## **ABSTRACT**

Lexical Simplification is essentially a process of simplification of text (Text Simplification) by identifying and replacing the complex words with alternative words (synonyms) simpler or easier to understand. Lexical Simplification is the most simple approach than other approaches. However, PAETZOLD and Specia (2013) argues that lexical simplification is very challenging as a result of substitution should maintain the originality and grammatical correctness of the sentences that want to be simplified. Shardlow (2014) explains that one of the main problems the application of lexical simplification is due to ambiguous meaning of the original sentence. It occurs when a word has multiple meanings or synonyms so that the system retrieves the substitute words that are irrelevant to the meaning of the sentence. Therefore, it is necessary to select the method of substitution of words to avoid ambiguous. As discussed in this research is to analyze the influence of word sense disambiguation in selecting word lexical substitution system simplification. Based on test results, it was found that the word sense disambiguation give a major influence on the Performance system either decrease or increase of Performance.

**Keywords:** Lexical Simplification, Text Simplification, Word Sense Disambiguation.