

Theme-Rheme Pattern: Its Contribution to Cohesion and Coherence in The Students' Research Background

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ABSTRACT

Cohesion and coherence are pivotal aspects of academic writing. Although the analysis of these elements in academic texts has garnered considerable attention from researchers worldwide, there remains a notable paucity of studies focused on the research backgrounds of student texts, particularly with respect to their educational level. This study sought to explore how the effective utilization of Theme-Rheme structures can enhance the overall clarity and organization of students' research backgrounds. Employing a qualitative content analysis approach inspired by Krippendorff (2004), this study meticulously scrutinizes fifty samples of academic papers to discern the prevalence and variations of Theme-Rheme patterns and their impact on the logical flow of information. The thematic structure formulated by Halliday & Matthiessen (2004/2014) and the thematic progression framework by Bloor & Bloor (2004) were instrumental in analyzing the data. The findings reveal that students utilize a variety of theme types in their research backgrounds. The unmarked theme is the most prevalent, accounting for 55% in undergraduate theses (UT), 54% in master's theses (MT), and 59% in doctoral dissertations (DD). Following this, the textual theme is utilized at rates of 30% in UT, 34% in MT, and 31% in DD. The marked theme appears less frequently, comprising about 13% in UT, 11% in MT, and 8% in DD, while the interpersonal theme is rarely employed, with an approximate usage of 2% across all educational levels. This study sheds light on the significance of Theme-Rheme structures in academic writing and offers valuable insights for educators and students alike, who are striving to enhance the quality of their academic papers.

1. Introduction

Writing in a second language (L2) necessitates not only proficiency in the target language but also adept use of writing methods, tactics, abilities, and consistent practice in drafting, developing, and analyzing ideas (Frances, 2022, p. 27). However, underlying every research presentation lies a crucial yet often overlooked stage: the research background. The research background elucidates why a research topic merits investigation (Zamroni et al., 2023). It articulates the rationale behind the study, underscores the supporting theories, furnishes fundamental information within a broader field, and hints at potential research expansions. Thus, the research background holds paramount importance in elucidating the reasons for problem formulation (Zamroni et al., 2023).

This study aimed to uncover the types of thematic choice and thematic progression patterns employed by students in crafting research backgrounds. Final projects such as undergraduate theses, master theses, and doctoral dissertations represent significant

academic writing endeavors undertaken by students to fulfill their educational requirements. To effectively construct a research background, students must not only possess adequate subject knowledge but also exhibit cohesive and coherent writing skills.

Halliday & Matthiessen (2014) suggest that academic writing, particularly the background section, should exhibit sound construction, cohesion, and coherence to achieve unity. Cohesion can be achieved through various techniques such as conjunctions, word references, or repetition (Bloor & Bloor, 2004). Meanwhile, coherence hinges on the presence of a central topic, organizational structure, and appropriate word usage. Writing lacking cohesion and coherence renders the meaning obscure (Halliday & Matthiessen, 2014).

Despite the paramount importance of cohesion and coherence in writing, many students encounter challenges in writing cohesively and coherently. Siregar et al. (2023) found that numerous students struggle with organizing ideas cohesively and

coherently. Cohesion and coherence are intertwined with the organization of ideas. Zaim & Ningsih (2019) contend that organizing ideas is inseparable from writing and embodies cohesion and coherence concepts.

Halliday and Matthiessen (2004) assert that thematic structure (choice) and progression significantly contribute to organizing ideas in a text. Feri et al. (2023) note that speakers or writers endeavor to organize their thoughts effectively, making thematic structure pivotal in this process. Thematic structure comprises theme and rheme, with the theme initiating the message and the rheme providing additional information (Halliday & Matthiessen, 2004). Consequently, thematic choice and progression in academic writing, particularly in research backgrounds, play crucial roles in shaping text structure and quality. Students' ability to select and develop consistent, structured, and interconnected themes is imperative for ensuring cohesion and coherence in their research backgrounds.

