

EFL UNIVERSITY STUDENTS' ARGUMENTATION ABILITY IN ACADEMIC WRITING: A TEXT ANALYSIS OF TRANSITIVITY SYSTEM FROM GENDER PERSPECTIVE

Widya Rizky Pratiwi^{1*}, Hanna Sundari², Juhana³

^{1,3}Masters of English Education, Universitas Terbuka, Tangerang Selatan, Indonesia

²Department of English Education, Universitas Indraprasta PGRI, Jakarta, Indonesia
widya_pratiwi@ecampus.ut.ac.id

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ABSTRACT

Building arguments for academic writing, such as constructing justification for a research proposal, is regarded a complex task. Moreover, it is believed that male and female authors use and produce the language differently, including perhaps providing thesis and arguments for research. Extensive research on rhetorical analysis of students' theses has been widely conducted; however, little we know the way they state their claims from gender perspectives. To fill the void, this study aims to explore how Indonesian male and female authors construct and state their arguments in Introduction section for justifying their research from the perspectives of argumentation ability, underpinned by the concepts of transitivity system of SFL approach. Informed by qualitative descriptive research paradigm particularly text analysis, ten Introduction sections from selected English thesis proposals written by male and female authors at a university in Banten Province, Indonesia were subject to analyze. The finding of the research shows that either male students or female students expressed their arguments of their research topic and justification in almost similar fashion. The most frequent processes over the clauses were material process, relational process (attributive and identifying), and mental process (male: 59%, 20%, 11%; female: 49%, 20%, 14%). These findings underscore the common strategies employed by students, regardless of gender, in establishing their research objectives and setting the stage for their academic work. Such insights can be of significance for educators and researchers aiming to guide students in optimizing their academic writing skills, particularly in crafting compelling Introduction sections for thesis proposals.

Keywords: *Argumentation Ability, Transitivity System, Gender Analysis, Academic Writing.*

INTRODUCTION

Men and women are believed to use language differently. Since Robin Lakoff's 1975 ground-breaking work titled "Language and Women's Place," the study of how women and men use language has gained increasing attention, resulting in a wealth of research. Much of this research has focused on the language use of women and men, exploring phonological and lexical differences, as identified by Trudgill in 1972, as well as discourse functions, as highlighted by Holmes in 1995 (Argamon et al., 2003; Ishikawa, 2015).

The term "gender" itself was originally used to describe categories constructed based on societal notions of gender. Gender is understood as a social construction influenced by culture (Coates, 2016). However, this conventional understanding of gender is not without its challenges. Judith Butler (1990, as cited in Coates, 2016) suggests that

gender is something that is continuously "done" through repetitive actions and behaviors over time, gradually forming a sense of self. Gender is dynamic and actively produced in everyday human life. While gender is often seen as divided into binary pairs, such as male and female or feminine and masculine, Coates (2016) argues that this binary view oversimplifies the concept of gender, which is inherently plural and multifaceted. However, for the purposes of research, this study continues to refer to the traditional gender categories of men and women. Drawing from Coates (2016), differences in language use during conversations between men and women can be examined from the perspective of communicative competence, as outlined by Dell Hymes. This includes minimal responses, hedge expressions, short questions (question tags), questions, commands, swearing and taboo language, and praise. Women tend to employ more hedge expressions (e.g., "you know," "sort of," "like") and frequently offer compliments to their interlocutors. Conversely, men tend to use more swearing and issue more commands. Women also tend to use linguistic forms associated with politeness, often referred to as "women's style" and "men's style." However, it's crucial to note that Coates, (2016) emphasizes that differences in language use between men and women are also influenced by various other factors, such as social status, ethnicity, power dynamics, and more.

In the context of academic writing, such as reports, articles, and essays, it is believed that men and women also use language differently. Argamon et al. (2003) conducted an analysis of the British National Corpus (BNC) and found distinctions between documents authored by men and women. Female writers tend to use more pronouns, while male writers favor nouns. Similar results were also observed in (Ishikawa, 2015), which found that men tend to use more nouns when expressing social activities, economics, and scientific phenomena, while women tend to utilize specific pronouns and words to convey cognitive and psychological processes.

