

CHAPTER I

INTRODUCTION

This chapter consists of general information about this study, which has seven detailed parts of the study including the background, purpose, statement of problems, scope, significance, clarification of terms, and organization of the paper.

1.1 Background of the Study

Scholars and academicians need a platform to publish their works in order to share what they have found in their research journey and academic writing can be one of the options. Academic writing gives them a space to evaluate on how they depict knowledge, prove their understanding, and portraying the skills of thinking, interpreting, and presenting (Irvin, 2010). There are many types of academic writing, research article is one of them. It is important for university students, scholars, and researchers to advance their knowledge and practice, and it can be obtained through one of the important activities in academia, writing research papers (Lubis & Kurniawan, 2020).

Particularly in Indonesia, the publication of research articles in reputable journals has become a mandatory practice for academics, students, and faculty members alike (Yadira, Zein, & Setia, 2022). The reputable journals can be filtered by indexation. According to Balhara (2012), journal's quality can be reflected through its indexation. In Indonesia, Science of Technology Index or Sinta is known as a journal indexation portal managed by Ministry of Education, Culture, Research and Technology. Sinta is also considered as a journal database which has six levels to measure journal quality. Journals were accredited into six levels, Sinta 1 and 2 were considered to be the higher rank than Sinta 3 to 6. Sinta journals covered many fields of research, including Computer Science which becomes the main area in this study.

Writing research papers has structures to follow. In Computer Science papers, the structures are similar to other field's publications, consisting of title, abstract, introduction, background, related work, system model and problem statement, methods, simulations, conclusions, acknowledgment, and references

(Andonie & Dzitac, 2010). One of the important sections of research article is an abstract. Based on Lubis and Kurniawan (2020), an abstract's quality determines the quality of research paper's content as a whole. Abstract plays a critical role in communicating the main points of the research. According to Cross and Oppenheim (2006), readers can save their time by comprehending abstract because the well-written one contains the ideas representation of the article.

Abstract writing has some frameworks proposed by some researchers, such as Hyland (2000), Swales and Feak (2009), and Bhatia (1993). Five moves were being proposed by Hyland (2000), which consisted of Move 1 – *Introduction*, Move 2 – *Purpose*, Move 3 – *Method*, Move 4 – *Product* and Move 5 – *Conclusion*. Using Hyland (2000) framework, previous studies were conducted by the researchers and they took a look in various disciplines (Gani, Kurniawan, Gunawan, & Lubis, 2021; Juanda & Kurniawan, 2020; Sabila & Kurniawan, 2020; Ramadhini, Wahyuni, Ramadhani, Kurniawan, Gunawan, & Muniroh, 2020).

From the previous studies, we can find the distinction between hard and soft science fields' research article abstracts. Hyland (2000) stated that hard science researchers had the tendency to create an abstract focusing on method description. To divide the hard and soft science, Shapin (2022) stated that there have been minor conflicts at the edges of its definition, but in general, the term is commonly understood to categorize natural sciences as rigorous (with physics and mathematics being the most precise), and social or human sciences (like sociology, anthropology, and psychology) as less strict. Some consideration is also given to disciplines that lean towards strictness, while others are thought to possess elements of both characteristics.

Computer Science is considered as hard science since it involves scientific method and emphasizes on proofs (Helmenstine, 2019). Understanding the rhetorical structure of abstracts in Computer Science research articles can provide insights into how authors construct their arguments and persuade their audience. Despite that, the research about rhetorical structure in Computer Science field was considered rare. There was one previous study written by Nurhayati, Fadilah, and Habibah (2022) which researched about two Sinta-indexed Computer Science

journals. However, the samples were limited to only 30 abstracts with index Sinta 1 and 2, also the chosen published years were in the year of 2021-2022.

Thus, this study examines Sinta-indexed Computer Science journals' abstracts using Hyland's (2000) model. The aim of this study is to identify rhetorical moves and linguistic features of the abstracts. Linguistic features such as voice and tenses are analyzed to show the linguistic realizations in Computer Science journals. This study uses more samples and is expected to help future researchers, scholars, and academicians to implement the main used structures of Computer Science journals' abstracts.

1.2 Purpose of the Study

This undergraduate thesis aims to conduct a rhetorical move analysis of Computer Science research article abstracts in SINTA-indexed journals. The study will identify and analyze the rhetorical moves used by authors in their abstracts to understand how they construct their arguments and communicate their research.

1.3 Statement of Problems

The research questions for this thesis are:

1. What are the rhetorical moves used by authors in the abstracts of Computer Science research articles in Sinta-indexed journals?
2. How are the rhetorical moves realized in research articles abstracts from Sinta 1 to 6?
3. What are linguistic features used in Sinta-indexed Computer Science research articles abstracts?

1.4 Scope of the Study

This study focuses on investigating the research article abstracts in Sinta-indexed Computer Science journals. From Sinta 1 to 6, the writer analyzed the rhetorical moves and linguistic features of abstracts in each level.

1.5 Significance of the Study

This study aims to contribute to the understanding of how authors construct their Computer Science research article abstracts in well-structured manner, and how this can be useful for researchers, editors, and other stakeholders in the field. The study will also demonstrate the feasibility of using rhetorical move analysis as a tool for analyzing research article abstracts in Computer Science and other fields so researchers can study this field too.

1.6 Clarification of Terms

1.6.1 Move analysis

Move analysis is defined as a textual approach used to examine the rhetorical structure and organization such as moves and steps in various textual genres (Swales, 1990, 2004).

1.6.2 Move

Move is a rhetorical unit with communicative function and has a contribution to the communicative intent of the written text or spoken form (Swales, 2004 and Pho, 2008).

1.6.3 Step

Step is a subordinate component within moves that fulfil the communicative function of the move they belong to (Swales, 1990).

1.6.4 Linguistic features

In Yun Li (2011), inspired by Santos (1996), the linguistic features can be the characteristics at the macro-level of textual organization and the features of individual sentences at the micro-level of textual analysis.

1.6.5 Tenses

Linguists describe tense meanings using the timeline of linguistic act which divided into three parts: past, present, and future (Michaelis, 2021).

1.6.6 Voice

According to B. A. Ilish (1968), the voice in sentence conveys both the nature of relationship between the subject and the predicate, also the attitude of the action towards the object existed.

1.7 Organization of Paper

The thesis is divided into five main chapters which will organize the whole ideas:

1) Introduction

The first chapter will provide an overview of the study's background and objectives, scope and significance, research question, definition of key terms, and organization of paper.

2) Literature Review

The second chapter will review relevant literatures on rhetorical move analysis, Computer Science research article abstracts, and previous studies of this topic.

3) Research Methodology

The third chapter will describe the methodology used in the study, including the sample selection, data collection, and analysis procedures.

4) Findings and Discussion

The fourth chapter will present the findings of the study and further discussion of the results.

5) Conclusion and Suggestion

The last chapter will consist of conclusions of the current research and suggestions for future research.