In recent years, thematic progression has garnered considerable attention in academic writing studies. Gultom et al. (2020) and Arunsirot (2013) focused on thematic structure, emphasizing its role in enhancing students' writing skills and the significance of coherence in writing. Trung & Hoa (2018) and Linda et al. (2017) underscored the importance of thematic progression in organizing ideas, conveying meaning, achieving cohesion, and teaching writing across various text genres. They advocate for students' attention to thematic progression patterns, utilization of multiple themes, and incorporation of text themes to enhance cohesion and coherence in their essays. Thematic choice and progression are integral in creating cohesive texts (Hawes, 2015). and constructing logical relations between clauses to achieve coherence and cohesion (Susilowati et al., 2022). Additionally, Nurdianti et al. (2020) and Zamroni et al. (2023) examine and evaluate thematic progression patterns in students' research backgrounds, noting its potential to enhance coherence.

Despite the emphasis on composing effective texts, scant attention has been given to how students, especially in higher education, manage themes across paragraphs to maintain unity, or systematically select appropriate themes in research backgrounds to ensure clarity. Previous studies have focused on linguistic aspects in academic writing, with limited exploration of Theme-Rheme patterns in research settings. While prior research has concentrated on syntactic or semantic analyses, the thematic choice and progression analysis in research backgrounds remains underexplored.

Therefore, this study aims to bridge this gap by analyzing thematic choice and progression in research backgrounds written by undergraduate, master, and doctoral students.

Two primary questions guide this study:

- 1) What thematic choices do undergraduate, master, and doctoral students employ in their research backgrounds?
- 2) What thematic progression patterns do students of each academic level utilize in writing research backgrounds?

2. Literature Review

This section reviewed some of the current research literature. The first subsection explained the concepts of systemic functional linguistics. The review then turns to the specific context of theme-rheme pattern. The last subsection shows the current study of thematic choice & progression. All these concepts need to be defined with theoretical guidance and existing literature to achieve the research objective.

2.1 Systemic Functional Linguistics (SFL)

SFL is a linguistic stream examining how to choose language forms in the context of using language in a text (Halliday & Matthiessen, 2014). It provides a theoretical framework for understanding how language functions in texts (Halliday & Matthiessen, 2014; Bloor & Bloor, 2004).

Unlike traditional grammar, SFL views language as a system with different functions, including ideational, interpersonal, and textual metafunctions (Halliday & Matthiessen 2014; Bloor & Bloor, 2004). However, this study only focuses on the textual metafunction, specially on text structure, coherence, and cohesion. These components are crucial in academic writing, as they contribute to the clarity and organization of research backgrounds (Siregar et al., 2023; Feri et al., 2023).

2.2 Theme-Rheme Pattern

In SFL, clauses are analyzed in terms of their theme-rheme structure, where the theme initiates the message, and the rheme provides further information or elaboration (Halliday & Matthiessen, 2014). Thematic progression patterns, such as constant theme pattern (CTP), linear theme pattern (LTP), split theme pattern (STP), and derived theme pattern (DTP), play a vital role in organizing textual meaning (Bloor & Bloor, 2004). These patterns offer insights into how themes evolve and contribute to the coherence and cohesion of the text (Feri et al., 2023).

Previous studies have shown that thematic choice and progression analysis can effectively reveal students' writing abilities and the challenges they encounter in maintaining coherence (Herdiawan, 2017; Sayukti & Kurniawan, 2018; Istibsyaroh et al., 2020; Nurdianti et al., 2022; Feri et al., 2023). By understanding these patterns, researchers can identify recurring themes and structural elements that contribute to effective academic writing.

2.3 Current Study of Thematic Choice & Progression

The thematic choice and progression as an analytical tool have several objectives that are (1) to explore the students' problems in writing, (2) to investigate the students' writing ability, and (3) to investigate the thematic choice and progression in students' academic writing contributing to cohesion and coherence text. It can be seen from several previous studies.

Herdiawan (2017) conducted a study on the background of undergraduate thesis. The study aimed to explore the students' problems in writing research background and has identified at least four problems encountered by students. They are textual theme, concordance between theme and rheme, incomplete rheme, and empty rheme. Similarly, the study conducted by Sayukti & Kurniawan (2018). They analyzed students' recount text by investigating the students' writing ability and found that there were still several spelling, punctuation, and capitalization mistakes in the students' recount text. These studies indicate that this analytical tool can contribute to evaluate the problems of students and in writing academic text and improve students' writing ability.

