Lexical Complexity on Descriptive Writing of Indonesian Male and Female EFL Learners

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Abstract

This study was aimed to find out the effect of gender on linguistics properties of academic writing abstracts of Indonesian Male and Female EFL Learners. Therefore, the linguistics properties of 40 essays from EFL learners (20 males & 20 females) were analyzed on the lexical complexity (diversity and density). The participants were selected from a homogenous group of EFL learners who were sitting for Writing 1 (one) subject in the English Department *Universitas Negeri Medan*—Indonesia. A computerized text analysis program (Word Smith Tools) was employed to measure the lexical complexity of the EFL learners' essays (descriptive writing). As a result, females indicated to write more lexical density way than males in their descriptive writing but no significant different on lexical diversity.

Keywords: gender, descriptive writing, lexical, diversity and density

1. Introduction

One of the familiar genres in writing an essay is descriptive writing, and it has been taught to EFL learners in Indonesia until now. Sumarsih & Sanjaya (2013, p. 108) define descriptive writing as "a paragraph that describes a particular person, place or event in great detail. Basically, descriptive writing vividly portrays a thing (living and non-living) in such a way so that the reader can visualize it and or go through to the author's experience (s) or imagination (s). Therefore, in composing descriptive writing, an author should have wide vocabulary.

Linguistically, vocabulary is a subfield study of semantics, which is lexical semantics and morphology, which is a morpheme. Fromkin, Rodman, & Hyams (2014) stated that lexis is concerned with the word meaning and the meaning of relationships among words in phrases and or sentences. It means that lexis is the main element in any piece of writing. In line with composing descriptive writing, the author ought to understand and fulfill the lexical category requirements to produce a very communicative descriptive text.

Naturally, every person who carries to learning his/her own personalities, beliefs, attitudes, decision, and targets, will reveal the necessity of concentrating on learners as vigorous human beings (Vaezi & Kafshgar, 2012). This is a fact that each individual characteristic affects the learner's competence and performance. Therefore, an individual characteristic is an essential variable in learning English as a Foreign Language (EFL) besides the language proficiency levels. Many researchers have considered this variable in their previous researches (Sanjaya, Mokhtar, & Sumarsih, 2015; Vaezi & Kafshgar, 2012; Gas & Slinker, 1994).

Gender is an important variable to consider in the learning process (Vaezi & Kafshgar, 2012). Therefore, the main purpose of this study is to find the effect of learners' gender on their language production (descriptive writing) from the semantic view (lexical).

The objective of this study was to investigate the lexical complexity in descriptive writing of Indonesian EFL learners according to gender. In line with the purpose of the study, the research questions were formulated as below:

1)   Is there any significant difference between male and female in terms of lexical diversity in their descriptive writings?

2)   Is there any significant difference between male and female in terms of lexical density in their descriptive writings?

2. Literature Review

2.1 Semantics; Lexical

The relation between morphology and semantics is noticeable. Both are concerned with meaning. Semantics determines the logical form (or logical meaning) of sentences while morphology deals with the meaning of word components (Prasad, 2012). It means in writing a single sentence, these two components are put together in order to create meaningful words. Linguistically, there are two types of words to express the meaning: the open class and closed class. The open class is the lexical items, which are considered to be the form class, such as nouns, verbs, adjectives, and adverbs. The closed class is the grammar in which the meaning can be understood based on the structure of the sentence and its relations with that of others. In this the meaning can be understood only from the relationships among the words in a sentence. It includes the items such as conjunctions, prepositions, and determiners (Prasad, 2012). Therefore, lexical items and grammatical items are two components that students need to master in order to write a descriptive text.

As previously mentioned, lexis is one of the main components in any piece of writing. This study is focused on lexical items (lexemes) in descriptive writing. According Kreidler (2002) lexemes is a minimal unit that can take part in referring and predicating. Moreover, lexis is associated outside the language, for instance: "*cats*", with the additional "s" on "cat" word the meaning of this word can be known as more than one "cat" or plural. This is grammatical meaning, but the word "cat" itself is not grammatical but lexical, with association outside language. Based on this elaboration, this study is concerned with the lexical diversity and lexical density. Lexical diversity means both content and functional words in a piece of writing, while the lexical density means the lexical item excluding the functional words.

2.2 Descriptive Writing

Writing is a task on ordering words into meaningful sentences or ideas to send information and present them on a piece of paper. Fundamentally, writing is the same as discourse, which is discussed in terms of its aims, function of language, and its features, which are the separate elements, devices, and mechanism of language (Cooper & Odell, 1977). Furthermore, Reinking, Hard, & Osten (1993) concluded that writing is a way of communication.

