

## CHAPTER III

### RESEARCH METHODOLOGY

This chapter elaborates: (1) the research design, (2) data collection, and (3) data analysis used in the study.

#### 3.1 Research Design

This qualitative study reports the descriptive study of the occurrences of hedges and boosters in academic written discourse. As such, the study was carried out by adapting a corpus-based approach. Corpus can be defined as a large and principled collection of naturally occurring texts (written or spoken) stored electronically. By utilizing large, diverse corpora in conjunction with computational and quantitative tools, corpus-based analyses have provided new insights into many areas of language structure and use (Reppen, 2010). Two major advantages to the use of text corpora for linguistic are first, they provide a large empirical database of natural discourse, so that analyses are based on naturally-occurring structures and patterns of use rather than intuitions and perceptions, which often do not accurately represent actual use. Second, they enable analyses of a scope not feasible otherwise, allowing researchers to address issues that were previously intractable. This is particularly true of computer-based text corpora, which can be analyzed using (semi-)automatic techniques. Such analyses can examine much more language data than otherwise possible, including more texts, longer texts, a wider range of variation (texts from different language varieties), a wider range of linguistic characteristics, and the systematic co-occurrence patterns among linguistic features (Meyer, 1992) The investigation of hedges and boosters occurrences was carried out by analyzing a corpus which consisted of ten final thesis written by ELT learners. The scope of the analysis , however, was limited on the discussion section only.



### 3.2 Data collection

**Table 3.1 Data Sources**

Year Published	Thesis
2018	5
2019	5
Total	10

In order to gather the data for answering the research question, a corpus-based approach was applied as the main approach in exploring the occurrences of hedges and boosters in ELT learners' academic written discourses. The corpus itself which consisted of 39.258 words was built by compiling ten chosen final thesis written by master students of English Education study program studying in a public university in Indonesia. A purposive sampling that refers to the sampling technique in which the writers' own judgement of typicality or possession of the particular characteristics being sought become the main consideration in choosing the primary data is used in this study (Cohen, 2006). The thesis which were chosen are the most current one or specifically those that were published in 2018 and 2019. Then, All thesis were also written by ten master students of English Education study program in the same university. Despite the fact that considerable amount of cross-discipline or cross-cultural studies of hedges and boosters have been done ((Dontcheva-Navratilova, 2016; Takimoto, 2015; (Yagiz & Demir, 2015; Farrokhi & Emami, 2008), the choice to concentrate on narrowing the primary data only within the scope of thesis written by Indonesian ELT learners here was made so as to draw a true illustration of how hedges and boosters are employed by Indonesian ELT learners as the non-native speakers of English. Another consideration for having a data taken from a single source was related to the matter of the internal validity of the data as the data are homogenous and equal in certain conditions.

Since previous researches have evidenced considerable results in which hedging expressions appear frequently in the \_discussion' sections of academic writing, thus, in this study, the discussion section of ELT students' final thesis became the main source of the analysis. Discussion section is considered to be the



most important section of a research, as it puts the study findings in an appropriate perspective and describes the contribution made by and the significance of the study. Nonetheless, the structure of discussion section in each research design might differ in one and another. According to Creswell (2012), as in quantitative research findings, the general steps that are commonly done after reporting and explaining the detailed results are concluding a study by summarizing key findings, developing explanations for results, suggesting limitations in the research, and making recommendations for future inquiries. On the other way around, in the qualitative research discussion section, it requires the process of which the researcher steps back and forms some larger meaning about the phenomenon based on personal views, comparisons with past studies, or both. The discussion section in the qualitative research mainly include the general steps of the review of the major findings and how the research questions are answered, personal reflections of the researcher about the meaning of the data, personal views compared or contrasted with the literature, limitations of the study and suggestions for future research. Another considerations for choosing the thesis is the clean text policy proposed by Sinclair in 1991. The compilation process of the corpora followed a —clean-textl policy (Sinclair 1991), which is meant by removing any additional marks embedded in the corpora that include extra unnecessary information (photos, tables, links) aside of of the parts of the main body of the file. Therefore, in choosing the thesis, the writer purposively choose those thesis in which the discussion section are written in the separate section instead of those that are compiled under the same section with the findings. This is done because the main arguments revealing writers’s proposiiton are usually found in the discussion section while findings are mostly contain the elaborated raw data found in the research