Next, Priyatmojo (2021) and Rahayu et al., (2020) employed this tool differently. They analyzed the thematic choice & progression pattern in students' recount and narrative texts. These studies showed that thematic choice contributed to cohesion text, meanwhile thematic progression patterns contributed to the coherent development of a text. Thus, thematic choice and thematic progression pattern as an analytical tool are crucial in achieving communicative effectiveness in a message. Moreover, in a different genre, Feri et al., (2023) also employed thematic choice & progression analysis to explore the students' expository essays of IELTS academic writing based on their level of proficiency. This study highlights that proficiency characterizes writers in organizing and developing in writing as reflected through thematic choice and progression. They found that there are several factors contributing to develop theme-rheme pattern in a text. They are level of proficiency, educational background, culture, etc. Furthermore, the other important point of these tools are genres of the text (Halliday & Matthiessen, 2014; Bloor & Bloor, 2004).

In recent decades, thematic choice and thematic progression patterns analysis have attracted the attention of many researchers. These analysis have been conducted in several genres such as narrative text (Arigusman, 2018; Jelimun et al., 2020), descriptive text (Potradinata, 2018), recount text (Hajar & Kurniawan, 2023; Holik & Gunawan, 2019; Priyatmojo, 2021), news text (Putri, 2018), undergraduate thesis (Babaii et al., 2016), exposition text (Rakhman, 2013), research abstract (Yuned, 2016),

essay (Liu et al., 2015), novel (Yaqub et al., 2021), short story (Dashela, 2021), argumentative text (Bi, 2023), and scientific article (Alaa et al., 2018; Leung, 2018).

All these studies have highlighted the importance of thematic structure in academic writing. Although previous studies have provided valuable insights into thematic choice and progression pattern in various genres, lack of study have focused on research background. Many of these studies have focused on descriptive analysis without delving into the systematic selection and development of themes in research background. This present study builds upon existing research by specifically examining thematic choice and thematic progression pattern in the context of research background, thereby addressing a significant gap in the literature. Thus, the difference of the present study lies on the object of study. This study analyzed the thematic choice and progression of students' research background by considering educational background of students.

3. Method

This study aimed to analyze the thematic structure in the research backgrounds of students' undergraduate theses, master's theses, and doctoral dissertations using qualitative content analysis. According to Krippendorff (2004), content analysis is a method that interprets texts comprehensively to make replicable and valid inferences related to their contextual use, focusing on the essential meanings aligned with the research's questions, objectives, and conceptual framework. This approach was employed to identify and understand patterns of themes in students' research backgrounds.

3.2 The Collection of Data and Participants

The participants of this study were research backgrounds written by undergraduate, master, and doctoral students that have been published. The data were collected in the digital library of the state teacher college over a span of the last ten years. They were written in English. They are divided into two groups which are the English Department at the undergraduate and master levels. Because there is no doctorate-level of English Department at the college, this study chose the Language Science Department at the doctorate level because at <https://eprints.uny.ac.id>, doctoral dissertation written in English was only found in this department.

The initial dataset comprised 314 research backgrounds from the English Department (176 from undergraduates and 138 from master's students) and only 10 that fit the categories from the Language Educational Science Department at the doctoral level. As stated by Bloor & Bloor (2004), thematic choice and progression analysis can be applied in English text. From this pool, a purposive selection was made to choose 25 undergraduate thesis backgrounds, 15 master's thesis backgrounds, and 10 doctoral

dissertation backgrounds, resulting in a total sample size of 50 research backgrounds for detailed analysis. According to Bodo (2021), in qualitative research, researchers are very closely related to contextual factors. So, the purpose of sampling in this case is to collect as much information as possible from various sources and buildings (construction). Thus, the aim is not to focus on differences which will later be developed into generalizations. The goal is to detail the specificities present in a unique context concoction. Therefore, he added that in qualitative research, there is no random sample, but a purposive sampling (Bodo, 2021, p. 15)

Due to the limited data published at <https://eprints.uny.ac.id>, this study only uses small data, especially in doctoral dissertations written in English. The present study acknowledges several limitations. First, the selection of only 50 research backgrounds may not fully represent the diversity of thematic choices and progression patterns across all academic writings in the college. Second, the exclusive focus on research backgrounds from the English and Language Science Departments might limit the generalizability of the findings to other disciplines.

