

**ANALYZING LEXICAL DENSITY AND DIVERSITY IN CONCLUSION
SECTION OF UNDERGRADUATE STUDENTS' THESIS**

**THESIS
Presented to**

State Islamic Institute of Kediri

**In Partial Fulfillment of the Requirement
for the Master Thesis in English Language Education**



By:

**ROVITA JAYANING SHOIMMAH
926.003.19.028**

**DEPARTMENT OF ENGLISH LANGUAGE EDUCATION
FACULTY OF POSTGRADUATE
STATE ISLAMIC INSTITUTE OF KEDIRI**

2021

CHAPTER I

INTRODUCTION

This chapter presents some aspects. They are (a) background of the study, (b) statement of the problem, (c) objective of the study, (d) significance of the study, (e) scope and limitation of the study, (f) operational definition of the key term.

A. Background of Study

Students improve their writing ability by producing academic papers, among other various ways. For some reason, the papers are produced as an assignment, as a research project, as report of an activity, and so on. Students' vocabulary knowledge and skills are essential for successful communication in a second or foreign language for producing written text. In the writing field, research has explored EFL learners' ability to use varied vocabulary. Words are the units of meaning, making sentences, paragraphs, and texts. Although vocabulary teaching has enriched learners' knowledge of lexical items, whether they can use the words they have learned is a different story. English vocabulary falls into two major categories: high-frequency words, words that appear very frequently in almost all kinds of discourse, and low-frequency words, which seem very infrequently across all texts.¹

Students are required to produce a good paper as their assignment to show their achievement in writing ability and their linguistic competence.

Their paper can be analyzed based on the linguistics view, such as lexical

¹ Patrisius Istiarto Djiwandono, *Lexical Richness In Academic Papers: A Comparison Between Students' And Lecturers' Essays*. (Indonesian Journal of Applied Linguistics, 2016), 206-219.

density and lexical diversity. In English as a Foreign Language (EFL) area, writing skill is essential, especially for students in the final year since they must write a research report as one of the requirements for the degree. When students write their research papers, they need to make great efforts to make the writing coherent and to contribute to the field. A good writer will use the necessary words and choose the appropriate words to deliver their writer's meaning. Using only right words is very important to express the points. The students should select more proper comments to elaborate on the ideas instead of using many words and writing them variously. Then, students need to notice the choice of words they use to produce good writing.²

Whitaker stated ten principles in producing good academic writing: clear purpose, audience engagement, clear point of view, single focus, logical organization, firm support, clear and complete explanations, effective use of research, correct citation style, writing style.³ The students are expected to apply varied words to create an excellent English academic writing style since readers catch their interest with the writing style.

Various words indicate that the writers have produced English texts and internalized them with more effort. Diverse words also give variation in a written work, which avoids homogeneity throughout the academic paper. In some previous studies focusing on receptive vocabulary, informants have to indicate whether they know a specific lexical item sampled from a dictionary or a word list. The critical purpose of a vocabulary program is to bring

² Hermawati Syarif and Rahmi Eka Putri, *How Lexical Density Reveals Students' Ability In Writing Academic Text*. (Lingua Didaktika, 2018), 86-94.

³ Anne Whitaker, *Academic Writing Guide: a Step by Step Guide to Writing Academic Papers*. (Slovakia: City University of Seattle, 2010), 2-3.

learners' vocabulary knowledge into communicative use. When students are in a situation where they are asked to use various vocabularies, students would expect to see a relationship between direct measures of students' vocabulary size and the richness of vocabulary in their language production.

Students' vocabulary in their production can be analyzed based on lexical density and lexical diversity. Lexical density is a measure of the proportion of content words in the text. It refers to statistical measuring the lexical diversity in a text.⁴ Lexical density is a condition of the proportion of the words in the text. It shows the ratio of lexical items and grammatical items. Lexical items consist of the noun, adjective, verb, and some adverbs, while grammatical items consist of determiner, pronoun, most preposition, conjunction, finite verb, and some classes of the adverb.⁵ Lexical density shows the complexity of words in a text. It describes the development of lexical in the written language, text with lower lexical density is easily understood. Through the analysis of lexical density, students' progress in language learning, especially in writing, can be identified.⁶

Analyzing lexical density can be a useful way to better understand a text because it can help explain the complexity and it is suitable for certain level of language. While lexical diversity measures how many different words that are existed in the text or paper.⁷ Lexical diversity analyzes a text based on words used in lexically diverse. Students have to use many different words in their paper, with little repetition of the words already used.

⁴ Ibid.

⁵ Victoria Johansson, *Lexical Diversity And Lexical Density In Speech And Writing: A Developmental Perspective*, (Lund University, Dept. of Linguistics and Phonetics, 2008).

⁶ Syarif and Putri, *How Lexical Density Reveals*, 86-94.

⁷ Djiwandono, *Lexical Richness In Academic Papers*, 206-219.

This study uses a primary method to determine the lexical density in the analysis conclusion section of thesis produced by students at the undergraduate level. The researcher selects conclusion which consist of students' own words in explain the result of study, it since the text pass a trusted plagiarism checker. The best-known quantitative measure for samples of written texts or speech is the type-token ratio (TTR). The total number of different words used (types) is divided by the total number of words in the text.⁸ Based on Johansson, both lexical density and lexical diversity measures can be easy to operationalize and practical to apply in computer analyzes of large data corpora.⁹ The traditional method, namely Type-Token Ratio, TTR is appropriate to measure lexical density and lexical diversity. Measurements based on the type-token ratio can be regarded as quantitative since they give insight into the number of words known. Type refers to the kinds of lexical words, while token encompasses the total number of lexical words used in a particular text. Another term commonly used is vocabulary richness. As explained before, this represents evidence that a learner has been exposing themselves to a wide range of reading materials and quite possibly processing them up to the point of mastery.

