

CHAPTER I

INTRODUCTION

1.1 Background of the Study

The ability to engage in critical thinking through argumentative writing is an essential skill for academic success, particularly in higher education settings. This skill involves the ability to reason, construct arguments, and evaluate evidence effectively, all while adhering to logical principles. Recent research has explored the impact of language features on students' critical thinking skills, often highlighting gender differences in how male and female students approach argumentative writing.

Over the last five years, studies have shown a growing interest in understanding how language use in argumentative writing fosters critical thinking. These studies highlight that the integration of critical thinking into writing instruction can significantly improve students' abilities to present coherent arguments, evaluate evidence, and address counterarguments (Nejmaoui, 2019). While male and female students are often found to have comparable critical thinking skills, subtle differences in language use, argumentative strategies, and rhetorical structures can influence their writing performance.

For instance, in gender-focused studies, female students have been found to employ more connective language, using relational terms to ensure coherence and flow in their arguments. In contrast, male students often focus on directly presenting evidence and logic (Juhana, 2021). These distinctions suggest that gender may influence how students engage with critical thinking tasks, but both groups can reach similar levels of argumentative sophistication when properly guided through structured writing tasks.

The Grade XI students in SMK Telkom 2 Medan have been observed to master speaking more than writing, especially when discussing their hard skills and competencies in their departments. Vocational curricula are often designed to meet the specific needs of industries, where effective oral communication is critical for tasks like teamwork, customer service, and problem-solving. For instance, studies have

shown that curricula tailored to industry needs, such as English for Specific Purposes (ESP), focus heavily on developing speaking skills to prepare students for real-world workplace communication (Nasihin & Oktarini, 2022; Lo & Sanjaya, 2015). Unlike general education, vocational curricula often deprioritize academic writing in favor of practical communication. This is because vocational students are more likely to engage in workplace interactions rather than produce written reports or essays. Research indicated that this focus on practical communication leads to stronger speaking skills among vocational students (Aryawan, 2023; Dimitriu & Birnaz, 2021).

Thus, this chapter sets out the foundation for exploring the specific language features that contribute to critical thinking in argumentative writing. It investigated the variations between male and female students, drawing on recent findings in second language learning and critical writing pedagogies (Murtadho, 2021). By delving into these dynamics, this study aimed to provide insights that can inform writing instruction and help bridge gaps in critical thinking development across genders.

Gender disparities in academic achievements and cognitive abilities have been extensively researched, yielding inconclusive findings. Various studies indicate potential distinctions in the cultivation and application of analytical thinking skills among male and female learners, potentially attributed to differing schooling backgrounds, cognitive approaches, or socializing mechanisms. As argued by Tan (2017), critical thinking (CT) has emerged as a key educational goal aimed at boosting student achievement and improving the global competitiveness of many developing nations.

Gender differences were supposed to lead to mastering argumentative writing for vocational high school students, especially in SMK Telkom 2 Medan. More male students look better at writing argumentative technology-related texts than female students in the Computer and Engineering Department. While more female students seemed to be better at writing about culinary and cuisine than male students. Female students are often associated with cooking due to traditional gender roles, yet they experience occupational segregation in professional kitchens (Kiester, 2016). Despite

these challenges, there is a growing recognition of the need for equitable treatment and support for female culinary students, which can enhance their success in the industry.

Incorporating critical thinking into the educational curriculum involves a shift from traditional rote learning to more interactive, student-centered approaches. This may include problem-based learning, collaborative projects, and the use of real-world scenarios to challenge students' thinking. As developing economies continue to invest in education, the emphasis on critical thinking is likely to play a pivotal role in their progress and global competitiveness.

Critical thinking is crucial for generating new knowledge through problem-solving, advanced thinking, and informed decision-making (Cottrell, 2017; Kelley, 2014). It is linked to enhancing student learning in academics and preparing them to be adaptable, flexible, and resilient in real-world situations (Gambrill, 2019). Furthermore, CT is essential for helping students make better decisions, reduce their vulnerability to cognitive biases and fallacies, and employ evaluative thinking (Davies & Barnett, 2015) to achieve a thorough understanding.

It is imperative to explore whether these variances similarly influence the utilization of linguistic attributes in persuasive composition and the potential repercussions on critical thinking abilities. Numerous studies indicate potential distinctions in writing techniques between males and females. For example, men typically utilize more direct and structured arguments, whereas women often adopt a more collaborative and reflective writing approach (Klein & Meyer, 2020; Myers, 2019).

Despite the acknowledged significance of linguistic characteristics and analytical reasoning in scholarly writing, there needs to be more literature concerning the precise influence of these characteristics on the critical thinking abilities of both male and female students. Most existing research has focused on general writing proficiency or cognitive abilities without examining the interplay between language features and critical thinking in a gender-specific context.

Language features on the critical thinking skills of male and female students in argumentative writing written by a male student of Grade XI SMK Telkom 2 Medan can be seen in the following paragraph:

Smartphones in schools can help learning by giving students easy access to information and educational tools. They allow students to research topics online on the website, read e-books like Canva or .pdf files, and use learning apps, making lessons more interactive and fun. Smartphones also help students and teachers communicate better, creating a lively learning environment. Plus, using smartphones in school prepares students for a tech-focused future, helping them develop important skills like digital literacy.