3.3 Research instrument

In analyzing the data, it is known that in qualitative research, the researchers themselves acted as the main instrument in describing, analyzing, or interpreting data (Bodo, 2021). Inter-researcher triangulation was used to ensure the validity of the data analysis. The researchers asked for help from experts who had a background in assessing the results of the data analysis that had been carried out by the researcher

Furthermore, the researchers followed the thematic choice theory developed by Halliday & Matthiessen (2004/2014) and thematic progression developed by Bloor & Bloor (2004). In order to uphold the credibility and dependability of this study, the researchers took

meticulous care to construct and validate the analysis guidelines with input from experts. Additionally, the data analysis underwent through scrutiny and verification procedures.

3.4 Unit of analysis

The subjects of this study were research backgrounds. Meanwhile, the objects were thematic choice and progression in research backgrounds of undergraduate thesis (UT), master thesis (MT), and doctoral dissertation (DD). The unit analysis of this study was words, phrases, and clauses of research backgrounds of UT, MT, and DD. Each clause was analyzed by using thematic choice theory developed by Halliday & Matthiessen and thematic progression theory developed by Bloor & Bloor (2004). The thematic choice is related to the types of themes used by students in their research backgrounds. Each word/phrase of the theme in a clause was categorized according to the type of theme. There are three types of themes which are topical, interpersonal, and textual theme (Halliday & Matthiessen, 2014). Generally, a clause consists of at least one clause and one simple topical theme. The use of theme in a work of writing varies according to the authors. If the authors only use one theme in their writing, the theme is called a simple theme. If the authors use more than one theme in their writing, it is categorized as multiple themes. Meanwhile, thematic progression is a connecting pattern between the theme and rheme of a clause. According to Bloor & Bloor (2004), there are four types of theme-rheme patterns which are constant theme pattern, linear theme pattern, split theme pattern, and derived theme pattern.

3.4 Procedure

This present study employed several stages. They have followed the content analysis designs developed by Krippendorff (2004) as shown in the Figure 1.

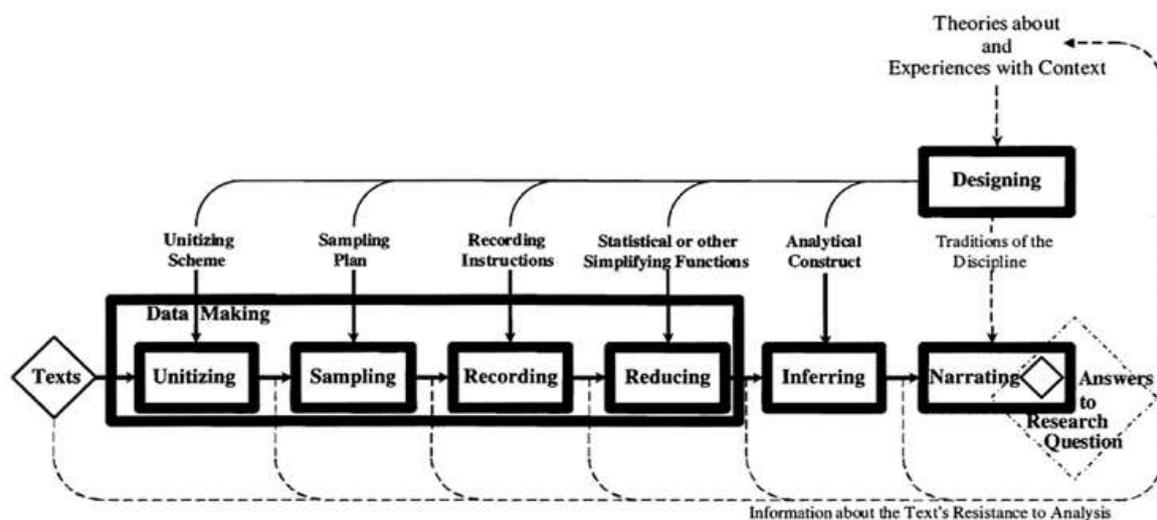


Figure 1. The Components of Content Analysis

“Together, the first four components constitute what may be summarily called data making-creating computable data from raw or unedited texts. The fifth components, abductively inferring contextual phenomena, is unique to content analysis and goes beyond the representational attributes of data (Krippendorff, 2004, p.83).

