#### **THESIS**

# HEDGES USED IN JOURNAL ARTICLES OF EFL AND MEDICINE BY INDONESIAN WRITERS-RESEARCHERS



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ENGLISH LANGUAGE STUDIES

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## HEDGES USED IN JOURNAL ARTICLES OF EFL AND MEDICINE BY INDONESIAN WRITERS-RESEARCHERS

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#### As a partial fulfillment to obtain Master Degree

#### **Program**

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Written and Submitted by

**KUSMIANTI RAHAYU MH** 

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States truthfully that this thesis entitled "Hedges Used in Journal Articles of EFL and Medicine by Indonesian Writers-Researchers" is originally my own work. If it is proven later that some part of this thesis is either plagiarized or the work of others, I am willing to accept any sanctions for my dishonesty.

Makassar, 19<sup>th</sup> August 2021

Kusmianti Rahayu MH

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Makassar, 19th August 2021

The Researcher

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#### **ABSTRACT**

**KUSMIANTI RAHAYU MH.** Hedges used in Journal Articles of EFL and Medicine by Indonesian Writers-Researchers (Supervised by Abidin Pammu and Harlinah Sahib)

This research aims to explore: (1) To address Indonesian's hedging incidence of EFL and Medicine research papers (2) To examine the difference of hedges occurring in EFL and Medicine research papers.

The present study investigated hedges incidence of research papers from two difference fields: EFL and Medicine. It comprised 30 journal articles written by Indonesian writer-researchers taken from TEFLIN (15 papers) and Acta Medica Indonesiana (15 papers). The papers uploaded to lancsbox 6,0, corpus software. The analysis is not relied on the software only, but also manual checked to see the context in measuring the hedging.

Applying quantitative method, the data analysis reveals two major results. First, EFL researchers utilized more hedges by 64 pttw compared to Medicine by 62,32 pttw. Secondly, hedges employed in the form of Modal auxiliary, Verb, Noun, Adjective, Adverb, and Others in which modal auxiliary (can) appeared as the most frequent hedge occurred in both disciplines. To conclude, EFL and Medicine researchers of Indonesia is familiar in employing hedges to accommodate the claims.

Key words: Hedges/Hedging, Research Papers, Academic writing

#### **ABSTRAK**

**KUSMIANTI RAHAYU MH.** Hedges yang digunakan pada artikel jurnal English as Foreign Language (EFL) dan kedokteran oleh Penulis-Peneliti Indonesia (Dibimbing oleh Abidin Pammu dan Harlinah Sahib)

Penelitian ini bertujuan: (1) Untuk melihat insiden hedging dari naskah penelitian EFL dan Kedokteran di Indonesia (2) Untuk mengetahui bagaimana perbedaan hedges yang terjadi pada naskah penelitian EFL dan Kedokteran.

Penelitian ini melihat insiden hedge dari artikel penelitian pada dua bidang yang berbeda: EFL dan Kedokteran. Terdiri dari 30 artikel jurnal yang ditulis oleh penulis-peneliti Indonesia yang diambil dari TEFLIN (15 artikel) dan Acta Medica Indonesiana (15 artikel). Dokumen diunggah ke lancsbox 6.0, yang merupakan software corpus. Analisis tidak hanya mengandalkan perangkat lunak, tetapi juga diperiksa secara manual untuk melihat konteks dalam mengukur hedging yang terjadi.

Dengan menerapkan metode kuantitatif, analisis data memberikan dua hasil utama. Pertama, peneliti EFL menggunakan lebih banyak hedges sebesar 64 pttw dibandingkan dengan Kedokteran sebesar 62,32 pttw. Kedua, hedges yang digunakan dalam bentuk Modal auxiliary, Verb, Noun, Adjective, Adverb, dan Others dimana Modal Auxiliary muncul sebagai hedge yang paling sering terjadi di kedua disiplin. Sebagai kesimpulan, peneliti EFL dan Kedokteran Indonesia sudah terbiasa menggunakan hedge dalam mengakomodasi klaim.

Kata kunci: Hedge/Hedging, Naskah Penelitian, Penulisan Akademik

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#### CHAPTER I

#### INTRODUCTION

#### A. Background

The investigation of hedging in academic writing has been massively growing. Since the introduction by Lakoff in 1972, the study of hedging phenomenon is updating, indicating that the essence and interest take the attention among the researcher. As defined by Lakoff (1972), hedges are "words whose job is to make things fuzzier or less fuzzy". In other words, it is a linguistic device or writing strategy. This technique plays a pivotal role as it makes distance between the writer who did the researcher (writer researchers) and absoluteness of the claim, advocating the flexibility to promote a claim without making it as categorical ones (Hyland, 1996; Kotnarowski, 2015). As a result, the proper usage of hedging is emerging to comprehend (Hyland, 1998).

