

Hedges Incidence on EFL and Medical Research Papers Written by Indonesian Researcher

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Abstract:- Comprehending the proper use of hedging could help academic practitioners especially Indonesian as Non-Native speakers of English. The fruitful of this study would be gained both teachers of academic writing to design the materials and students to be more aware and practical in employing hedges to place their claims in a suitable way. The present work used research articles corpus as the sample. It comprised 30 journal articles written by Indonesian from English as Foreign Language taken from *TEFLIN journal* (15 papers) and *Acta Medica Indonesiana* (15 papers). The papers uploaded to Lyncbox 6.0. The result of this study presents the use of hedges on EFL and Medical papers are almost equal by only 0,9 difference and the highest hedges used is the category of modal auxiliary.

Keywords:- Hedge, Research Papers, Indonesian Researcher.

I. INTRODUCTION

The investigation of hedging in academic writing has been massively growing. Since the introduction by Lakoff in 1972, the study of the hedging phenomenon is updating, indicating that the essence and interest take the attention of the researcher. As defined by Lakoff[1], 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 the distance between the writer who did the research (writer researchers) and absoluteness of the claim, advocating the flexibility to promote a claim without making it as categorical ones[2]. As a result, the proper usage of hedging is emerging to comprehend[3].

The utilization of hedges is crucially taken into account. In today's research, there have been numerous interests in exploring the use of hedges particularly in academic writing on publication. In discovering publication trends and spotting research paper, researchers should have a blank spots on their writing[4]. The studies about hedging in research papers of English studies fields like EFL, linguistics, applied linguistics, were conducted by some researchers. The work of discovering hedging written by different discipline authors

was carried out as well by Takimoto[5]. Moreover, the variation of hedging evaluation focusing on Non-native speakers of English[6], comparing hedges written by English Native Speaker and Non-Native Speaker[7], comparing the use of hedging in two written legal discourse genres [8], comparing the hedging in spoken data[9].

From some studies aforementioned, the different field of the author is one of the concerns of the study. The different fields could contribute to how an author declares the stance in his work. Hardjanto[10] found the various hedges (modal auxiliary category) usage phenomenon in different disciplines. Social science uses more hedges than natural science does. However, in Varttala[11], economic writer researchers were found commonly using hedge than the medical ones. Therefore, the diversity of hedges incidence is worth taking into account; to see whether the EFL papers could have the same hedging utilization with medical papers, assuming that medical papers are not the same as the other natural sciences paper in terms of applying to hedge.

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[12] stated that Non-native speakers of English are difficult to word observed facts and interpretations. In line with this point, the comparative study of Sanjaya et al[13] found that Indonesian author is less using hedge in claiming than English authors. The lack of employing hedging by the non-native speaker is also discovering in other works. However, observing the implementation of hedging in a research article by Indonesian undergraduate students, resulting in the use of hedge by Indonesian is in great number. It becomes interesting to investigate further on this phenomena because Indonesia has many cultures[14].

Regarding to those points above, it is critical to see how they use of hedging in the Indonesian context. Indonesian as the subject matter of hedging investigation are documented under the study of Sanjaya[13]. The study focused on one discipline (Applied Linguistics, English), although the researchers differ from others due to their comparative study (English Native and Non-Native speaker comparison).

Comparing different fields for hedging phenomena, the research of Hardjanto[10], an Indonesian, might be counted.

Hedges	EFL	Medic
Modal Auxiliary	34,8 pttw (389)	39 pttw (297)
Verb	12,8 pttw (143)	10,6 pttw (81)
Adjective	1,1 pttw (12)	1,2 pttw (9)
Adverb	1,3 pttw (15)	1,4 pttw (11)
Noun	7,6 pttw (85)	6,8 pttw (52)
Others	6,8 pttw (76)	4,8 pttw (33)
Total	64,4 pttw (720)	63,5 pttw (483)

However, in his paper, there is no information that the papers were written by Indonesian. To conclude, the study of Indonesian author in different fields remains less and needs more attention.

Last but not least, the study of hedging remains worth to conduct especially in terms of Non-Native speaker context, for instance Indonesia. 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, for example, EFL and Medical papers. EFL field could be predicted by applying less hedges than Medical one due to the exact result of research. However, as Varttala[11] found that Medical writer researchers use less hedging than economic which is a social science. Therefore, this present study would fill the gap in terms of comparing two disciplines (social science and natural science) in which this natural science one (Medical discipline) has unique incident according to Varttala[11]. Finally, this paper investigated the hedging phenomenon occurs in research papers of Indonesian author from two fields: EFL and Medic.

II. PREVIOUS RELATED STUDIES

Hedging or hedges is one of the linguistics devices. Lakoff (1972) stated that “words whose job is to make things fuzzier or less fuzzy”. Employing hedging is handling the level of certainty in a statement. In another word, hedging is the word that is 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.

To begin with Wang[15]) 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 the combination model of hedging by Hyland[3][16] and Varttala[11], this work confirms that modal auxiliary hedging is the highest used. However, it is found that EFL authors used less hedging in their papers. The result shows that hedging is 1.44 % of the total words in the corpus. Moreover, the Writer-oriented function is discovered as the most important function in EFL papers corpora. This study contributes to the pedagogical implication of introducing students to the variety of hedging used in academic discourse. To compare to the recent study,

the main difference is the field of the papers and the software used.

Secondly, Livytska[17] explored hedging utilization in four sub-fields of the applied linguistics discipline. The 20 articles were manually coded based on Hyland classification. Unlike Wang[15], 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 with 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 will analyze the use of hedging in two disciplines.