Based on the research design of content analysis above, this study employed several stages. First, the researchers collected data in Microsoft Word, consisting of text from the research backgrounds of students at all levels of education. Second, the researchers read and divided each paragraph into clauses. The aim was to facilitate the identification of thematic choices and progressions of the research backgrounds. Third, the themes and thematic progression patterns in each clause were identified and classified according to the types of themes. The number of each type of theme and pattern used in the research backgrounds of students was calculated. The

researchers then provided percentages for each theme and pattern, giving an overview of the extent to which these themes and patterns appeared in the data. Furthermore, the researchers provided interpretations of these findings. This includes why certain themes emerged, how the patterns of thematic progression patterns reflect the structure of the research backgrounds, and whether the findings are consistent with relevant literature or theories. Finally, conclusions were drawn based on the interpretation of the results. The researchers summarized the main findings and evaluated the implications of the research for the research questions or initial research objectives.

4. Results

This section presents research findings based on the research questions which are: (1) to reveal the thematic choice types used by students of each level in their research backgrounds, and (2) to map the thematic progression patterns of research backgrounds written by undergraduate, master, and doctoral students.

4.1 Thematic Choice

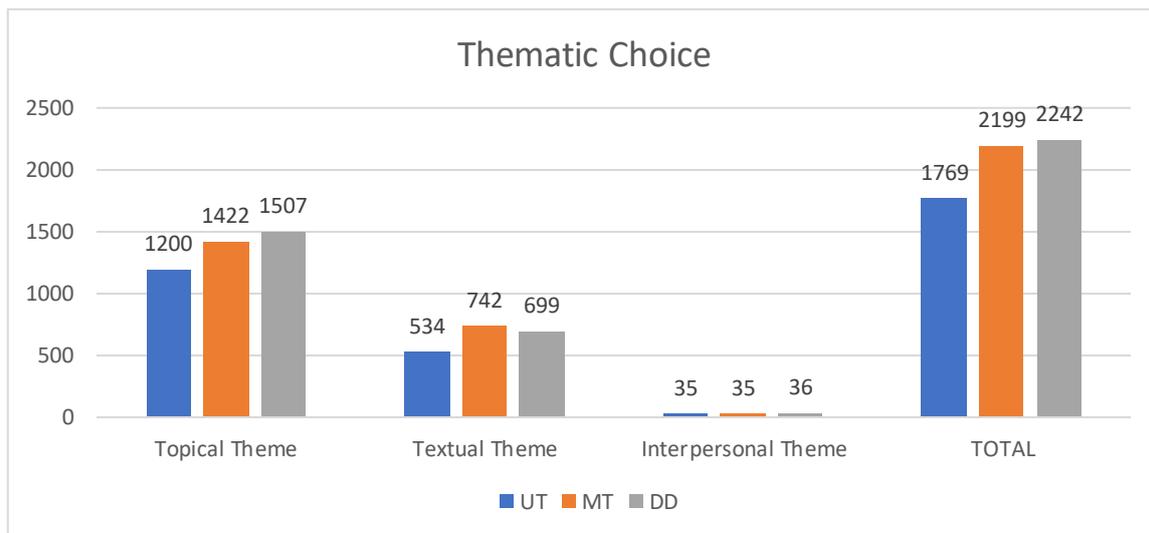


Figure 2. Thematic Choice Types

The figure 2 reveals that there are 2242 themes employed in doctoral dissertations, 2199 themes in master thesis, and 1769 themes in undergraduate thesis. These themes are categorized into three types: topical, textual, and interpersonal. Topical themes, focusing on the subject or main topic, are prevalent across students' research backgrounds at all educational levels, establishing the core focus of the discourse. Textual themes organize the structure of the text, guiding the reader through the argument and ensuring coherence. Interpersonal themes express the writer's stance and engage with the reader, often reflecting opinions or framing the argument. Each type serves a specific

purpose, enhancing clarity, organization, and engagement in academic writing.

4.1.1 Topical theme

The topical theme is divided into two types. They are unmarked and marked topical themes which were found in 1507 occurrences in doctoral dissertations, 1422 occurrences in the master thesis, and 1200 in the undergraduate thesis. This theme is divided into two categories which are marked and unmarked topical themes. These themes have several units which are differently realized by students based on the level of proficiency. The differences between unmarked and marked units are presented in the following table.

