlihat" (look), being the second most frequent, and "menunjukkan" (show), being the most frequent. Conversely, the other devices were used relatively sparingly, ranging from none to 24 times in the entire corpus. This phenomenon could suggest that the writers might lack knowledge of word choice or a repertoire of other words or phrases with similar meanings. For instance, "menunjukkan" (show) is essentially the same as "mengindikasikan" (indicate) and similar to "menandakan" (mark) and "membuktikan" (prove), but it appears that the students may not be aware of these alternatives. A closer analysis of the context will shed more light on this.

Epistemic Lexical Verbs have distinct attributes, indicating varying degrees of evaluation concerning facts and propositions. The consistent use of a particular device points to a lack of knowledge among student writers, both in terms of different words and the meanings each conveys in academic writing. This could be a result of limited exposure to diverse word choices that convey varying degrees of evaluation for facts, ideas, or propositions.
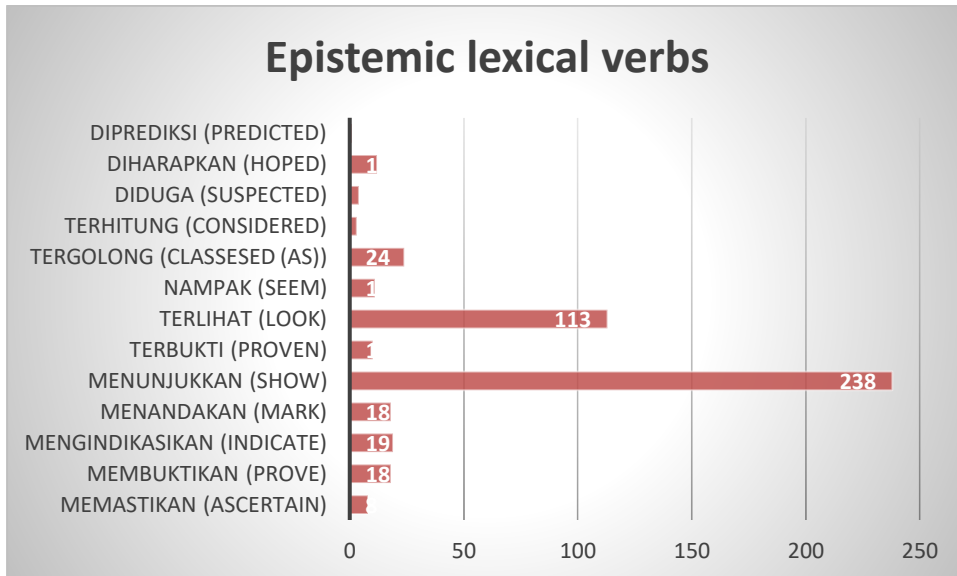
Figure2: Epistemic Lexical Verbs

Epistemic Adjectives and Adverbs
Epistemic Adjectives and Adverbs encompass a wide range of choices, allowing for the expression of attitudes towards proposed ideas or facts in the research. Experienced writers tend to have a higher awareness of which words or phrases to use, enabling them to convey more accurate and objective judgments. However, in this data, we observe a relatively limited selection by student writers, who predominantly opt for using "sering" (often) and "selalu" (always), appearing 125 and 101 times, respectively, in all the analyzed corpora.

This indicates a propensity to overgeneralize facts within a very narrow parameter of "often" and "always," despite real-world events or occurrences varying in degrees of frequency, intensity, urgency, and quality. Precision in expression is crucial to maintaining objectivity in meaning. The data suggests two possible causes for this trend. First, student writers may have a tendency to overgeneralize. Second, they might lack the knowledge and experience needed to effectively convey their attitude towards knowledge or facts in their research. Further investigation into the reasons behind this usage may shed light on ways to improve their academic writing