Moreover, research conducted by Read et al. (2004) suggested that male writers often display assertiveness in their writing, while female writers tend to exhibit a lack of self-confidence and a reliance on other people's viewpoints. In particular, studies on argumentative essay writing, such as the research conducted by Noroozi et al. (2020), have shown significant differences between essays written by male and female students. Female students tend to excel in aspects of positioning or expressing their opinions on essay topics. However, different results emerged from a syntactic complexity analysis and lexical examination of academic writing conducted by Tankó (2021). The findings indicated that male writers significantly outperformed female writers in terms of syntactic complexity

and certain lexical variables, particularly in the use of complex nominal phrases, sophisticated and varied lexicon, and adverb variations.

Although extensive research has been conducted regarding differences in language use among men and women, and there is a general consensus that male and female students exhibit variations in their essay and academic writing, there remains a need for more specific and comprehensive conclusions regarding the precise aspects in which these differences manifest (Read et al., 2004)

Gender analysis and language use extend beyond mere variations in essay writing; they also encompass numerous aspects of phonology and pragmatics. These linguistic differences span various dimensions, including linguistic features and interactions between speakers. However, it's noteworthy that the realm of formal writing, such as books or articles, has not received as much widespread attention in the context of gender studies (Argamon et al., 2003).

It is presumed that male and female students may offer distinct viewpoints, assessments, and arguments concerning essay topics. These differences could be shaped by each writer's unique personal experiences, cultural background, and knowledge of the world. These varied perspectives often find expression in clausal structures and the use of conjunctions within essays. Therefore, investigating the transitivity system within the framework of Systemic Functional linguistics Theory (henceforth SFL), which describes lexico-grammatical content and language activity in essays, becomes a pertinent research endeavor. SFL provides a comprehensive theoretical framework for understanding language from a functional perspective. Often referred to as the social theory of language in context (Emilia & Hamied, 2015), SFL underscores the dynamic interplay between language and its various sociocultural contexts (Schleppegrell, 2004).

One fundamental premise of SFL, as articulated by Derewianka and Jones (2016), lies in its exploration of the multifaceted functions and meanings of language in diverse contextual settings. Language, they contend, exhibits distinct variations and nuances depending on the context in which it is employed. For instance, the language used within scientific discourse markedly differs from the language employed in scientific literature. Similarly, language used in conversations among close friends contrasts sharply with language utilized in formal scientific presentations. Furthermore, spoken language diverges from written language, and in each instance, the speaker or writer navigates through the intricate web of linguistic choices within their language system, as elucidated by Halliday (1985, as cited in Derewianka and Jones, 2016). When considering the role of Systemic Functional Linguistics (SFL) as an analytical tool for language text analysis, Schleppegrell

(2004) illuminates that SFL serves as a comprehensive grammatical theoretical framework. Within this framework, SFL constructs are employed for the purpose of text analysis. Specifically, SFL enables the examination of the intricate relationship between language and the context within a given text. Furthermore, it allows for the identification of the influence of social experiences on the speaker or writer during the linguistic selection process.

This research specifically centers on the analysis of systemic aspects within the processes of transitivity and logical semantics in argumentative essays authored by both male and female student writers. At the clause level, the transitivity system can be further dissected into three critical aspects, as expounded by scholars such as Christie and Derewianka (2010) and Halliday and Matthiessen (2014). These three aspects encompass:

- a. **Processes:** These pertain to the various actions or activities encapsulated within the text, typically expressed through the verb group (verbal group).
- b. **Participants:** This dimension revolves around the individuals or entities involved in the actions, typically represented through groups of words, i.e., noun groups.
- c. **Circumstances:** Here, the focus shifts to the contextual situations or conditions that envelop the processes, often realized through adverbs and prepositional phrases, i.e., adverbial groups and prepositional phrases.

The following are the three constructions in the six types of process transitivity, as written by (Song, 2013).