Researchers present their work in the form of journal articles. It is required to write academically including in delivering a claim. In a research paper, the writer can convince the reader to accept their research by emphasizing their confidence of the work in the form of booster. Yet, It is also essential to know how to put the claim on a paper to give the audience or the reader space for a discussion. This can be applied by using language strategy. Therefore, it is required to apply hedge in an academic writing to moderate the claim.

However, hedges for instance *might, could, would, may, etc* are still unfamiliar among some students in a college. It is somehow considered as informal. For them, in writing academic, the uncertain words should be avoided. The confidence of a writer to claim a result should be clearly shown. Furthermore, the lesson of the using of hedge is still rare in an academic writing class. The book of academic writing like as Academic Writing by Bailey (2004) doesn't include hedge in any chapter. In fact, hedges are one of the academic writing features. In the book of Swales and Feak (2012) entitled Academic Writing for Graduate Students, hedges are included in a chapter. As Swales and Feak (2012) mentioned that the position of the authors is important because it can make them to express not only what they know but also what they think. The way to give the stance contributes to the position of the authors. One of them is to soften the claim.

Utilization of hedges is crucially taken into account. In fact, today's research, there have been numerous interests at exploring the use of hedges particularly in academic writing. The studies about hedging in research paper of English studies field like as EFL, linguistics, applied linguistics, were conducted by some researchers (Kim and Lim, 2015; Salichah et al, 2015; Wang and Tatiana, 2016; Livytska, 2019; Musa and Hussin et al, 2020). The work of discovering hedging written by different discipline authors was carried out as well (Varttala, 2001, Takimoto, 2015). Moreover, the variation of hedging evaluation focusing on Non-native speaker of English (Risda et al, 2018; Musa et all, 2020), comparing hedges written by English

Native Speaker and Non-Native Speaker (Abdollahzadeh, 2011, Samaie et all, 2014; Sanjaya et all 2015; Ahmadpour et all, 2017; and Varsanis 2020), comparing the use of hedging in two written legal discourse genre (Ward, 2015), comparing the hedging in spoken data (Huu, 2016; Li and Li, 2020).

From some studies aforementioned, the different field of the author is one of the concerns of the study. Different field could contribute on how an author declares the stance in his work. Hardjanto (2016) found the various hedges (modal auxiliary category) usage phenomenon in different discipline. Social science uses more hedges than natural science does. However, in Varttala (2001), economic writer researchers were found commonly using hedge than the Medicine one. Economic as softer science appears much more tentative than harder science. Therefore, the variety of hedges incidence is worth to take into account in this present study. Using EFL papers as soft science to be compared to harder science like Medicine, the hedge phenomenon is important to investigate to figure out whether all soft sciences are the same in terms of hedging.

Apart from discipline variation, the nativity (English Native speaker or non-native speaker) is worth noting as well. Hedging usage by non-native speaker Salager-Meyer (1994) stated that Non-native speaker of English are difficult to word observed facts and interpretations. In line with this point, the comparative study of Sanjaya et al (2015) found that Indonesianauthor is less using hedge in claiming than English author. The lack of employing hedging by non-native speaker is also discover in other works

(Abdollahzadeh, 2011; Ahmadpour et al 2017; Varsanis 2020). However, a study of Salichah et al (2015) observing the implementation of hedging in research article by Indonesian undergraduate students, resulting the use of hedge by Indonesian is in great number. It becomes interesting to investigate further on this phenomenon.

Regarding to those points above, it is critical to see how the use of hedges in Indonesian context. As mention earlier, some students of Indonesia remain unfamiliar with hedge, how to use it, or the function of it. Indonesian as subject matter of hedging investigation are documented under the study of Hidayati et al (2008), Sanjaya et al (2015), and Salicichah et al (2015). The three studies focused on one discipline (Applied Linguistics, English), although Sanjaya et al (2015) differs to others due to their comparative study (English Native and Non-Native speaker comparison). Furthermore, comparing different fields for hedging phenomenon, the research of Hardjanto (2016), an Indonesian, might be counted. However, his study has no information about whether the articles written by Indonesian researchers. In other words, the study of Indonesian author in different fields remains less and needs more attention to undertake well.

Finally, the study of hedging remains worth to conduct especially in terms of Non-Native speaker context, for instance Indonesia. In addition to its unfamiliarity among the students, the study of hedge towards Indonesian researchers' articles is still required to conduct. The result could contribute

in pedagogical implication of academic writing in Indonesia. In addition, comparing the use of hedging in two different disciplines is paramount as well for example EFL and Medicine papers. As Varttala (2001) found that medical writer researchers use less hedging than economic which is a social science. Therefore, this present study is expected to fill the gap in terms of comparing two disciplines (social science and natural science) in which this natural science one (Medicine discipline) has unique incident according to Varttala(2001).