.
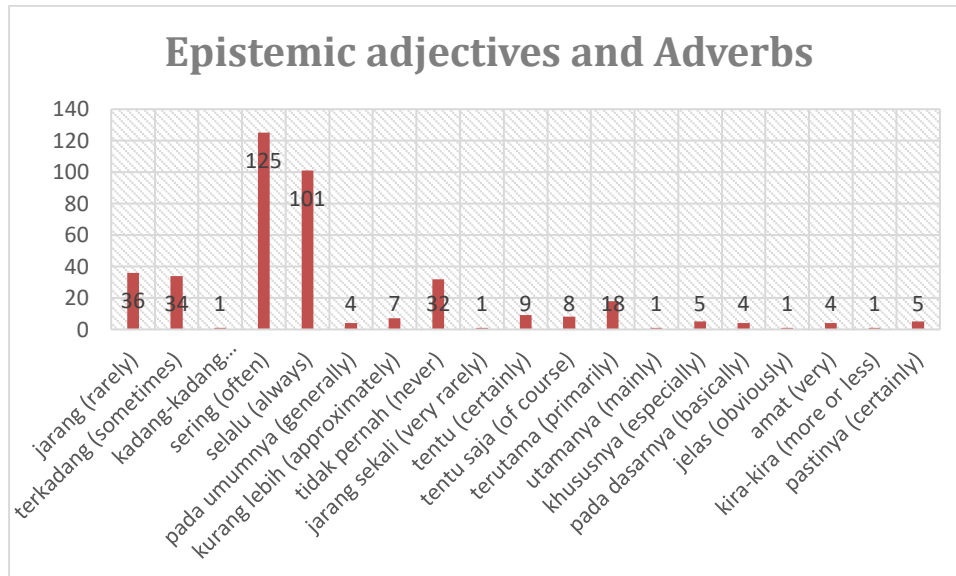
Figure 3. Epistemic Adjectives and Adverbs

Of all the investigated hedge devices, below is the overall outlook of the use. Each has been presented in each sub-heading above and the analysis has also been clarified.

Table 3. Frequency mapping of the whole hedge devices

Types	*Frequency*	*Percent*
Modal auxiliary	1458	*Dapat 889* *Mampu 185* *Bisa 174* *Harus 133* *Mungkin 34* *Boleh1* *Seharusnya 14* *Bisa jadi 2* *Pasti 26*
Epistemic lexical verbs	459	*Memastikan 8* *Membuktikan 18* *Mengindikasikan 19* *Menandakan 18* *Menunjukkan 238* *Terbukti 10* *Terlihat 113* *Nampak 1* *Tergolong 24* *Terhitung 3* *Terbukti 10* *Diduga 4* *Diharapkan 12* *Diprediksi 1*
Epistemic adjectives and adverbs	410	*Jarang 36* *Terkadang 34* *Kadang-kadang 1* *Sering 125* *Selalu 101*

		Pada umumnya 4
		Kurang lebih 7
		Tidak pernah 32
		Jarang sekali 1
		Tentu 9
		Tentu saja 1
		Terutama 18
		Utamanya 1
		Khususnya 5
		Pada dasarnya 4
		Jelas 1
		Amat 4
		Kurang lebih 7
		Kira-kira 1
		Pastinya 5
Miscellanious	2327	0

Hedges distribution

The Pie Chart is made simply to further clarify how the three types of hedges are distributed which indicates that Modal Auxiliary lies in the biggest position with the highest frequency of use, followed by Epistemic Lexical Verbs and Epistemic Adverb and Adjective which share similar frequency.
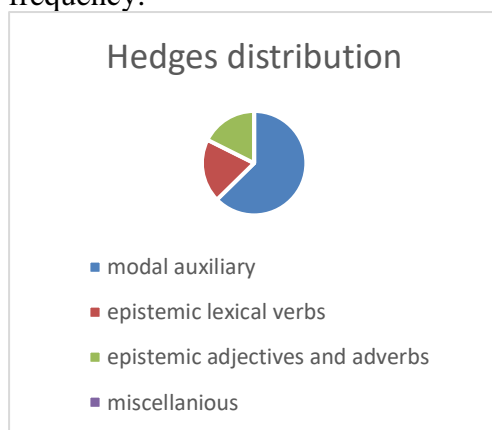
Figure 4. Overall look of the hedges devices

Display of how the devices were used in context

The sampled data of concordances illustrates how the student writers adopted the hedging devices to express their academic ideas and propositions in their academic report investigated in the corpora analysis with varying types of expression. From the sampled excerpts of concordances, each reflects the way student writers use various hedge devices along with each individual context of academic discourse with differing degrees of confidence and certainty of the truth value of the messages.