Table 1. Six Types of Processes (Song, 2013)

Processes	Participants	Circumstances
Material processes	Actor-Process-Goal	Extent
Mental Processes	Sensor-Process-Phenomenon	Location Manner
Relational Processes	Attributive or identifying Carrier-Process-Attribute Identified-Process- Identifier	Cause Accompaniment Matter Role
Behavioral Processes	Behavior-Process	
Verbal Processes	Sayer-Process-Receiver- Verbiage	
Existential Processes	Process-Existence	

Within the process transitivity, six distinct types of processes are employed to convey various forms of human experience. The specific details are outlined in Table 2 below.

Table 2. Process Types (Christie and Derewianka, 2010)

Process Types	Aspect of Experience	Example
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Material Processes	Doing and happening in the material world – “outer” experience	We went to the bus.
Behavioral Processes	Physiological and psychological behavior	The crowd gasp ed.
Mental Processes	Processes of consciousness – ‘inner experience’	They realized that she was right. (cognition) I liked the beds and the lounge rooms. (affect) We noticed that a big wave was coming. (perception)
Verbal Processes	Processes of ‘saying’ and ‘meaning’	“stop” cried a commanding voice.
Relational Processes	Processes of ‘being’ and ‘having’ creating relationships between elements of experience	I was really excited. Cody had a kind heart but no money.
Existential Process	Existing	In ancient times, there was a minotaur.

METHOD

Guided by a descriptive qualitative framework, the present analysis aimed to investigate the argumentation found in the Introduction sections of thesis proposals written by both male and female students. A total of ten Introduction sections (five from males and five from females) were selected for analysis. The analysis was conducted using the Transitivity system, as proposed by Christie and Derewianka (2010) and Halliday and Matthiessen (2014), following the steps outlined by Emilia et al. (2017):

- a. The texts were analyzed at the clausal level, as example:

National education	is	education that	is	based on Pancasila and the 1945 Constitution of the Republic of Indonesia,	which	is rooted	in religious values and Indonesian national culture.
<i>Value</i>	<i>Process relational identifying</i>	<i>Token</i>	<i>Process relational identifying</i>	<i>Circumstances angle</i>	<i>Behavior</i>	<i>Process behavioural</i>	<i>Circumstances location</i>

- b. Components related to participants, processes, and circumstances were identified.
- c. The identified components were then labelled with specific roles, based on the process types within the Transitivity system.
- d. After the linguistic analysis was completed, an interpretation within the context of argumentation and gender was conducted.

To ensure the reliability of the qualitative data, an inter-rater reliability approach was employed. Two independent raters separately analyzed the data in different locations. In cases where discrepancies emerged, a process of cross-checking and discussion was undertaken to arrive at a final decision. This rigorous process enhanced the trustworthiness of the qualitative analysis.

RESULTS AND DISCUSSION

RESULTS

The primary aim of this analysis was to conduct a comprehensive investigation into the argumentation within the Introduction sections of thesis proposals, with a focus on examining the transitivity system in texts produced by male and female students. The dataset for this analysis consisted of 898 clauses extracted from the Introduction sections authored by both male and female students. These sections featured various process types within the transitivity system, including material, mental, verbal, relational, behavioral, and existential processes. Fascinatingly, within the Introduction sections crafted by both male and female students, a remarkable pattern emerged in the choice of process types. The most prominent process types observed were material processes, relational processes, and mental processes. For male students, these processes accounted for 59%, 20%, and 11% of the total processes, respectively. In comparison, female students displayed similar preferences, with 49% of material processes, 20% of relational processes, and 14% of mental processes, as illustrated in Tables 3 and 4.

Table 3. Process Types in the Introduction Section Written by Male Students

No.	Process Types	Occurrences	Percentage
1.	Material	262	58,88%
2.	Mental	49	11,01%
3.	Verbal	16	3,60%
4.	Relational Identifying	53	11,91%
5.	Relational attributive	37	8,31%
6.	Behavioral	16	3,60%
7.	Existential	12	2,70%
	Total	445	100,00%

Table 4. Process Types in the Introduction Section Written by Female Students

No.	Process Types	Occurrences	Percentage
1.	Material	222	49,01%
2.	Mental	66	14,57%
3.	Verbal	29	6,40%
4.	Relational Identifying	8	1,77%
5.	Relational attributive	83	18,32%
6.	Behavioral	35	7,73%

7.	Existential	10	2,21%
	Total	453	100,00%

The following one sample of material process is extracted from the Introduction sections written by female students.

