CHAPTER I

INTRODUCTION

The first chapter of this paper is the Introduction which covers the background of the study, research questions, research objectives, scope of the study, significance of the study, the organization of the paper, and the clarification of the key terms.

1.1 Background of the Study

Research articles are the products of scientific, systematic, and objective study, and they have long been regarded as an important academic genre for scholars and researchers interested in extending their expertise across disciplines (Tessuto, 2015). The importance of having expertise in writing research articles in the academic field is in line with academic requirements for obtaining master's and doctoral degrees in Indonesia, that are national and/or international publications. According to Suherdi, Kurniawan, and Lubis (2020), one of the indices of product evaluation and institutional contribution is the frequency of international publications. International publication also plays role as an indicator of academic success because of several reasons. First, obtaining government or institutional awards for good publication in international journals would promote financial stability. Second, international publication will help the institution's credibility (Kanoksilapatham, 2005). Third, the authors can gain international recognition or promotion, enabling them to collaborate with scholars from other countries.

Among all sections, an introduction is considered the most important section in the research article because of several reasons. First, it is the first section read by the readers. Second, it justifies the main idea of the research article explicitly. Third, it adds a short overview of the previous studies in specific disciplines (Arsyad & Arono, 2016; Safnil, 2001). Moreover, according to Kendal (2015), the introduction section is expected to illustrate the latest research and its implications. Additionally, the aim of the research article introduction (RAI) is to provide a logical description of the research and convince readers to read the article comprehensively, therefore authors have to write this section as persuasively as possible (Swales and Najjar 1987; Safnil 2001; Swales and Feak 2004). RAI, according to Belcher (2009), is built to 'provide enough detail for the readers to grasp the claim and its stakes' (209). Swales and Feak (2004) also say that RAI serves at least two purposes: claiming the article's relevance and motivating readers to read it. Furthermore, the research article presentation is crucial in demonstrating the research's novelty, as it is described as a place for the authors to explain the research context, the statement of a gap, and the current research's objectives (Swales, 1986). Because of its essential roles, a comprehensive analysis needs to be done to understand the complexity of writing research article introductions.

It has long been assumed by previous researchers that genre analysis through move analysis is a useful method for recognizing the complexities of writing RAI. Move analysis is related to the study of a genre's rhetorical organization, which is made up of move as the communicative discourse unit, which contains one or more steps as the sub-communicative one to achieve the rhetorical purpose realized in a text (Swales, 2004; 1990). In 1981, John M Swales studied the way RAI was rhetorically structured and developed a formative model of analysis called Creating A Research Space (CARS), which consisted of three moves: Move 1 (establishing a territory), Move 2 (establishing a niche), and Move 3 (occupying the niche). The model was later revised in 2004 by updating the moves and steps into Move 1 (establishing a territory), Move 2 (establishing a niche), and Move 3 (presenting the present work). This was, according to Swales, aimed at accommodating greater rhetorical style variations among RA introductions in different disciplines and languages. So, Swales' (2004) revised CARS model is widely used by researchers nowadays.

Genre analysis involves genre knowledge and genre performance. Genre knowledge refers to the writer's understanding of genre (Tardy, 2009), while genre performance is the actual performance of the genre when the specific utterances actually produced (Devitt, 2015). In terms of genre knowledge, Tardy (2009) suggests a four-dimensional model of genre knowledge that involves formal knowledge, process

knowledge, rhetorical knowledge, and subject matter knowledge. Meanwhile, scholars refer to particular performances of a genre (Bawarshi & Reiff, 2010) or performing identity within disciplinary norms and group performances when addressing genre performance (Hyland, 2010). The relation between genre knowledge and genre performance can be traced back to Chomsky's (1965) theory, which distinguishes between what a person has in mind (competence) and what actually comes out of their mouth (performance). He points out that an individual's memory, motivation, and other variables influence their actual performance.