Menunjukkan (show)

1   dengan ayahnya. Dengan nada bicara dan   menunjukkan muka yang kesal, MVA bercerita tentang
2   paham yang berkepanjangan. Hasil Tes EPPS   menunjukkan bahwa MVA memiliki need yang tinggi pa

3   an perhatian seseorang dari nyeri. Musik terbukti   menunjukkan efek yaitu menurunkan frekuensi denyut

4   nilai Z = -2,366 dan p = 0,018 sehingga p < 0,05   menunjukkan adanya perbedaan learning operator SPB

5   nilai Z = -2,366 dan p = 0,018 sehingga p < 0,05   menunjukkan adanya perbedaan kinerja operator SPBU

6   nilai Z = -2,371 dan p = 0,018 sehingga p < 0,05   menunjukkan adanya perbedaan aspek jumlah pada ope

7   pertama yang positif, keramahan dan kesopanan,   menunjukkan sikap yang baik, integritas, serta mel

8   k berikut diskusi Berdasarkan hasil analisis data   menunjukkan bahwa hipotesis yang menyatakan bahwa

9   ang terhadap konsumen pada evaluasi 1, 2, 3 dan 4   menunjukkan nilai yang fluktuatif (Grafik 7). Pela

10   fluktuatif (Grafik 7). Pelayanan pada evaluasi 1   menunjukkan nilai yang maksimal dengan nilai 3, ak

Selalu (always)

1   yang kerap marah-marah kepada MVA. MVA   selalu merasa terkena imbas dari emosi ayahnya set

2   pekerjaannya. MVA mengaku sangat kesepian   selalu berada di rumah sendirian. Tidak ada yang m

3   g didirikan, akan tetapi pemilik usaha juga harus   selalu siap menanggung segala risiko yang dapat t

4   elakukan berbagai cara yang tepat, seperti : a.   Selalu memberikan kualitas yang baik untuk setiap

5   dan pengeluaran kas didalam perusahaan dapat   selalu di awasi. j. Memiliki karakteristik sebaga

6   sama, seperti yang diungkapkan R3 \x93Nggak   selalu sih, asal soto Semarang aja.\x94 Kedua, w

7   dengan berbelanja oleh-oleh, dan oleh-oleh yang   selalu dia cari di setiap daerah yang dikunjungi a

8   6 ,R9, dan R10. Sebagian besar dari mereka tidak   selalu menginap di hotel yang sama, seperti R1 ya

9   sus saat bekerja yang bersih. b. Alat rias wajah   selalu tersedia lengkap. c. Alat alat untuk acara

10   dia lengkap. c. Alat alat untuk acara pernikahan   selalu tersedia lengkap. d. Memiliki handy talky

Sering (often)

1   adalah teman MVA di tempat kuliah. Mereka   sering menghabiskan waktu bersama dengan sekedar m

2   alasan bau anyir atau amis yang dihasilkan daging   sering membutanya merasa mual. Hal tersebut tidak

3   dikan DA terhindar dari beberapa penyakit. Selain   sering mengalami luka karena bertanding maupun cid

4   Mulai dari mengubah kebiasaan yang terkadang   sering lupa memesan makanan, ajakan teman serta hi

5   namun karena keterbatasan sebagai anak kos, DA   sering melupakannya. DA menggantinya dengan memper

6   al/muntah, gelisah, menarik diri dalam pergaulan,   sering bertengkar yang artinya responden saat men

7   ui beberapa kendala seperti belum terbiasa, masih   sering lupa, dan canggung. Dukungan dari teman ses

8   dan interaksi dengan nasabah lebih lama dan   sering sebelum frontliner diberikan pelatihan diba

9   di tempat yang dituju, dan ada yang sudah cukup   sering.   Maka,   peneliti   kemudian mengelompokkan re

10   , R3, R4, R7, dan R8. Beberapa responden sudah sering menginap di rumah atau kos kerabatnya, sep

Discussion

The most frequently used hedge found was Modal Auxiliary (62%), with "can" being the predominant device in this category, used 889 times. This suggests that student writers overuse "can" compared to other available devices, indicating a possible lack of knowledge and experience in using hedges appropriately for academic writing. It also implies they have had minimal exposure to more standard academic writing styles due to their limited writing experience. This finding aligns with previous research on students' writing, though it cannot be considered a definitive conclusion. Further study, such as conducting interviews, may help validate this initial finding and provide a more conclusive understanding of the students' writing experience and their knowledge of hedges.