On February 11th, 2022	Indonesian Education, Culture, Research, and Technology Minister, Nadiem Anwar Makarim	officially launched	a new curriculum namely Kurikulum Merdeka Belajar.
<i>Circumstances Time</i>	<i>Actor</i>	<i>Process material</i>	<i>Goal</i>

When material processes are found in the Introduction section of thesis proposals, it typically means that the writers are describing actions, events, or activities related to the research topic. Material processes involve doings and happenings, including actions and events taking place in the external world. In the context of an Introduction section, this might signify that both male and female writers are outlining the background, context, or key events related to the research problem or topic. It can also imply that the writers are highlighting the actions or activities that have led to the need for the research. Material processes can be used to provide a narrative or chronological account of the research's context, development, or significance. The following is the excerpt of material process from male student's Introduction section.

Discourse competence on the other hand	requires	knowledge of language and discourse
<i>Actor</i>	<i>Process material</i>	<i>Goal</i>

self-regulation	is	the influence of a person's environment and the combination of metacognition.
<i>Token/identified</i>	<i>Process relational: Identifying</i>	<i>Value/Identifier</i>

the words knowledge level of EFL students	at the university level	is	inadequate	to the level that
<i>Carrier</i>	<i>Circumstances location</i>	<i>Process relational: attributive</i>	<i>Attribute</i>	<i>Circumstances matter</i>

These conditions	would be	the vast homework	for English teachers	to accomplish
<i>Token/identified</i>	<i>Process relational: identifying</i>	<i>Value/identifier</i>	<i>Beneficiary</i>	<i>P material</i>

Then, here are the samples of the process relational of identifying from Introduction section written by male student.

The development of fluency	happens to be	the focus of this research
<i>Token/identified</i>	<i>Process relational: Identifying</i>	<i>Value/Identifier</i>

With such an inconducive condition where	students	in general	are being	self-conscious, unselfconfident, afraid	to make	mistake
<i>Circumstances Location</i>	<i>Carrier</i>	<i>Circumstances Location</i>	<i>Process relational: Attributive</i>	<i>Attribute</i>	<i>Process material</i>	<i>Goal</i>

A complete sentence uttered for each heading	is	enough	for lower-level students
<i>Carrier</i>	<i>Process relational: attributive</i>	<i>Attribute</i>	<i>Circumstances Angle</i>

In the context of thesis proposals, the use of the relational process in the attributive mode may involve describing the characteristics or attributes of key concepts or variables, emphasizing their relevance to the research. In the identifying mode, it may involve explicitly naming and identifying key researchers, theories, or previous studies, such as self-regulation and word knowledge level, that are essential for understanding the research context. The use of relational processes in a text, such as in the Introduction section of thesis proposals, helps establish a clear and coherent connection between different elements, making it easier for readers to follow the logical flow and relationships within the research. This, in turn, contributes to a more effective and engaging presentation of the research background and context.

Furthermore, concerning to the type of mental process, the Introduction sections written by both male and female students show a similar occurrence (11% and 14%), ranking third in frequency. The following excerpts are examples of clauses containing mental processes.

Indonesians	learn	English		
<i>Senser</i>	<i>Process mental</i>	<i>Phenomenon</i>		
since the most common problem that	students	face	in developing	the skill
<i>circumstances contingency</i>	<i>Senser</i>	<i>Process mental</i>	<i>Process material</i>	<i>Goal</i>
the participants	understand	the poems' meaning.		
<i>Senser</i>	<i>Process mental</i>	<i>Phenomenon</i>		
Children	should be educated	according to the features of nature and time.		
<i>Target</i>	<i>Process mental</i>	<i>Circumstances angle</i>		

DISCUSSION

From the clause analysis of Introduction section from thesis proposal, it was found that both male and female writers demonstrated the similar fashion of process types in which were material processes, relational processes, and mental processes as the most prominent types.