Table 4. Topical Theme Units in Students' Research Background

Units of Topical Theme	Educational Background			TOTAL
	UT	MT	DD	
Unmarked Topical Theme				
Noun	140 (14%)	175 (15%)	167 (12.86%)	482
Pronoun	276 (28%)	288 (24%)	241 (18.55%)	805
Noun Phrase	421 (43%)	523 (44%)	686 (52.81%)	1630
Existential 'It'	15 (2%)	41 (3%)	36 (2.77%)	92
Existential 'There'	41 (4%)	39 (3%)	14 (1.08%)	94
Extending NP	22 (2%)	29 (2%)	25 (1.92%)	76
Group or Phrase Complex	28 (3%)	40 (3%)	69 (5.31%)	137
Embedded WH	3 (0.58%)	6 (1%)	9 (0.69%)	18
Embedded Non-Finite	27 (3%)	35 (3%)	48 (3.70%)	110
Embedded That	-	-	-	0
Predicator	-	-	1 (0.08%)	1
TOTAL	973	1176	1299	3448
Marked Topical Theme				
Subordinate Clause	34 (15%)	34 (14%)	33 (17.19%)	101
Prepositional Phrase	180 (80%)	196 (80%)	148 (77.08%)	524
Adverbial Group	11 (5%)	16 (7%)	11 (5.73%)	38
TOTAL	225	246	192	663

Table 4 presents a detailed description of unmarked and marked units. In terms of Unmarked units, the Noun phrase is commonly realized by students, and the prepositional phrase as marked topical theme unit is commonly realized by students in their research background. The example of noun phrase as unmarked topical theme unit and prepositional phrase as marked topical theme are presented in the following.

- (1) *English as a foreign language plays an important role in Indonesia's curriculum.* (UT 1)
- (2) *They should be able to use English communicatively both in spoken and written.* (DD 4)
- (3) *In Indonesia, the government issued the act of National Education System No. 20/2003 about the function and goal of national education to develop students' skills, build their character, and build civilization of a dignified nation.* (MT 3)
- (4) *Besides, the appropriate materials do not only contribute to the writing instructions and the students' performance,* (UT 8)

- (5) *Moreover, since the students are prepared to be an English teacher, it is important for them to experience the use of writing strategies as well as knowing well the appropriate strategies for them.* (MT 9)

Examples (1) and (2) are the examples of a noun phrase (1) and pronoun (2) as the unmarked topical theme unit. The theme of this clause is *English as a foreign language* which functions not only as a subject but also as a starting point of the clause that should be developed in the next clause.

Meanwhile, examples (3), (4), (5) illustrate the examples of prepositional phrase (3), adverbial group (4), and subordinate clause (5) as marked topical theme unit. The theme of the clause employs prepositional phrase (*In Indonesia*).

4.1.2 Textual Theme

Textual theme is made up of structural conjunction, conjunctive adjunct, and relative. A summary of the analysis data is presented in the table 5.

Table 5. Textual Theme Units in Students' Research Background

Units of Textual Theme	Educational Background			TOTAL
	UT	MT	DD	
Structural Conjunction	264 (50%)	401 (56%)	402 (58.52%)	1067
Conjunctive Adjunct	161 (30%)	186 (26%)	129 (18.78%)	476
Relatives	104 (20%)	135 (19%)	156 (22.71%)	395
TOTAL	529	722	687	1938

From **Table 5**, students realized all types of textual themes. There are 687 occurrences in a doctoral dissertation, 722 occurrences in the master thesis, and 529 occurrences in the undergraduate thesis. Structural conjunction is commonly found in the research background of each level. Examples of textual theme units are presented in the following.

- (1) *It happened in the class **since** the students were participated passively in teaching and learning process of speaking. (UT 1)*
- (2) ***Additionally**, in Indonesia, based on Law No. 20/2003 on National Education System, the teacher are expected to use teaching approach and method. (MT 1)*
- (3) *The evaluation result is then as the basis in redesigning a new maritime English syllabus*

*specified for Deck Officer Class IV **which** is hopefully compatible with IMO regulation. (DD 1)*

In example (1), this clause employs *since* which is categorized as a structural conjunction to connect the independent clause and dependent clause. In example (2), *additionally* which is a conjunctive adjunct is to connect the clause before and the next clause. In the example (3), the textual theme unit used is *which*.

4.1.3 Interpersonal Theme

Results of analysis data also reveal that there are differences in interpersonal theme units in the students' research background of each level. Those are presented in the following table.