Moreover, descriptive writing is a text or paragraph aiming at describing or portraying a person, thing, event or place (Sumarsih & Sanjaya, 2013). In addition, Pardiyono (2007) stated that descriptive writing is one of writing genres, which is visualizing the object (living and non-living thing) in order to give the description to the reader clearly.

Therefore, descriptive writing describes a person, place, or thing to make the reader easily visualize the object and or can enter into the writer's experience. Moreover, Jolly (1984) claimed that there are five types of descriptive writing paragraphs, which are Describing a Process, Describing an event, Describing a personality, Describing a place, and Describing an object.

2.3 Gender

Gender is a biological variable and only two component of this gender, which are male and female. One of the main factors, which affect the EFL learners' competences and performances, is gender. Chastain (1988) reported that female EFL learners are better learners than males. Furthermore, Brown (2000) reported that many researchers noticed the differences between male and female EFL learners in speaking competence and performance. In the American English native speakers, female students have been found producing standard language more than males.

Gender, as biological variable, is caused many differences among the EFL learners for both receptive and productive skills (Brown, 2000). Thus, many scholars conducted researches in investigating the effect of gender on various teaching and learning aspects. One of the essential aspects in language skill is writing. Jones & Myhill (2007) examined the influence of gender on the linguistics competence of written product. They compared the different gender (male and female) in linguistics characteristics of writing on sentence and text levels. There is a significant difference of linguistics competence between male and female on sentence and text level. Therefore, different gender has different writing appearance in linguistics characteristics aspects.

3. Relation of Writing, Lexical and Gender

In line with the definition, writing is the same as discourse (Cooper & Odell, 1977). It means that writing contains ordered words, which have meaning in order to deliver the author's message to the reader. Moreover, Deporter & Heracky (2002) stated that writing is a brain activity that needs memory, accuracy, and skill to combine words in proper linguistics rule. It means that in order to deliver the message from the author's thought

to the reader in a piece of paper (writing), the author should choose or select the sufficient words and combine it in the proper language rule. Accordance with, lexis is the words itself in a writing even thought there is a slight different between them (Prasad, 2012). Therefore, there is an essential role of lexis on writing. Additionally, Brown (2007) there are six (6) indicators in assessing writing and one of them is vocabulary or lexis. It means that learners are required to write various related vocabularies in their essay, paragraphs or test. In order to see in depth the number of vocabularies or lexis used in their writings, you may look at the lexical complexity, which can be divided in to lexical diversity and lexical density (Vaezi & Kafshgar, 2012). In line with, male and female tend to have differences in writing including the lexis number and other linguistic features (Myhill, 2007). Therefore, from the basic definition of writing, lexis is one of the significant components in composing a writing including descriptive writing, and the way to put the lexis in writing is different for every single personality including male and female. In so doing, an evident need to be showed on how is the different of male and female in lexical complexity of their descriptive writing.

4. Method of Research

4.1 Participants

20-male and 20-female EFL learners in English Language and Literature Department, Faculty of Language and Arts, State University of Medan, were selected as the subjects in this study. Their ages were from 18 to 22-year old. In addition, they use English only for international communication and in the class only. Their first language is Indonesian language. All of them have learnt English since 12 years old but they do not use the language. They just learnt it. The 40 EFL learners were purposively chosen from 92 students by using purposive random sampling technique.

4.2 Materials

Descriptive writing test: A set "descriptive writing text test" was administered to 20-male and 20-female EFL learners, from English Education Study Program *Universitas Negeri Medan*. The test was set asking the students to write a descriptive writing of at least 200 words and the topic was about to describe a place entitled "*My Favorite Place*". Thus, the test was only one topic.

4.3 Data Collection

The data were collected from the male and female writing composition. The vocabularies in their descriptive writing were collected as the main data and will be analyzed accordingly.

4.4 Data Analysis

Text analysis program by using computer (Wordsmith Tools-WT) is employed to analyze the collected data. WT is the updated text analysis program package and designed to check how the words behave in texts (Li, 2000). Basically, WT contains three (3) core programs. They are 1) Concord, 2) Wordlist and 3) keywords (Scott, 2009). In this current analysis, Wordlist is the only program employed to analyze text. Wordlist would be used to analyze the lexical (lexical diversity and lexical density) in a text because Wordlist has statistical function, which provides statistic ratio type. Moreover, this program is able to calculate each of composition word. Then, subordinate ratio (lexical diversity and lexical density) can be calculated based on related formula.