Material processes, verbal processes, and relational processes stand out as the central components within the transitivity system (Emilia et al., 2017). Material processes, often described as the "process of doing," encompass a broad spectrum of actions, activities, and events. They primarily pertain to outer experiences, involving interactions with the external world. In contrast, verbal processes involve the use of language and communication, while relational processes help establish connections between elements, thereby contributing to the understanding of inner experiences. This categorization aids in distinguishing between actions and interactions in the external world and the intricacies of inner experiences (Bavali & Sadighi, 2008; Emilia et al., 2017).

In the transitivity system, the mental process pertains to the construal of sensing, perception, cognition, intention, and emotion. It involves configurations of a process of consciousness, which typically includes a participant endowed with consciousness and, often, a participant entering into or created by that consciousness (Bavali & Sadighi, 2008).

This process is crucial in text analysis as it provides insights into how individuals perceive and process information, their intentions, and emotional responses. The presence of mental processes in the Introduction section of thesis proposals suggests that both male and female student-writers are engaging with the content at a cognitive and emotional levels. This could indicate that they are providing insights, perspectives, or evaluations related to the research topic, such as self-regulation, curriculum, etc. Mental processes can convey the writer's thought processes, perceptions, and emotional responses, which are particularly relevant in academic writing as they reflect the writer's engagement with the subject matter. In this context, it may signify that both writers are presenting their stance, understanding, or the significance of the research topic.

Furthermore, relational process serves the purposes of characterizing and identifying (Bavali & Sadighi, 2008). It is centered on highlighting connections, links or relationships between entities or concepts. Relational process can be expressed in two modes: attributive and identifying (Eggins, 2004). The attributive mode involves attributing characteristics or qualities to entities or concepts. In contrast, the identifying mode is focused on explicitly identifying or naming the entities and their relationships. The following samples are of relational process from the excerpts of female students.

For a thesis proposal, the combined use of material and relational processes in the Introduction or Background section is common and effective. It allows the writers to provide both concrete details about the research context (material processes) and to establish the intellectual framework and significance of the research (relational processes). These linguistic choices help set the stage for the research, offering a comprehensive understanding of what the study aims to achieve and why it is important to.

When the material process, mental process, and relational process of transitivity are the most frequent clauses in the Introduction section of thesis proposals, it signifies that the text is primarily focused on presenting and discussing actions, mental activities, perceptions, and relationships among entities or concepts. In this context, the Introduction section written by male and female students is likely emphasizing the background, purpose, and context of the research, as well as the cognitive and relational aspects that underlie the study's framework and objectives.

CONCLUSION

The objective of this research was to conduct a thorough analysis of the Introduction sections in thesis proposals, concentrating on dissecting the transitivity system in texts generated by both male and female students. Upon scrutinizing ten such sections, it became

evident that male and female students exhibited a remarkably similar approach to presenting their arguments and justifications for their respective research topics. In these Introduction sections, the dominant processes across clauses included material processes, relational processes (both attributive and identifying), and mental processes. The prevalence of these processes was notable in both male (59% material, 20% relational, and 11% mental) and female students' (49% material, 20% relational, and 14% mental) texts, as highlighted in the analysis.

The analysis of the transitivity system within the Introduction sections of thesis proposals provides valuable insights into the linguistic choices and priorities of male and female students. When material processes, mental processes, and relational processes are the most frequent clauses, it reflects the text's emphasis on presenting actions, mental activities, perceptions, and relationships among entities or concepts. This suggests that the Introduction section serves to provide context, background, and an understanding of the research's framework, objectives, and the cognitive aspects underpinning the study. These findings shed light on how students construct their academic writing in this specific section, revealing their linguistic preferences and choices. Understanding these patterns can be beneficial for educators and researchers aiming to enhance students' academic writing skills in the context of thesis proposal writing. Further research can explore how linguistic choices evolve across different sections of academic texts and how these patterns relate to the persuasiveness and effectiveness of the written argumentation.

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