#### **B.** Research Questions

Based on the background of the study, the researcher formulates the following research questions as follows:

- To what extent do EFL journal articles different from Medicine journal articles?
- 2 How do Indonesian writers-researchers use hedges in EFL and Medicine journal articles?

#### C. Objectives of the Study

- To address Indonesian writers-researchers' hedge used in the journal articles of EFL and Medicine.
- 2 To examine the difference of hedges occurring in EFL and Medicine journal articles.

#### D. Significance of the Study

Analyzing on how writer-researchers employ hedge in their work is paramount. It appears beneficial to figure out the variety in delivering a claim and to examine the familiarity towards hedge of Indonesian researchers.

Comprehending the proper use of hedging could help the academic practitioners especially Indonesian as Non-Native speaker of English. The fruitful of this study would be gained both teacher of academic writing to design the materials and students to be more aware and practical in employing hedges to place their claims in suitable way.

#### E. The Scope of the Research

Avoiding widen research and unlimited investigation, it is necessary to scope the topic examined. The limitation to some points, as follow:

- By discipline, this research is educational research specifically under the topic of academic writing
- 2 By object, the focus of this study is addressed to Indonesian writerresearchers' papers in international journal publications in fields of EFL and Medicine. The analysis used Hyland's hedges (2005) and Varttala (2001)

#### F. Key Terms Definition

To avoid misinterpretation and misunderstanding by the readers, it is essential to formulate terms definition:

- Hedge/Hedging. These two words are somehow interchangeable.
   Hedge is used to soften the claim of authors or to position them.
   According to Hyland (2005) stated that hedges are devices such as possible, might and perhaps, etc. In this research, hedge is specified to its items while hedging is to term the incidence.
- 2 The terms *Others* (with italic form) is for one of category of hedge in which it is excluded from categories of modal auxiliary, verb, noun, adjective, and adverb. In other words, "*Others*" is defined hedge that can be a word or a phrase.

#### **CHAPTER II**

#### LITERATURE REVIEW

#### A. Previous Studies

There have been numerous studies already conducted in relation to the use of hedging in social interaction both in ESL and EFL contexts. These studies revolve around the importance of maintaining solid communication by maintaining the use of proper hedging according the existing norms of society. To begin with, a study of Salichah et al (2015), explored the use of Hedges and Booster in Undergraduate Students' Research Articles (Indonesian students) in one field namely English department. Employing Hyland (1998a) and Hinkel (2005), the work produced five types of hedges and three types of boosters. For both hedge and booster, modal auxiliary took the highest used item. The work is fruitful for the reference of teaching design especially in academic writing class. Nevertheless, it is pivotal to find out more in terms of various discipline to broaden horizon of hedging exploration.

Wang and Tatiana (2016) investigated the hedging in applied linguistics and EFL journal papers (750 research articles of 15 leading journals) using WordSmith tools 5,0 with 4. 831. 500 running words. Applying combination model of hedging by Hyland (1998a, 2005) and Varttala (1998), this work confirms that modal auxiliary hedging is the highest used. However, it is found that EFL authors used less hedging in

their paper. The result shows that the hedging is 1.44 % of total words in the corpus. Moreover, Writer-oriented function is discovered as the most important function in EFL papers corpora. This study contributes in the pedagogical implication of introducing students to the variety of hedging used in academic discourse. To compare to the recent study, the main difference are the field of the papers and the software used. The present study compared EFL and Medicine papers in particular written by Indonesian using Lancsbox 6,0.

Secondly, Livytska (2019) explored hedging utilization in four subfields of applied linguistics discipline. The 20 articles were manually coded based on Hyland classification. Unlike Wang and Tatiana (2016), this study found that "reader-orientated hedges" is the main pragmatic type. The hedging devices were dominated by lexical words (3.411 occurrences). It confirms that the journal article authors attempt to apply persuasive strategies by the assistance of epistemic lexical verbs. In addition, this research shows the diversity in typology, frequency, and distribution in one area of study. The gap would be in the point of fields of the study in which this work explored applied linguistics while the present study analyzed the use of hedging in two disciplines.