Genre knowledge and genre performance have been observed quite extensively in previous studies such as Kuteeva and Negretti (2016) who explored the significance of the discipline in the conceptualization of genre knowledge and found that the students' formal and rhetorical knowledge of genre is linked to their perception of knowledge-making practices in their respective disciplines, Wardle (2007) who investigated the effects of genre knowledge developed in a writing/composition class on student writing in disciplinary classes, and Devitt (2004), Cheng (2007) and Johns (2011) who examined genre-based L1 and L2 pedagogies. The number of studies discussing prior knowledge and its (possible) impact on students' writing performance in university classrooms has recently increased (Devitt, 2004; Rounsaville, 2012; Uzun, 2017), with some studies specifically focusing on English-speaking university students' perceptions of their prior knowledge (Artemeva, 2008; Reiff and Bawarshi, 2011). However, only a few studies have looked at English Language Learners' (ELLs) prior knowledge of genres, their use, and the impact on learning academic English genres (Gentil, 2011; Mein, 2012). Even fewer studies have looked into how ELLs think about their prior genre knowledge and writing strategies (Dooey, 2010), and the relation between students' genre knowledge and writing development (Driscoll, et al., 2020).

Although studies about genre knowledge and genre performance have been extensively conducted, little is known about the relation between genre knowledge and writing development of graduate students across disciplines in writing RAI. Scholars mostly focused on the rhetorical move analysis of research article introductions written by authors across disciplines (Stoller & Robinson, 2013; Arsyad & Arono, 2016; Gani et al., 2021; Setiawati et al., 2021; Kurniawan et al., 2022). Therefore, the current study aims to analyze and compare genre knowledge and writing development of Indonesian graduate students from soft and hard sciences in composing their research article introductions, as previous studies show the nature of science has its distinctive criteria in terms of article writing. Haggan (2004) states that hard sciences generally prefer a title stating the exact topic of the paper by adding more information or context specify certain aspects. Meanwhile, soft sciences need a broader range of methods and attempt to engage readers by rhetorical means. Additionally, social science research issues tended to be less clearly defined leading researchers to put more identification and explanation of the significance of the issues (Jiang & Hyland, 2017; Lu, et al., 2021). Meanwhile, the hard science research issues were assumed making researchers provide simpler explanations and justifications for the issues (Jiang & Hyland, 2017). This differing nature of both sciences may influence not only the rhetorical organization of the research article introduction but also students' writing development.

1.2 Research Questions

- 1. How do Indonesian graduate students majoring in soft and hard sciences rhetorically organize their research article introductions?
- 2. How are Indonesian graduate students' writing development associated with their genre knowledge in writing research article introductions?

1.3 Research Objectives

This study attempts to seek:

- 1. The rhetorical organization of research article introductions written by Indonesian graduate students majoring in soft and hard sciences.
- 2. The manifestation of Indonesian graduate students' writing development associated with their genre knowledge in writing research article introductions.

1.4 Scope of the Study

This study focuses on the analysis of research article introductions written by Indonesian graduate students majoring in soft and hard science from the beginning of their study until their research articles were published in their senior year. This study is limited to master of English Education and Mathematic Education candidates from a public university in West Java, Indonesia who have successfully published their research articles in international conferences and journals.

1.5 Significance of the Study

This study hopefully may bring significance theoretically and practically as follows:

1. Theoretical significance:

This study will enrich literature in English Language Learning especially English writing skills in a specific genre, in this case, research article introduction. Furthermore, this study will also give information to other researchers who want to conduct research in the same field.

- 2. Practical significance
 - a. For students, the result of this study will give information about previous students' retrospective journeys in writing research article introductions from the beginning of their study until their research articles are published so that they can learn from them.
 - b. For lecturers, the result of this study will enrich lecturers' knowledge about students' writing development associated with their genre knowledge especially in writing research article introduction and the comparison of students' genre development from those who come from soft and hard science.
 - c. For institutions, the result of this study will give information about the organization of research article introductions written by students from soft and hard sciences who had successfully published their research article in international conferences and journals so that the institutions may organize

a workshop on how to write good research article introduction based on that information.

1.6 Organization of the paper

This paper consists of five chapters. The first chapter covers: (1) background of the study; (2) research questions; (3) research objective; (4) scope of the study; (5) significance of the study; (6) the organization of the paper; and (7) clarification of key terms used in the study.