Table 6. Interpersonal Theme Units in Students' Research Background

Interpersonal Theme Units	Educational Background			TOTAL
	UT	MT	DD	
Mental Clause	25 (83%)	44 (94%)	21 (53.85%)	90
Modal Adjunct	5 (17%)	2 (4%)	14 (35.90%)	21
Finite	-	1 (2%)	3 (7.69%)	4
Vocative	-	-	1 (2.56%)	1
TOTAL	30	47	38	115

The interpersonal theme is rarely found than others. This theme is only found in 115 occurrences as a whole. Table 6 above shows that mental clause as an interpersonal theme unit is commonly realized by students in their research background. Examples of interpersonal units are presented in the following.

- (1) *It becomes a problem when learners cannot process their ideas into a text, even **sometimes** they do not know what to do in the beginning of writing. (UT 3)*

(2) ***The researcher believe that** all of them are important and needed. (MT 6)*

(3) ***The teachers, materials developers or researchers** have established and articulated the principles providing the roots of the materials: the researcher must create a framework to support the different stages of development. (DD 1)*

(4) *Why does this learner need to learn a foreign language.* (DD 2)

In example (1), *sometimes* of this clause is categorized as a modal adjunct. In example (2), *The researcher believe that* is categorized as a mental clause. In example (3), *The teachers* are categorized as

a vocative. Meanwhile, in example (4), *does* is categorized as a finite. Additionally, simple and multiple themes have also differenced in students' research backgrounds. A summary of simple & multiple themes of each level is presented in the following table.

Table 7. Simple & Multiple Themes in Students Research Background

Texts	Simple Theme	Multiple Theme			TOTAL
		Textual + Topical	Interpersonal + Topical	Textual + Interpersonal + Topical	
DD	785 (52.0%)	689 (45.6%)	31 (2.1%)	6 (0.4%)	1511 (100%)
MT	647 (45.6%)	726 (51.1%)	42 (3.0%)	5 (0.4%)	2064 (100%)
UT	640 (51.2%)	531 (45.8%)	33 (2.7%)	4 (0.3%)	1848 (100%)
	2050	1968	106	15	4139
TOTAL			2089		

Table 7 shows that the students use multiple themes more than simple themes, in which textual + topical combination is commonly realized by students of each level. Examples of simple & multiple themes are presented in the following.

- (1) *The Indonesian Ministry of Education and Culture applies a new curriculum to replace the previous curriculum, Kurikulum Tingkat Satuan Pendidikan (KTSP) or School Based Curriculum.* (UT 7)
- (2) *Therefore, the selection of proper strategies needs to be considered in order to minimize the*

problems related to the teaching and learning activities in writing class. (MT 9)

4.2 Thematic Progression (TP)

According to Bloor & Bloor (2004), there are four thematic progression patterns which are CTP, LTP, STP, and DTP. Based on data analysis, all these patterns were applied by the students of each level. A summary of thematic progression patterns in students' research backgrounds is presented in the following table.