Meanwhile, the investigation of hedging and booster in different fields was conducted by Takimoto (2015) compiling the data from eight disciplines (humanities, social sciences, and natural sciences). Retrieving 369.605 words and using AntConc 3. 4. 3, the work searched lexical expression and

discovered that the highest hedges and booster usage is in humanities and social science confirming the characteristics of these fields is interpretative and less abstract while the natural sciences utilized less of hedges and booster since it is an exact result of research. Interestingly, however, Varttala (2001) stated that economic shows higher incidence of hedging compared to Medicine while economic is categorized as social science. This present study contributed further to see incidence in two disciplines (EFL and Medicine) by the same nativity of author. As Indonesian researchers are not native speaker of English, it can be assumed that they way in producing sentences will be different including in hedging.

The research of hedging has been increasing in this present era with variety of subject matters and phenomenon. Comparing the use ofhedging by English native speaker (henceforth as NS) and non-native-speaker (henceforth as NNS) is paramount. Sanjaya et al (2015) evaluated the use of hedging and booster by English and Indonesian scholar in applied linguistic. Involving 52 research papers articles using manual and computer-based searches, this study selected the hedges by identifying all lexical items included in a proposition and investigating whether it plays as hedge semantically and pragmatically. The result of the study shows that English authors use hedges more than Indonesian confirming that Indonesian is less being cautious in delivering the claims than English researchers. Using this related study, the present study investigated Indonesian writing on academic work in different discipline, assuming there might be a difference.

Related to the study aforementioned, Varsanis (2020) explored 20 papers of Greek and Anglo-American writers. In this work, it is discovered that Anglo-American authors employee hedges and booster higher than Greek ones. The result supports the study by Sanjaya et al (2015) in terms of English native speaker nature in writing research articles. Assuming that corpus software could be fully valid to spot the hedges and booster, Varsanis (2020) used manual techniques.

Furthermore, Abdollahzadeh (2011) investigated hedges utilization between Iranian and British post graduate students of applied linguistics by involving 83 dissertations. Focusing on type of hedges, Iranian writers result "can" higher than British. On the hand, the use of "would" produce more by British authors. The final of this study shows that Iranian students are less applying hedges in their writing. The findings seem confirming the three previous researches above.

Another interesting research is conducted by Ahmadpour et al 2017). Combining quantitative and qualitative methodology, the Persian nurse authors were examined by investigating their articles and being interviewed. It is revealed that the frequency in using hedges in NS is twice more than NNS. However, the result of booster usage by NNS particularly in discussion part is higher than NS. The findings of this work contribute significantly to the academic writing teaching for Persian.

To conclude, the studies above resulted those different fields and nativity showed different incidence of hedge. This present study focused on

Indonesian writer-researchers to explore more about Indonesian familiarity of hedge and to discover phenomenon of hedge usage in different fields.

#### B. Theoretical background

#### 1. Concept of Hedging

Hedging or hedges is one of linguistics devices. Lakoff (1972) stated that "words whose job is to make things fuzzier or less fuzzy". Employing the hedging is handling the level of certainty in a statement. In another words, hedging is the words that used to make an argument less definite. We may think about the words *perhaps*, *probably*, *almost*, and *so on*, which can be categorized as hedging.

Hyland (1996), on the other hand, voiced that the terms of hedging as any linguistic tools that signify either (a) an absence of impeccable commitment to the truth of proposition, (b) an intend not to deliver categorical claims. Expressing the tentativeness and probability in an occasion, learning hedging techniques is pivotal (Hyland, 1996). To conclude, hedging is strategy in using language to authorize the scientific writers to produce statement that is not absolute or the only truth in a research world. In addition, Crompton (1997) stated the same idea of Hyland (1996):

Hedge is an item of language which a speaker uses to explicitly qualify his/her commitment to the truth of a proposition he/she utters. Hedging may be used to display not only or necessarily the degree

of confidence speakers has in their propositions but also how much confidence they feel it is appropriate to display.

From that definition, we may define that hedging is a technique of claiming while still realizing that this claim is probably not true. It defines the level of confidence of the writer/speaker. It is the way to remain contributing in new idea as well as stating that this idea is not the ultimate one.

Hyland (2005) stated that "Hedges are devices such as possible, might and perhaps, which indicate the writer's decision to recognize alternative voices and viewpoints and so withhold complete commitment to a proposition. Hedges emphasize the subjectivity of a position by allowing information to be presented as an opinion rather than a fact and therefore open that position to negotiation. Writers must calculate what weight to give to an assertion, considering the degree of precision or reliability that they want it to carry and perhaps claiming protection in the event of its eventual overthrow (Hyland, 1998a). Hedges therefore imply that a statement is based on the writer's plausible reasoning rather than certain knowledge, indicating the degree of confidence it is prudent to attribute to it"

To clarify, the example is provided below.

- "Of course, text is more than a list of words, and it is essential to see how words group together as chunks, clusters or bundles" (categorical statement)
- (2) "Of course, text is more than a list of words, and it is **suggested** to see how words group together as chunks, clusters or bundles" (hedged statement).