Chapter Two emphasizes on the literature review and some previous related studies that are used to analyze the data. This chapter primarily presents the explanation of the concept of research article introduction (RAI), genre knowledge, the relation of genre knowledge and writing development, the concept of soft and hard sciences, and the concept of move analysis.

Chapter Three provides detailed information about the research methodology. The research design, research participants, data collection, data analysis, and data trustworthiness are also discussed in this chapter.

Chapter Four presents the result of the data analysis, revealing the issue of genre knowledge and RAI writing development of graduate students from soft and hard sciences. This chapter provides detailed descriptions of the data covering the RAI rhetorical organization of soft and hard science students and their genre knowledge connection to writing development. Also, it explains other related issues contributing to the student's writing development. This chapter ends with thorough discussions of the data results by comparing and contrasting them to the previous studies

Finally, Chapter Five presents the conclusion of the overall discussion, an implication of the research, puts forward some suggestions for English lecturers, graduates' students, and future researchers, and the limitation of the study.

1.7 Clarification of the key terms

1. Research Article

A research article is a kind of academic writing or scholarly writing that reports an original study and is published in a scholarly journal. It generally consists of the title, introduction, abstract, methodology, result, discussion, conclusion, and references. The aim of the research article is to seek the trend within a specific study, stand for, expand, or argue against the existing issues within a specific field (Lubis, 2018; Shannon, 2011).

2. Research Article Introduction

Research Article Introduction (RAI) is part of the research article that covers information about the research topic and research problem that want to be explored further in order to build a research context, findings that were obtained from previous studies, identification of gaps in previous studies, and closes with a statement of research aims and problem formulation (Swales, 2004). RAI consists of three Moves namely Move 1 (Establishing a territory), Move 2 (Establishing a niche), and Move 3 (Presenting the present work). Move 2 involves 3 steps namely Step 1 (Indicating a gap), Step 2 (Adding to what is known), and Step 3 (Presenting positive justification). Meanwhile, move 3 contains 7 steps i.e., Step 1 (Announcing present research descriptively and/or purposively), Step 2 (Presenting research questions or hypotheses), Step 3 (Definitional clarifications), Step 4 (Summarizing methods), Step 5 (Announcing principal outcomes), Step 6 (Stating the values of the present research), and Step 7 (Outlining the structure of the paper) (Swales, 2004).

3. Rhetorical moves

Rhetorical moves are the discoursal or rhetorical units that perform a coherent communicative function in a written or spoken discourse. It consists of one or several steps to realize each of the moves properly (Swales, 2004). In this study, the rhetorical moves were analyzed by looking at the manifestation of moves and their constituent steps. Move is defined as communicative units (e.g., Move

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1=Establishing a territory). Step is defined as sub-communicative units (e.g., Step 1 of Move 2=Indicating a gap).

4. Genre knowledge

Genre knowledge refers to the writer's understanding of genre, which includes four different dimensions namely formal knowledge, process knowledge, rhetorical knowledge, and subject matter knowledge (Tardy, 2009). Formal knowledge refers to the genre's structural components, such as discourse and lexicogrammatical conventions, structural moves, forms and media of communication, and linguistic code. The writing processes for written genres, their distribution and reception by the audience, and any related genre networks are all examples of process knowledge as procedural activities. The intended aims of a genre, the socio-rhetorical sense, and persuasion dynamics are all protected by rhetorical knowledge. Subject matter knowledge, on the other hand, is advanced material knowledge regarding a discipline.

5. Soft and Hard Sciences

Hard science is a branch of science that is concerned with physical entities, while soft science is concerned with living entities (Simms, 2010). Examples of hard sciences are Mathematics, Physics, Chemistry, Engineering, and Medicine (Neumann, et al., 2002; Simms, 2010). Meanwhile, soft sciences include Applied Linguistics, Sociology, Anthropology, and Psychology (Lu, et al., 2021).

6. Move Analysis

Moves analysis is a part of genre analysis. By definition, move analysis focuses on investigating the realization of rhetorical moves in which those moves have their own constituent steps (Zamani & Ebadi, 2016).