Similar findings are observed in the use of Epistemic Lexical Verbs, where student writers tend to overuse the verb "menunjukkan" (show), which appeared 238 times in this category, despite other available verb choices that convey different meanings. The Epistemic Lexical Verbs account for approximately 20% of the devices used. Overusing a single verb suggests a monotonous pattern in presenting research findings in Chapter IV and the general discussion section. This also indicates a possible inadequate knowledge and experience of students in writing, leading to a limited understanding of appropriate devices for different contexts.

Hedging is intended to minimize the author's involvement in the texts, emphasize the tentativeness of propositions, and politely soften the absoluteness of reality or facts. However, as evident from the context, student writers often prefer candid and absolute claims about their research findings. For instance, statements like "auditor eksternal pada KAP di Semarang dapat berdampak positif dengan meningkatnya kinerja" (external auditors in accounting firms in Semarang can positively impact performance) and "segala kegiatan yang dilakukan subjek selalu menghasilkan kebahagiaan dan kepuasan" (all activities conducted by the subjects always result in happiness and satisfaction) exhibit absolute claims. These statements could be down-toned to "may affect" and "often result," respectively. Such absolute statements may attract readers' questions or opposing opinions, as they lack the necessary caution and tentativeness expected in academic writing.

Conclusion and Suggestion

Among the four categories of hedges investigated, only three types were found in the corpora: Auxiliary modal verbs, epistemic adjectives and adverbs, and epistemic lexical verbs. The category of Miscellaneous, which encompasses certain extent, assumption, and indicators, was not discovered. Modal Auxiliary constituted the most frequently used hedge devices, followed by the Study of Epistemic Lexical Verbs and Epistemic Adjectives and Adverbs. This indicates that student writers tend to use a limited variety of devices, revealing their lack of exposure to different types and functions of hedges, as well as their minimal writing experience. The overuse of the modal verb "dapat" (can) can be attributed to it being the most popular hedge commonly known and used by student writers, despite other modal verbs that may convey different nuances and lexical meanings.

Student writers' limited variation and overuse of hedging devices suggest their lack of knowledge about these devices and their relevant functions in academic discourse. Moreover, the high frequency of certain devices used, among other choices, indicates their ignorance of the potential danger of overstating and exaggerating statements, critical aspects of presenting academic rhetoric that convey the writers' conviction and the evidential truths in their writing. While hedging allows writers to be cautious and tentative in their propositions, misusing hedges may lead to unintended counterproductive consequences.

It is suggested that lecturers in charge of academic writing should emphasize the significance of hedges in academic discourse so that students become more aware of their role in knowledge dissemination and the likelihood of their writings being accepted by the relevant discourse community. The results can be valuable references for educators and have implications for thesis supervisors to guide this important rhetorical aspect of academic discourse. Disseminating the rules and norms of writing proper academic texts could lead students to produce more acceptable final research projects. Future research on hedges in academic contexts, considering interviewing the writers about their understanding, usage, and function in academic discourse, would provide valuable insights into their writing practices and knowledge.

References

Adolphs, S. (2006). *Introducing electronic text analysis*. London: Routledge.

Bazerman, C. (1988). *Shaping Written Knowledge; Essays in the growth, form function, and implications of the scientific article*. Madison, WI: University of Wisconsin Press.

Bazerman, C. (2016**).** *What Writing Does and How It Does It: An Introduction to Analyzing Texts and Textual Practices.* Routledge.

Bazerman, C. (2020). Preface. In R. J. Dippre & T. Phillips (Eds.), *Approaches to Lifespan Writing Research: Generating an Actionable Coherence* (pp. xxi-xxiii). WAC Clearinghouse. Retrieved from https://wac.colostate.edu/books/perspectives/lifespan/

Bruner, J. (1996). The Culture of Education, Cambridge, MA: Harvard University Press.

Camiciottoli, B. (2003). Metadiscourse and ESP reading comprehension: an exploratory study. Reading in a Foreign Language 15, 28-44.

Halliday, M. A. K., & Hasan, R. (1985). *Language. Context and text: Aspects of language in a social-semiotic perspective.* Geelong, Australia: Deakin University Press.

Gillaerts, P. & Van de Velde, F. (2010). Interactional metadiscourse in research article abstracts. Journal of English for Academic Purposes. 9(2), 128-139. doi:10.1016/j.jeap.2010.02.004

Hyland, K. (2005). *Metadiscourse: Exploring interaction in writing.* London: Continuum

Halliday, M. A. K. (1978). *Language as a social semiotic: The social interpretation of language and meaning.* London: Edward Arnold.