In sentence number 1, the writer is confident to state a certainty by using "is essential" meaning that it is a fact, a peremptory. However, in sentence 2 the writer promotes his/her claim by using hedging leaving a room of objection on that point. Another example is as follow.

- (1) "Our study **shows** that the median of CFR per country in May 3rd 2020 was 3.66%"
- (2) "It *might* result in aberrant and non-standardized data collection and poor statistical analysis"

For both examples above, we see that first one is confident statement or stating the absolute fact while in the second example, the voice of the author is uncertain by using modal auxiliary "might" which has weak level of certainty. Therefore, hedging helps the author to show their incapability to make something definite.

According to Hyland (1998), hedging can be modal auxiliary such as would, may, could, might, should, cannot, etc; Epistemic lexical verbs such as suggest, indicate, and predict, assume, etc; Epistemic adjective, adverb, and noun such as about, possible, apparent, probable, possibly, presumably, aassumption, possibility, etc. (see apendix 1)

Kotnarowski (2015) stated that "To convey answers to research question, we answer the question by creating argument, these arguments are based on claims made by individual and supported by evidence. Hedging is fruitful in this process because often times, writer develop

answer to research question but feel like they are not the best only or most complete answer they're also prepared for other writer to raise objection or point up problem with their answers or research. Hedging allows writer to anticipate an address possible opposition to his/her claims while still contributing to ongoing dialogue in a research field. Academic writing is a balance of fact and evaluation, the writers take data and facts they uncovered to be objectively as possible but also showing how they interpret". There are 4 functions of hedging by Kotnarowski (2015):

- Submit new arguments/claim to the ongoing dialogue while acknowledging that there might be other, equally valid (or perhaps, better/more effective) points of view
- Make a new contribution to their field in a productive and cooperative way
- 3. Have the flexibility to avoid making absolute/categorical statement which claim that the writer/researchers has found the perfect and only answer, hedging allows the writer or researcher to offer something new and establish him/herself as a possible authority on a topic, while leaving room for other voices and perspective.
- Participate in ongoing conversation in fields where new evidence is generated all and it is almost impossible to stay completely up-todate on the current state of affair.

Kotnarowski (2015) added that Hedging allows researchers to not put always black and white language to access a whole palette of different shades of gray. Hedging encourages and allows writer researchers to be what skeleton calls confidently uncertain in their claims this term meanswe need to accurately state how precise we can be when doing something and to feel okay with being imprecise especially when absolute precision is very difficult (if not) impossible to achieve.

In addition, Varttala (2001) stated that the hedges is possibly beneficial approach by linking it to the idea of epistemic modality. In other words, it is the concept of a number of lexical categories including certain modal auxiliaries (e.g. *may, might, could*), full verbs (e.g. *suggest, think, seem*), certain adverbs and adjectives (e.g. *perhaps, probably, potential, presumable*) and nouns (e.g. *possibility, probability, assumption*) which have been appeared as central items of interest for the linguist or researchers.

In this research, the certain modal auxiliaries, verbs, nouns, adjectives, adverbs, and *Others* are based on Hyland (1998, 2005) list of hedges and Varttala (2001), the selected items categorized are as follow:

1. Modal auxiliaries. As cited in Oktaviani (2018), It is said that according to Quirk, et al. (1985), Modals are classified into central modals, marginal modals, idiom modals, and semi-auxiliaries. Some other experts, however, classify modals in a more simplified way by dichotomizing: (1) modals and semi modals (Leech, et al., 2009), (2) modals and quasi-modals (Collins, 2009), and (3) plain-modal auxiliaries and semi-auxiliaries (Payne, 2011). Based on the classification, it is noticed that basically there are two major types of modals; they are 'pure' modals or central modals or core modals (e.g., must, will, would, can, could, shall, should, may, might) and periphrastic or phrasal forms equivalent to 'pure' modals or known as

semi-modals or quasi-modals (e.g., be going to, have to, be able to, be supposed to, want to, etc.) However, in this study, modal auxiliaries are limited to the list found in Hyland (1998,2005) and Varttala (2001) such as *Could, couldn't, can, will, would, wouldn't, may, might, should, cannot, shall, ought, must.* 

- 2. Verbs: Appear, argue, assume, attempt, believe, claim, calculate, estimate, feel, guess, imply, indicate, note, predict, propose, seek, seem, speculate, suggest, suppose, suspect, tend to, report
- 3. Noun: nouns are assumption, doubt, prediction, probability, implication, and clues.
- Adjective: doubtful, essential, relative, typical, uncertain, unclear, and apparent.
- 5. Adverb: about, almost, apparently, approximate(ly), broadly, essentially, evidently, fairly, frequently, generally, partially, possibly, potentially, presumably, probable, probably, relatively, roughly, slightly, typically, uncertainly, unclearly, unlikely, usually, sometimes, somewhat, quite, rather.
- 6. Others: certain amount, certain extent, certain level, consistent (with), to my knowledge, from my perspective, from our perspective, from this perspective, in general, in most cases, in most instances, in my opinion