However, smartphones can also be a big distraction in the classroom. Many students find it hard to resist checking social media, playing games, or texting during lessons, which can make it difficult to concentrate. This constant urge to multitask can hurt their ability to learn and remember information. Relying too much on smartphones might also prevent students from developing strong critical thinking and problem-solving skills, as they might choose quick online answers instead of thinking deeply about what they're learning. It's important to find a balance between the benefits and distractions of smartphones in education.

The paragraphs above show how the male writer proposed his ideas related to the advantages and disadvantages of using smartphones in schools. He started with the pro argument and ends with the contra argument concerning using smartphones in schools. He presented direct arguments and forgets to use assertive phrases. But both paragraphs are seen like his thoughts on the topic. He showed all benefits of using smartphones in the first paragraph by giving examples. Then he showed the disadvantages of using smartphones in the second paragraph by giving examples of how distracting smartphones are for students while studying.

In my opinion, smartphones have both positive and negative impacts on learning in schools. On the one hand, we will be able to improve learning through various educational access and applications, one of which is the My LMS application, which is used by Telkom 2 Medan Vocational School students. Students can use this application easily to get information or various learning materials.

On the other hand, smartphones can also disturb students' concentration. The presence of social media and entertainment applications can divert

attention from lessons, reduce productivity, and reduce face-to-face interaction between students.

The paragraphs above show how the female writer proposed her ideas related to the positive and negative impacts of using smartphones in schools. She started with the pro argument and ends with the contra argument concerning using smartphones in schools. She presented more cautious and expressive opinions. She showed all the benefits of using smartphones in the first paragraph by giving examples directly implemented at SMK Telkom 2 Medan. Then she showed the disadvantages of using smartphones in the second paragraph by giving examples that she can feel directly.

The research gap was identified based on three main areas that had not been well explored: (1) Limited Gender-Based Comparative Studies on Language Use, while some research highlighted gender-based differences in argumentative writing, there still needs to be comprehensive, comparative studies specifically focusing on the language features employed by male and female students. For example, research like that of Nejmaoui (2019) and Juhana (2021) touched on how students used evidence and constructed arguments but did not deeply explore the linguistic nuances, such as the use of connectives or hedging, that might differ by gender. This gap limited a full understanding of how language patterns might influence critical thinking skills across genders. (2) Underexplored Influence of Socio-Cultural Factors, most of the current studies focused on language and critical thinking skills within academic environments, but failed to address how sociocultural contexts shaped the language features that male and female students used in argumentative writing. Cultural factors, such as communication styles and gender norms in different societies, might have significantly impacted how students developed and applied critical thinking in writing. For instance, some cultures might encourage more assertive language in males and more relational language in females, but these influences were underexplored in academic settings (Hu et al., 2019). (3) Insufficient Cohort Studies on Critical Thinking Development, a research such as Murtadho (2021) demonstrated that interventions designed to enhance critical thinking could improve argumentative writing in short-term experiments. However, there was a scarcity of longitudinal studies examining whether these

improvements were sustained over time and how gender might play a role in the long-term development of critical thinking through language use. Addressing this gap would provide insights into whether male and female students benefited equally from critical thinking-focused writing instruction and how their language use evolved over extended periods.

These gaps indicated areas where further research could deepen our understanding of the interaction between language features and critical thinking skills in gendered contexts of argumentative writing.

1.2 Problem of the Study

Based on the background of the study, the problems of the study were formulated as follows:

1. How were language features used in the critical thinking skills of male and female students in argumentative writing?
2. Why were language features used on critical thinking skills in the argumentative writing of male and female students in the way they were?

1.3 Objectives of the Study

In relation to the problem of the study, the objectives of the study were:

1. To compare the use of language features on critical thinking skills of male and female students in argumentative writing.
2. To explore the use of language features on critical thinking skills of male and female students in argumentative writing as the way they were.

1.4 Scope of the Study

This study focused on students of SMK Telkom 2 Medan grade XI, as this group represented a critical stage in academic development where argumentative writing skills are extensively developed. The research was confined to the analysis of argumentative essays, and language features such as vocabulary choice, sentence

structure, cohesion, and logical connectors were examined. The study compared the argumentative writing of male and female students, limiting the scope to gender as a primary variable influencing language use and critical thinking.

1.5 Significance of the Study

This research is significant for educators, curriculum designers, and researchers in the field of language education and cognitive development. By identifying how language features influence critical thinking in argumentative writing and uncovering potential gender differences, this study can inform teaching practices that are more sensitive to gendered cognitive and linguistic tendencies. Furthermore, the findings may contribute to the development of more effective writing instruction methods that enhance critical thinking across diverse student populations.

The study also contributes to the growing body of literature on critical thinking in education by focusing on the often-overlooked role of language features in shaping argumentative writing outcomes. Given the current emphasis on fostering critical thinking skills in the 21st-century learning environment (Zohar & Schwartz, 2022), understanding the factors that influence these skills is imperative.