Hewings, M. (Ed.). (2006). Academic writing in context: Implications and applications. London: Continuum.

Hyland, K. (2004). *Metadiscourse: Exploring interaction in writing*. NY: Continuum Discourse Series.

Hyland K, & Tse, P. (2004). Metadiscourse in academic writing: A reappraisal.*Applied Linguistics,* 25 (2), 156-177.

Jalal, F. (2009). Rendah, publikasi peneliti Indonesia di jurnal internasional. Suara Pembaharuan Daily. 1 July 2009. South East Asia : Indonesia: Interview with Dr. Fasli Jalal. Director General of Higher Education. Retrieved June 20, 2010 from / http://www.winne.com/dn interview. php?intervid=2668.

Krieger, D. (2003). Corpus Linguistics: What It Is and How It Can Be Applied to Teaching. The Internet TESL Journal 9, no. 3 (March): page nr. http://iteslj.org/Articles/Krieger-Corpus.html (accessed April 10, 2013).

Connor, E. Nagelhout, W., V. Rozycki (eds.). *Contrastive rhetoric: Reaching to intercultural rhetoric* (pp. 278-298). Amsterdam: John Benjamin.

Macintyre, R. (2013). Lost in a Forest All Alone: The Use of Hedges and Boosters in the Argumentative Essays of Japanese University Students. Sophia International Review. 35: 1–24.

Matsuda, P. K. & Atkinson, D. (2008). A Conversation on Contrastive Rhetoric. In U.

Meyer, P. (1997). Hedging strategies in written academic discourse: Strengthening the argument by weakening the claim. In R. Markkanen & H. Schroder (Eds.), *Hedging and Discourse: Approaches to the analysis of a pragmatic phenomenon in academic tex*t, (pp.21-41). New York: Walter de Gruyter.

Meyer, C. (2002). English Corpus Linguistics: An Introduction. Cambridge: CUP.

Mojica, L. (2005). Filipino authors' ways of showing detachment/commitment in their English academic papers. In D. Dayag & J.S. Quakenbush (Eds.), *Linguistics and language education in the Philippines and beyond: a festschrift in honor of Ma. Lourdes S. Bautista*, (pp. 511-525). Manila: Linguistic Society of the Philippines.

Nash, W. (1990). Introduction: The stuff these people write. In W. Nash (Ed.), *The writing scholar: Studies in academic discourse* (pp. 8-30). Newbury Park, CA.: Sage.

Pisanski Peterlin, A. (2005) 'Text-organising Metatext in Research Articles: An English– Slovene Contrastive Analysis', English for Specific Purposes 25: 307–19.

Prior, P. (2019). *Writing and Speaking: On the Interplay of Semiotic Resources*. In J. Burgess & D. Fuentes (Eds.), *Handbook of Research on Writing and Speaking in Second Language Acquisition* (pp. 45-62). Routledge. Retrieved from

http://journal.upgris.ac.id/index.php/eternal/index

https://www.researchgate.net/publication/353910206_Speaking_and_Writing_Interconnections_A_Systematic_Review

Sinclair, J. M.(1998) Corpus evidence in language description, In Gerry Knowles, Tony Mcenery, Stephen Fligelstone, Anne Wichman, (Eds.) *Teaching and language corpora*. Longman pp. 27-39

Sinclair, J. M. (1997) Corpus evidence in language description. In A. Wachtman (ed.) *Teaching and Language Corpora*. London: Longman.

Sperling, M. & Freedman, S.W. (2001). Research on writing. In V. Richardson (Ed.), *Handbook of research on teaching,* (4th ed.). (pp.370-389). American Educational Research Association.

Tardy, Christine M. 2016. *Beyond Convention: Genre Innovation in Academic Writing, Delves into the Complexities and Tensions of Genre in Academic Writing from Both Theoretical and Pedagogical Perspectives.* Michigan: University of Michigan Press,.

Thomson Scientific (2004).Scholarly research, publishing and analysis. Retrieved March 2010 from http://thomsonreuters.com/products_services/science/ academic/.

Van Dijk, T. A. (2008). *Discourse and context: A sociocognitive approach*. Cambridge: CUP