#### 2. Academic Writing

Academic writing is different with the common writing. As the name using "academic", it is a writing from academic work. Based on University of Leeds online library, Academic writing has characteristics which is clear, concise, focused, structured and backed up by evidence. The aim is to help

the reader in understanding. Using a formal tone and style, but it is not complex and does not require the use of long sentences and complicated vocabulary. Every discipline has certain conventions, vocabulary, and types of discourse. However, there are some general characteristics of academic that commonly the same in all discipline.

Characteristics of academic writing:

- Planned and focused: answers the question and demonstrates an understanding of the subject.
- Structured: is coherent, written in a logical order, and brings together related points and material.
- Evidenced: demonstrates knowledge of the subject area, supports
  opinions and arguments with evidence, and is referenced accurately.
- Formal in tone and style: uses appropriate language and tenses, and is clear, concise and balanced.

While based on Glasgow Caledonian University website, characteristics of academic writing are as follow:

Vocabulary choice - Developed broader academic vocabulary by focusing on vocabulary

- Caution writers are careful not to make claims that are too strong.
   Words like "may" and "might" are often used to make claims less strong.
   Writers are also very precise about the circumstances in which a claim is valid.
- Impersonality with the exception of reflective writing, write in the 3rd

person - do not use "I" and "you".

- Relevance Including information that is relevant to the question. A
  common mistake is to give too much unnecessary descriptive detail,
  which uses up too many words, while not demonstrating critical
  understanding of the issue.
- Precision this relates to formality. Words and terms have very specific
  meanings and it is important to use them correctly. If the writer is not sure
  what a word means, do not use it without checking that it makes sense,
  both in meaning and grammatical use. It is usually obvious to the reader
  when a writer has not understood a word or an idea
- Conciseness in order to write within the word count, it has to be written concisely.
- Grammatical complexity in this context complexity refers to grammar structures not the difficulty of understanding an idea.

The sentences in academic texts tend to be dense, in other words they contain lots of highly grammatically complex sentences. A variety of grammatical structures are used to create complex sentences. This is one of the reasons why academic reading is demanding – both the ideas and the sentence structures can be complex. It is useful to be aware of this and to develop the range of grammatical structures and vocabulary that using by thinking about what they mean and trying to use them in the writing.

According to Margutti (2011) Academic writing types consists of :

- 1. Essay: Argumentative text, usually short (1500 to 6000 words)
- Research paper: longer essay involving library research (3000 to 6000 words)
- Research article: an essay written to be published in scientific journals.
- Dissertation: long essay involving study and research (6000 to 20.000 words)
- 5. Theses: completed over a number of years. Offers an original contribution to the research area (20.000)
- Technical report: describes process, progress, and result of scientific research
- research project: describe the ideas for an investigation on certain topic

In this present paper, the academic paper is the research article ones, published by reputable journal.

#### 3. Corpus-Based Research

Study of language grows time to time and results the demand of more empirical and effective methodology especially when it comes up to the research of complex patterns and big data of linguistics or language in use. Corpus appears as one of methodology that can answer this challenge.

The use of Corpus-based research is not a new thing. There are lots of researches that apply this methodology to gain the data. According to McKay (2006: p.126), a corpus is collection of language that appears naturally both in the form of speaking and writing and gathered electronically. Mckay (2006: p.126-127) divides it into general corpus (data from different field) and specialized corpus (particular field). To conclude, A Corpus is a tool for language research where diverse and large amount of written and spoken language are stored by using technology.

The using of Corpus-Based Research is various in this present day. Starting from exploring most frequently used vocabulary for instance, research conducted by Chujo et al. (2011) entitled "Creating a Corpusbased Daily Life Vocabulary for TEYL" mentioned the purpose is to create a list of children's everyday vocabulary in English which provided a foundation for daily life vocabulary for Japanese elementary school students and which complemented and augment existing English vocabulary currently taught in Japanese junior and senior high schools. The research question attempts to figure out grade level of identified words, evaluate Semantic contents and distribution, and evaluate text coverage. The researchers employed specialized corpus CHILDES (Child Language Data Exchange System) corpus spoken data, Specialized CLAWS7 corpus (CLAWS7 part-of-speech tagger English), the pictures dictionaries including JHS textbook dictionaries (ten from Japan-based dictionaries and twenty non-Japan-based dictionaries), and data from the previous study by Chujo

et al (1994). The use of specialized corpus here is due to the target of the vocabulary list (children) and curriculum (conversational activities). The general corpus like British National Corpus in fact is not effective in this case.

