CHAPTER I

INTRODUCTION

This chapter begins with outlining the background of the research. It then presents information about the research question, research objective, operational definition, significance of the research and scope of the research.

1.1 Background of the Research

Research on second or foreign language (L2) writing skills has indicated that various factors affect students' L2 writing performance (Rahimpour, 2008). Nonetheless, relatively little is known as to how levels of *cognitive complexity* as reflected in L2 writing tasks affect students' L2 writing performance (Ishikawa, 2006; Kuiken & Vedder, 2007, 2008).

Within the context of L2 writing instruction, levels of 'cognitive complexity' may be defined as *the extent* of which L2 writing tasks require (or do not require) learners to deploy higher order thinking skills as they produce written texts. For instance, L2 writing tasks that only require learners to *describe* referents depicted in a picture may be assumed to require less higher-order thinking skills. This is because such tasks only require the learners to write whatever they see in the picture. In contrast, L2 writing tasks that require learners to *interpret* particular scenes depicted in a picture may be assumed to require higher-order thinking skills since these tasks require that the learners *not only* to describe whatever they see in the given picture,

but also to be able to generate ideas or opinions related to the scenes depicted in the picture (see Chapter 2 for details).

From theoretical perspectives, these two types of L2 writing tasks, which differ in terms of their cognitive complexity, can affect learners' L2 writing performance in many ways. Specifically, Robinson (2001, 2003, 2005, 2007) argues that getting learners to perform complex L2 writing tasks may increase both accuracy and complexity of their writing performance. However, such complex L2 writing tasks can reduce the learners' ability to write fluently. That is, the learners might need longer preparation time to cope with complex L2 writing tasks. On the other hand, getting learners to perform less complex L2 writing tasks may be conducive to increasing the accuracy and fluency. However, less complex tasks are less conducive to increasing the complexity of L2 writing performance.

Based on this complex/less complex distinction, Robinson (2001) maintains that L2 writing tasks need to be sequenced in an appropriate manner order so as to promote *balanced development* of accuracy, complexity and fluency. From pedagogic standpoint, such balanced development constitutes the ultimate goal of L2 instruction (Ellis, 2005; Lambert & Kormos, 2014; Skehan, 2009).

Several empirical studies have revealed the effect of cognitive complexity with varying manipulations and dimension on students' second or foreign language writing performance in many ways, especially in terms of accuracy, complexity and fluency. From the number of studies, several research results are in line with the theoretical perspective from Robinson, that complex tasks can lead students to greater accuracy and complexity but not fluency (Kuiken & Vedder, 2007; Faruji & Ghaemi,

2017). However, there have been some studies which are contradicting with Robinson's theoretical perspective, which the research results revealed that there is such a Trade-off on the aspect of writing performance (accuracy, fluency, complexity) in the complex task (Cho, 2015; Salimi, Dadaspour & Asadollahfam, 2011; Kim, 2020)

From the results of research that are still competing, it seems that there is no conclusive effect on task complexity found for writing performance. Therefore, further research is needed to investigate this issue. The present study, therefore, aims to fill this theoretical and empirical gap by examining how such a task with different levels of cognitive complexity may affect students' English writing performance in terms of accuracy and complexity.

1.2 Research Question

In light of the literature outlined above, this study addressed the following research question:

1. Is there any significant effect of cognitive complexity (+/-reasoning demand) on undergraduate EFL learners' English writing performance (accuracy and complexity)?

1.3 Research Objective

Based on the research question formulated above, the present study thus aims to investigate weather cognitive complexity affects learners' English writing performance.

1.4 Operational Definition

There are several terms used in this research. To minimize misinterpretation, the following are the operational definition of it:

1. Cognitive complexity: It refers to a simple and a complex English writing task that impose -/+ reasoning demand. In this context, the -reasoning demand is a simple task which was operationalized through description task. However, the +reasoning demand is a complex task which was operationalized through interpretation task. Learners were required to describe and interpret the same picture.

2. Writing performance: It refers to the accuracy and complexity of learner's sentences.

1.5 Significance of The Research

1. Theoretical benefits:

The theoretical benefits of this research will contribute to provide empirical evidence and support theories related to this research later.

2. Practical benefits:

Giving teachers an overview in determining criteria for assessing and sequencing task in task-based language teaching and syllabus design.

1.6 Scope of The Research

In this study the researcher limits the scope of this research, starting from the research participants, location of the research, and variables studied. 6th and 8th semester undergraduate students who have passed several English writing courses in the English Language Education Program at the University of Muhammadiyah Jember became research participants in this study. The variable studied is the effects of cognitive complexity on undergraduate EFL learners' English writing performance, in which there is actually one independent variable at two levels (-reasoning demand and +reasoning demand) and two dependent variables (accuracy and complexity) as the writing performance.