Students' descriptive writings were analyzed based on linguistics features of their writings. From the linguistics features of students' writings, the complexity of the lexical will be measured from: 1) diversity, and 2) density (Li, 2000). Li (2000) stated that lexical diversity is calculated by collecting different words including functional and content words divided by the words number in a text. Wordlist program provides ready information about token type/ratio. Formula to calculate lexical diversity is as below:

Lexical Diversity = different words (type) number × 100/tokens total number

Lexical density is measured by the lexical items number divided by the words total number in a text (Li, 2000). The formula for calculating the lexical density is as below:

Lexical Density = lexical words number × 100 / tokens total number

For example:

Student's Writing

> *My favorite place is Bali. Bali is very beautiful and interesting. My friend also said that Bali is a beautiful and interesting place. Bali is his favorite place as well.*

From that writing we can see that:

the lexical diversity = 19 x 100/ 30 = 6, and

The lexical density = 25 x 100/ 30 = 75.

That is the example how to calculate the lexical diversity and lexical density. On lexical diversity different words means all the different word in a text including the functional word such as "is, my, his" and each will be accounted once in a text. But for lexical density, all the lexical words excluding functional words are accounted all even though it mentions twice, it will still be counted as 1 lexical word.

Lexical complexity (density and diversity), were tabulated by Word Smith Tools (WST) program for every text and learners' genders effects on every linguistics feature was examined by employing Statistical Package for Social Science (SPSS) version 2.1 particularly on independent sample t-test.

5. Result and Discussion

5.1 Result

The result of this study is to achieve the purpose of the study by answering to the Research Question (RQ). Therefore, the result is arranged based on the RQ.

#RQ 1 (ONE)

Is there any significant difference between male and female in terms of lexical diversity in their descriptive writings?

The lexical diversity from Indonesian male and female EFL learners has been calculated and tabulated by using Wordsmith Tools and SPSS respectively. The result is showed on the following table.

Table 1. The difference between male and female in terms of lexical diversity on their descriptive writings

Variable	Mean Score		t-test	p value
	Male	Female		
Lexical Diversity	50.68	52.74	0.72	0.53

Table 1 shows that the difference between male and female mean score was only 2.06. Then, the t-test reached to 0.72 and the p value (0.53) >0.05. Therefore, the result of this analysis can be shown that there male and female did not have significant difference in terms of lexical diversity in their descriptive writing. It means that being female or male does not effect to the variety of the lexical in learners' writing performance.

#RQ 2 (TWO)

Is there any significant difference between male and female in terms of lexical density in their descriptive writings?

The lexical density from Indonesian male and female EFL learners has been calculated and tabulated by using Wordsmith Tools and SPSS respectively. The result is showed on the following table.

Table 2. The difference between male and female in terms of lexical density on their descriptive writings

Variable	Mean Score		t-test	p value
	Male	Female		
Lexical Density	48.68	52.74	-2.14	**0.046**

Table 2 shows that the difference between male and female mean score was 4.06. Then, the t-test result was -2.14 and the p value (0.046) <0.05. Therefore, the result of this analysis can be shown that there was a significant effect of gender (male and female) on descriptive writing of Indonesia EFL learners in terms of lexical density.

From both tables above, gender (male and female) only give significant effect to the lexical density of Indonesian EFL learners' descriptive writings but not to the lexical diversity.

6. Conclusion

Accordance with the result, females write more lexical density than males in their descriptive writing but gender does not give significant effect on the lexical diversity. This result may differ from other researchers' results; for example, Vaezi & Kafshgar (2012) found that there was no significant difference between male and female on lexical complexity (diversity and density) in their descriptive writing. However, Many agree with the previous

researchers, (Chastain, 1988; Brown, 2000; Myhill, 2007), who reported that there is a difference between male and female in terms of competence and performance in learning foreign language skills including writing because different gender has different writing appearance in linguistics characteristics aspects.

7. Limitation

This study was only focusing on quantitative research. The data were tabulated by employing Wordsmith Tool (WT) and independent sample t-test in SPSS version 2.1. Therefore, this study did not qualitatively analyze on the EFL learners descriptive writings. Moreover, the participants were only from one area which was in Universitas Negeri Medan Indonesia and all of the participants are Indonesian and most of them live in North Sumatera Province which have bond in same behavior and not so much different in culture and thought. Other than that, this study was only focused on written product of EFL learners particularly on descriptive text or writing.

8. Recommendation

Based on the conclusion and limitation, a recommendation to the English teacher and next researcher are needed to be delivered as below:

1)   Teacher should not focus only on lexical density of the student's writing as naturally female writes more than male does.

2)   Next researchers need to broaden the study on larger participants, more analysis on qualitative and other productive skill (speaking).

3)   Teacher and next researcher may use the result of this study as the basic information, data and source for teaching and future research and study.

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