Corpus or corpora is highly needed for the availability of specific purpose word. A study of Chujo et all (2011) that focused on building new corpus of daily vocabulary beginner confirmed that the words are able to select and categorize based on our needs. As the objective, the teachers teach only important words or frequently used ones. In line with this research, the study of Fauzi and Suradi (2018) presumed that using corpora for tourism student stimulating them to understand more vocabulary by being exposure. The other study by Donesch and Jezo (2013) with participants from Medicine students promoted that corpus can be used to learn specific vocabulary. It is proved that corpus effectively increase the students score in vocabulary. In other words, to make it effective, the learner should be able to classify the priority words to learn first to exposure and understand properly.

The advanced of corpora can be more implicative for deep understanding: communication strategies. A study of Anderson and Corbett (2009) examined that English can be taught in "friendly" way by using corpus to collect non-standard English. It can be concluded that to be more natural, learning English can be from various source including non-standard conversation and corpus can count that. Finally, after studying those words,

collocation, etc., the strategies in interaction to people are formed. The study suggested the idea of exposure to targeted language as well. It helps teacher to organize the classroom activity especially in speaking class. In this situation, students comprehend the vocabulary and its context they more.

Focusing on collocation is beneficial to gain the appropriate use of a word. Donesch and Jezo (2013) stated that a word is not stand as an isolated element, it somehow requires the meaning by following other word (collocate with). Therefore, to employ corpus is essential. It provides the data that direct teacher and students to see the matching-words or phrases from authentic source. By this natural appearance of the vocabularies, the learner will not be afraid of making "odd" phrase. This is the answer of the problem proposed by Fauzi and Suradi (2018) that collocation is an obstacle in studying vocabulary for some students. A bit different to the study mentioned, Miryani (2012) added that the importance of collocation concept developed to learn second language is taken into account. To conclude, collocation is a must to study in purpose of vocabulary comprehension.

In addition, investigating hedging incidence, the use of corpus software can be applied as well. Some researches employed corpus software to help the analysis (Abdollahzadeh, 2011, Salichah, 2015; Takimoto, 2015, Wang and Tatiana, 2016; Huu, 2016, Ahmadpour, 2017 Musa and Hussin, 2020, and many others). According to McKay (2006: p.126), a corpus is collection of language that appears naturally both in the

form of speaking and writing and gathered electronically. Corpora and its feature can help the analysis of text. However, according to Ädel (2010):

"We need more sophisticated corpus tools with simple user interfaces that students can use to compare vocabulary, collocations and annotated functional features such as hedges across corpora of different genres. This would raise students' awareness of typical distinctions between genres"

Relied on corpus tool to examine the hedging might be not the best solution. As it works like robot, using the software could produce invalid findings. Corpora tools is used to ease the analysis (Hardjanto (2016); Musa and Hussin, 2020). Therefore, this present paper employed the software to help the analysis but it was double checked.

The features of a corpus are not set inescapably. As mentioned by Dash and Arulmozi (2018: p.33), the features of corpus may be modified and reconstructed in the upcoming innovation of the corpus itself. There are ten major features formulated by Dash and Arulmozi (2018: p.17-33). First of all, the terms "Quantity" where Corpus is taken into account due to large numbers and variety of data collected, the bigger data stored the more reliable the result. Secondly, the data of corpus is authentic obtained from natural communication where there is no intervention or modification - called as "Quality". Third is "Representation" in which corpus is characterized by the representative of diverse samples provided. Next is the idea of "simplicity" that refers to the organization of corpus in digital form: the user

can be easy to access the data without a confusion of linguistic information added in the text. Fifthly, "Equality" focuses on the same amount as the representative data (number of words of spoken language has to be equal to the written one). The Sixth is "Retrievability" that refers to the ease and simplicity of accessing by people based on their needs: it relates to the advance of technology as well. "Verifiability" is the next feature that deals with the openness of data to be verified and assessed. The next is "Augmentation" that the corpus grows following the time and linguistic changes. "Documentation" is another feature that is to record detail information of the sources stored in a corpus such as genre, text type, author, year, place, ethnicity, etc. Finally, "Management" appears as the last feature that a corpus is arranged to be preserved, standardized, and upgraded.