Meanwhile, the investigation of hedging and booster in different fields was conducted by Takimoto[5] (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[11] stated that economics shows a higher incidence of hedging compared to medicine while economics is categorized as a social science. This present study will contribute further to see incidence in two disciplines (EFL and Medic) by the same nativity of the author.

III. OBJECTIVES OF THE STUDY

Based on those studies, it is important to find out hedging on different backgrounds: one is from social science (EFL) and the other is from natural science (Medic) written by Indonesian. The aim is to discover the hedges used; therefore, it can be a consideration of academic practitioners to design the academic writing lesson plan for Indonesian students.

IV. METHODOLOGY

The present work used research articles corpus as the sample. It comprised 30 journal articles written by Indonesian from English as Foreign Language taken from *TEFLIN journal* (15 papers) and *Acta Medica Indonesiana* (15 papers). The papers uploaded to *Lancsbox 6,0* and were manually checked into its context to determine the hedges. The raw frequency displayed on corpus software was normalized due to unequal corpus size (different running words).

V. FINDING AND DISCUSSION

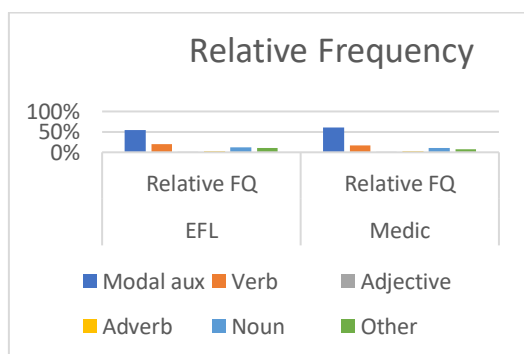
Using corpus *Lancsbox 6,0* and manual checking, the hedges appeared in academic research papers of EFL and Medic was investigated. The frequency of hedges was measured per ten thousand words.

Both corpora have slightly different numbers of running words. Therefore, the data is not able to be processed in the form of raw frequency; It is required to be normalized to result proper calculation and the balance. The data was categorized namely modal auxiliaries, verbs, adjectives, adverbs, nouns, and *others*. This following table shows the normalized frequency (NFq) per ten thousand words (pttw) and raw frequency (RFq)

Based on the table, it is noticeable that the hedge found in EFL papers is higher than Medic papers even the number is not significant modal auxiliaries appears as the most frequent category used in both fields. In detail, Verbs, Nouns, and other categories of EFL papers are eminent compared to Medic papers. Likewise, modal auxiliaries which are the highest categories in both corpora, experienced by Medic papers as the top number among others. It is also seen that even it is not high; the category of Adjective and Adverbs of Medic papers are higher than EFL papers.

Modal auxiliaries are used 34,8 times per ten thousand words of EFL papers while 39 times per ten thousand words by Medic papers. It indicated that the use of modal auxiliaries is almost equal in both fields. The same as that, verbs frequency of EFL and Medic papers is about equal. It is stood at 12, 8 pttw and 10, 6 pttw respectively. Noun and Others are the third frequent categories. The various number of frequencies among these two categories yet it is not the lowest (around 4-7 pttw) the smallest number occurred as a hedge in both disciplines is Adjective and Adverb by around 1 time appear per ten thousand words.

After analyzing the normalized frequency, the relative frequency is taken into account as well. This is to measure the percentage of relativity or the possibility occurrence of every category in one corpus (%). This can be described by the following graph.



From the graph, it is clearly revealed that the relativity of Modal auxiliaries appears up to 50 % in both corpora; the highest used on EFL and Medic papers. There is no significant difference in the category of Verbs in each discipline as well. The possible occurrence of hedge is around a fifth (around 20%). A small number of hedge incidence is in Noun and Others categories by around 10% relativity. The last is the category of adjective and adverb which experienced an insignificant number of relative frequencies by around 1%. To conclude, from the highest to the lowest hedging use in

academic papers of EFL and Medic are respectively: Modal Auxiliaries, Verbs, Nouns and Others, and Adjectives and Adverbs.

In EFL papers, the category of the modal auxiliary is around 50 %, while the verb category is 20%. Noun category and others categories experienced around 15%. Category of Adjective and Adverb underwent very small number.

Furthermore, the Medic papers experienced a higher number overall but it is not significant. Just like in EFL data, Medic corpus results in Modal auxiliary for the most frequent incidence by over 60 %. While the verb is under 20 % relativity of occurrence. Noun and *Others* are around 15 % while Adjective and Adverb result from very small numbers as in EFL papers.

In line with Hyland[3], 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, possible, presumably, assumption, possibility, etc*. The various hedge occurs in this research showed that Indonesian writer researchers are familiar with using hedges in their research paper. The result is related to the findings of Varttala[11] that found that social science like Economic papers is higher than natural science like Medic papers.

The research of hedging has been increasing in this present era with a variety of subject matters and phenomena. Comparing the use of hedging by English native speakers and non-native-speaker is paramount. Sanjaya et al [13] 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. Related to this study, there is no measurement to compare English authors and Indonesian authors. However, it was assumed that Indonesian research papers would not show many incidences in terms of hedges. In fact, this paper showed that Indonesian researchers employed various hedges in their research papers.

VI. CONCLUSION

Various type of hedges occurs in Indonesia research articles showing that Indonesian authors are familiar with hedges in academic writing. However, this result might not be represented as the sample is only 30 papers. Therefore, for future research, it could be better to have more papers to investigate. Secondly, it can be concluded that the authors of EFL and Medic research papers are more comfortable using Modal Auxiliary to advocate their claims instead of Verb, Adjective, Adverb, or *other* categories of the hedge. Lastly, there is no significant difference between EFL and Medic papers in terms of hedge usage.

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