When using TTR to measure lexical diversity, shorter samples often appear to be more prosperous. Further, both lexical density and lexical diversity are significantly higher in writing than in speaking. Thus, students' writing taken as the data to analyze. Here, researcher discusses the proportion

⁸ Douglas Biber, *Corpus-Based and Corpus-driven Analyses of Language Variation and Use*. (The Oxford Handbook of Linguistic Analysis: 2009).

⁹Johansson, *Lexical Diversity And Lexical Density*.

of lexical word types such as nouns, verbs, adjectives, and adverbs. It describes the development of lexical items in the written language.

Some previous studies relate to this research. A research conducted by Fadhillah in 2018, analyzed English textbooks that focused on lexical density analysis for analyzing 15 reading texts provided in *Pathway to English* Textbook for Grade X of Senior High School. The result showed most of the reading passages in this textbook are at a high level.¹⁰ Next, in 2019 Arum and Winarti also do research entitled "*The Use of AntConc in Providing Lexical and Syntactical Information of the Textbook of Radiographic Positioning and Related Anatomy: a Corpus Linguistic Study.*" The quantitative and qualitative analyses show the most common vocabularies, word classes, and sentence patterns used in the text book that will be used to compose a pocket dictionary, which will help the radiography students understand the radiological terms and comprehend many radiological sources autonomously and easily.¹¹

Also, the research was conducted in 2019 by Rozanov and Tsybulsky with the title "*Linguistic Analysis of Science Teachers' Narratives Using AntConc Software.*"¹² The result of this research revealed that AntConc software is a valuable tool of linguistic analysis, which can contribute to the understanding of various issues in educational research. In addition, there is research that analyzes news text entitled "*Lexical Density Analysis and its*

¹⁰ Yaumul Fadhillah, *Analyzing Lexical Density of English Reading Texts in Pathway to English Textbook for Senior High School Grade X*. Thesis, (Banda Aceh: Ar-Raniry State Islamic University, 2018).

¹¹ Euis Reliyanti Arum, and Wiwin Winarti. "The Use of Antconc in Providing Lexical and Syntactical Information of the Textbook of Radiographic Positioning and Related Anatomy: A Corpus Linguistic Study." *Jurnal Sositologi*, (2019), 106-112.

¹²Yulia Muchnik Rozanov, and Dina Tsybulsky. "Linguistic Analysis of Science Teachers' Narratives Using AntConc Software." *IGI Global*, (2019), 211-230.

Function in BBC News” that Aulia conducted in 2019. This study's data are the lexical density of the reading on *BBC News* online newspapers. The text's lexical density level had different levels: the reading texts had five text that content carrying lexical items dominant and three non-content carrying lexical items. So the result showed that readers quite difficult understand the vocabulary.¹³

The researcher decided to do this research since the students are required to produce academic text with various lexical items. It is possible to enrich their vocabulary indirectly. Students used necessary words and chose the appropriate words to deliver meaning in their text. The number of lexical items in a text can influence the length of a text and measure the text's level of difficulty. When a text, especially a research text, is difficult to understand, the reader will find it difficult to understand the research points. So, this thesis entitled “Analyzing Lexical Density and Diversity in Conclusion Section of Undergraduate Students’ Thesis” is appropriate to conduct.

B. Statement of the Problem

1. How is the level of lexical density in thesis conclusion section written by undergraduate students?
2. What types of lexical diversity are mostly found in thesis conclusion section written by undergraduate students?

¹³ Nurul Aulia,. *Lexical Density Analysis and Its Function in BBC News*. Undergraduate Thesis, (Medan: University of Muhammadiyah Sumatera Utara, 2019).

C. Objective of the Study

1. To find out the level of lexical density in thesis conclusion written by undergraduate students.
2. To find out the types of lexical diversity that mostly found in thesis conclusion written by undergraduate students.

D. Significance of the Study

The researcher hopes that this research will be helpful for the following:

1. For the Students

The research finding of this study aims to contribute to the discussion or theory of linguistics in the lexical field. The researcher intends to reveal students' ability in writing skill especially in using lexical diversity and lexical density on thesis conclusions. By doing this research, the researcher expects that students are more aware of their research text quality, then improve their academic writing ability based on the lexical field.

2. For the Next Researcher

The researcher expects that this research can inspiring next researchers to find another uniqueness in lexical field and can use this research as a reference to do new research in the same field. Moreover, the researcher also intends to contribute this research in improving the lexical awareness in English language education.

E. Scope and Limitation of the Study

This research's scope is data from the thesis conclusion of undergraduate students of IAIN Kediri, especially in the academic year 2019/2020. Moreover, this study limits the types and characteristics of lexical diversity and lexical density found in the thesis conclusion written by undergraduate students in the context.

F. Operational Definition of Key Terms

a. Lexical Density

Based on Jean Ure, lexical density is the proportion of lexical words to the total number of words in any given text in spoken or written.¹⁴

b. Lexical Diversity

A measurement of how many different words are used in a text, especially in lexical categories such as nouns, verbs, adjectives, and adverbs.

c. Thesis Conclusion

A part of research text produced by undergraduate students to summarize their research findings. It can also prove students' writing ability and quality since they used their words.

¹⁴ Jean Ure, *Lexical Density and Register Differentiation*. In G. E. Perren & J. L.M. Trim (Eds.). *Applications of linguistics: Selected Papers of the Second International Congress of Applied Linguistics* (pp. 443-452). Cambridge: Cambridge University Press.