Furthermore, those features promoted by Dash and Arulmozi are related to Hunston's features of Corpus as cited in McKay (2006: p.127). There are four major characteristics in which the use of some terms is different. First is "Size" that refers to the largeness and variety of source in a corpus. It is equal to "Quantity". Next is "Content" that signifies the authenticity both spoken and written language. In this case, "Content" is considered as "Quality". Thirdly, the Representativeness hints diverse kinds of data stored like the age, gender, fields, etc. It has similar meaning with the term "Representation". The last is permanence where the corpus is

required to be updated and developed as well as the terms "Augmentation and Management".

#### **Corpus software**

Lancsbox is a software or corpus tool used for language analysis and corpora developed at Lancaster university. It is widely used by linguists, language teachers, historians, sociologists, educators and anyone interested in language. There are features that can help the researchers or users to explore and analyze the data.

The details of the feature and function taken from the official website of Lancsbox are as follow:

#### a. KWIC

The KWIC tool generates a list of all instances of a search term in a corpus in the form of a concordance. It can be used, for example, to:

- Find the frequency of a word or phrase in a corpus.
- Find frequencies of different word classes such as nouns, verbs, adjectives.
- Find complex linguistic structures such as the passives, split infinitives etc. using 'smart searches'
- Sort, filter and randomize concordance lines.

#### b. Whelk

The Whelk tool provides information about how the search term is distributed across corpus files. It can be used, for example, to:

- Find absolute and relative frequencies of the search term in corpus files.
- · Filter the results according to different criteria.
- Sort files according to absolute and relative frequencies of the search term.

#### c. Words

The Words tool allows in-depth analysis of frequencies of types, lemmas and POS categories as well as comparison of corpora using the keywords technique. It can be used, for example, to:

- Compute frequency and dispersion measures for types, lemmas and POS tags.
- Visualize frequency and dispersion in corpora.
- Compare corpora using the keyword technique.
- Visualize keywords.

#### d. GraphColl

The GraphColl tool identifies collocations and displays them in a table and as a collocation graph or network. It can be used, for example, to

- · Find the collocates of a word or phrase.
- Find colligations (co-occurrence of grammatical categories).
- · Visualize collocations and colligations.
- · Identify shared collocates of words or phrases.
- · Summarize discourse in terms of its 'aboutness'.

#### e. Text

The Text tool enables an in-depth insight into the context in which a word or phrase is used. It can be used, for example, to

- View a search term in full context.
- Preview a text.
- Preview a corpus as a run-on text.
- Check different levels of annotation of a text/corpus.

#### f. Ngrams

The Ngrams tool allows in-depth analysis of frequencies of ngram types, lemmas and POS categories as well as comparison of corpora using the key ngram technique. It can be used, for example, to:

- Compute frequency and dispersion measures for ngram types, lemmas and POS tags.
- Visualize frequency and dispersion in corpora.
- Compare corpora using the key ngram technique.
- Visualize key ngrams.

#### q. Wizard

The Wizard tool combines the power of all tools in #LancsBox, searches corpora and produces research reports for print (docx) and web (htlm). It can be used, for example, to:

- · Carry out simple or complex research.
- Produce a draft report.
- · Download all relevant data.

#### C. Conceptual Framework

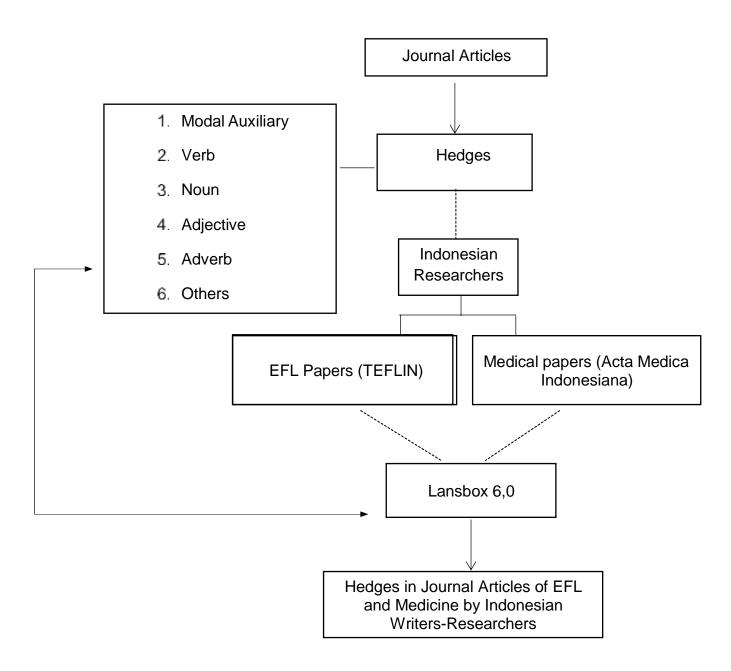


Figure 1 Conceptual Framework