Then, in quantitative research, summarizing the key findings in discussion section tends to be general, rather than specific conclusions. Specific conclusions in the results would include detail about statistical tests, significance levels, and effect sizes, while general conclusions state overall whether the hypothesis was rejected or whether the research question was supported or not supported. Meanwhile in qualitative research, the overall intent of this section is to provide



readers with an overview of the findings to complement the more detailed results in the description and theme passages. Another thing that becomes the most distinctive aspect in the feature of qualitative research discussion is that it has a room for personal reflections. Because qualitative researchers believe that personal views can never be kept separate from interpretations, personal reflections about the meaning of the data are included in the research study. These personal interpretations can be based on hunches, insights, and intuition which the researcher gains after spending times in the field and visiting personally at great length with individuals, such as one which commonly occur when conducting case studies or ethnographic studies. Briefly, there can be a wide variety of distinctive elements attached into the discussion section of each research type. At this point, it is worth noting that the present study will use ELT students' thesis as sources of data *regardless* of their research type in order to be able to touch the issue more comprehensively.

Beside the corpus, a short open-ended interview was also done towards some of the writers of the thesis to get some supporting views to support the primary data.

### 3.3 Data analysis

In this study, the data were carried out both quantitatively and qualitatively. Firstly, the frequency and the variants of hedges was explored in the basis of its five grammatical classes: modal verbs, lexical verbs, adverbs, adjectives, and nouns by using Hyland's (1998) and Varttala's (2001) taxonomy of hedges. Meanwhile, in analyzing the variants of boosters, the taxonomy developed by Hinkel (2005) comprising three classification of boosters which are universal and negative pronouns, amplifiers and emphatics is used. In analyzing the data for answering the first research question, this study utilize a concordance software named AntConc (3.4.4), particularly the features of the word list, developed by Anthony (2014) to examine the frequency of hedges and boosters easily. In classifying the occurrences of hedges and boosters based on its variants, the results of the data analysis were elaborated in categories as shown in the example below:



**Table 3.2 Table to Display Occurrences of Hedges**

<b>Types of hedges</b>	<b>Examples</b>
Modal Verbs	Can, could, may, might, should, will, would
Lexical Verbs	Appear, argue, attempt (to), believe, claim, conclude, feel, imply, indicate, interpret, note, perceive, propose, report, seem, seen, suggest, suppose, tend, think
Adverbs	Almost, apparently, commonly, frequently, generally, mainly, Modtly, normally, often, probably, quite, relatively, seldom, sometimes, usually.
Adjectives	Considerable, general, little, main, major, possible, significant, large, small, typical.
Nouns	Belief, chance, claim, conclusion, idea, imolication, interpretation, opinion, possibility, suggestion, overview.

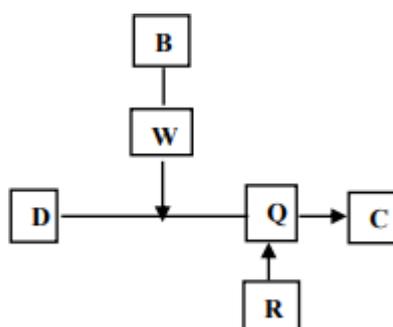
Table 3.2 consists of two columns which are first, types of hedges. In this column, the five grammatical classes which cover modal verbs, lexical verbs, adverbs, adjectives and nouns were displayed. Secondly, all the variety of hedges of found in the analysis were also displayed in the second column in accordance with each of word class. The next step is constructing another table to present the frequency of each hedges based on its grammatical classes. The frequency of hedges were identified in the basis of raw scores.

**Table 3.3 Table to Display the Frequency of Hedges Based on Its' Grammatical Classes**

<b>Modal Verbs as Hedging Device (Total words: 39258)</b>	<b>Frequency</b>
May	60
Might	22
Can	89
Could	51
Should	35
Would	18
Will	30
<b>TOTAL</b>	<b>305</b>



In order to have a more comprehensive results regarding the use of hedges and boosters in ELT learners' academic writing, the analysis was continued further towards the qualitative aspects. The arguments built in the discussion will be analyzed by following the Toulmin's (2003) Argumentation Scheme.



**Figure 3.1 Toulmin's Scheme of Argumentation**

### **First level of analysis**

In the first level of analysis, we evaluated the presence and connection of the three components : 1) the inference (C); 2) should be based on a statistical analysis of the data (D); and 3) should include a language of uncertainty (Q), together with possible conditions under which the inference may not be appropriate (R).

### **Second level of analysis**

At the second level of analysis, we evaluated whether the evidence provided information relevant to the conclusion. To this end, it is necessary to inquire into the Warrants (W); that is, how did the students arrive at their conclusion based on a certain body of evidence?, and what general principle authorized the transit from evidence to conclusion.