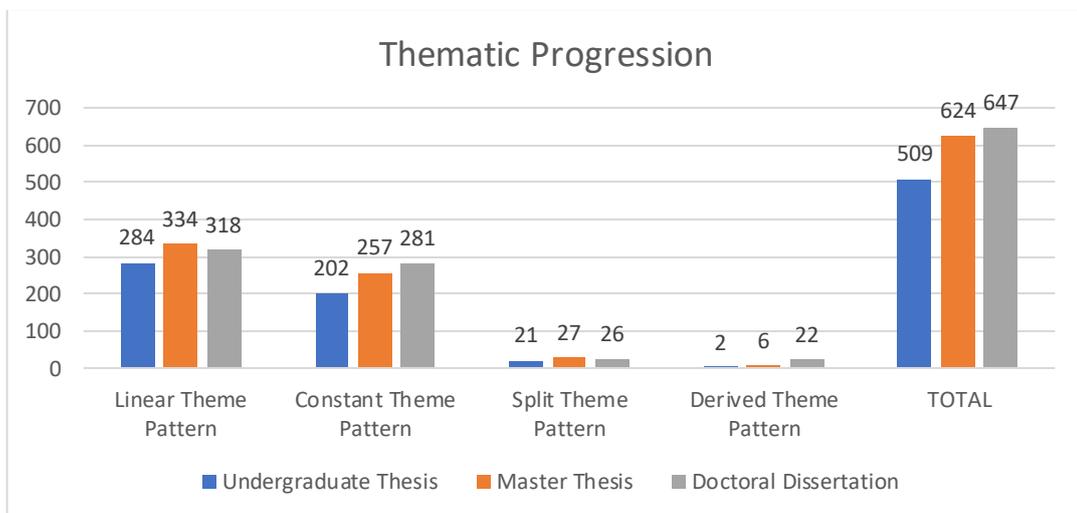


Figure 7. Thematic Progression Patterns

The table above shows that LTP is commonly realized by students in their research background and followed by CTP.

5. Discussion

This section discusses research findings that have been presented in the findings which show that there are several points related to the research purposes that are thematic choice and progression patterns in students' research backgrounds. Given the first and second questions, findings show that different types of theme and thematic progression patterns were realized by students of each level in their research background. However, findings show that the differences only occurred in terms of frequency. For example, topical themes are more commonly found than interpersonal and textual themes in students' research backgrounds.

5.1 Thematic Choice

To distinguish between the theme and rheme with clarity, textual meaning must be identified (Yunita, 2018). The occurrences of all types of themes unmistakably illustrate the three functions of language which are to organize and form itself, to convey ideas or experiences, and to establish relationships (Halliday & Matthiessen, 2014). In addition, the level of proficiency is one of the aspects influencing in choice of a theme. Although increased proficiency does not necessarily result in an improvement in all facets of thematic organization, it influences students' choice of thematic choice. Findings show that doctoral students can write longer texts than master and undergraduate students which affects the number of themes used by students in their research background. It indicates that the writing ability of doctoral students is higher than others.

In terms of thematic choice, Findings reveal that all types of themes are realized by students with different occurrences. A topical theme is commonly found in students' research backgrounds. A textual theme comes after it. Meanwhile, the interpersonal theme is rarely found in their research backgrounds. These findings are supported by Bloor and Bloor (2004) who noted that all clauses in English incorporate what is known as a topical theme (and sometimes other types if theme as well).

5.1.1 Topical Theme

The topical theme is commonly used by students. Halliday and Matthiessen (2014) classified this theme into two types which are unmarked and marked which is always realized by subject, predicator, complement, or circumstantial adjunct (Bloor & Bloor, 2004). This is supported by Sayukti and Kurniawan (2018) who found that the theme is not always realized by the subject of the clause. If the theme is realized by subject, it is categorized as an unmarked topical theme and if the theme is realized by predicator or complement or

circumstantial adjunct, it is categorized as a marked topical theme.

Our findings show that it is commonly found in students' research backgrounds of each level. Undergraduate are at the initial stages of learning how to structure academic texts. The use of unmarked topical themes often corresponds with their attempts to present information directly and clearly, adhering to expected norms of academic writing without complex structuring. According to Ebrahimi and Ebrahimi (2012), students aimed to maintain grammatical accuracy and minimize errors by adhering to conventional English structure. Unmarked themes are straightforward, making it easier for readers to follow the progression of ideas. Meanwhile, marked topical themes might be used less frequently at this level due to their complexity and the subtler nuances required in foregrounding less obvious aspects of the research topic. According to Feri et al., (2023) the varied usage of unmarked and marked topical theme, ranging from high to low frequency, suggests that students tend to favor simplistic structures, characterized by noun phrase + verb phrase patterns, in their writing. The number of unmarked theme outran marked theme indicating that topical theme theme occupied both thematic and subject position and it may also be indicative of simple structure of students' writings with different levels of language proficiency. This supported by Jalilifar and Alipour (2017). They found that the majority of unmarked topical themes occupied both the thematic and subject positions.

However, when used, they can reflect an undergraduate's effort to emphasize particular points or to follow specific instructions from academic writing courses that encourage variety in sentence beginnings for engagement and clarity. Master students, with a greater depth of subject knowledge and more experience in academic writing, use unmarked topical themes to maintain clarity and directness but with more sophisticated content. The thematic choice are developed by students proficiency level. Master's students' familiarity with their topic allows for more nuanced and varied marked topical themes, reflecting a higher level of critical engagement with the material. They are better equipped to manipulate thematic choices to highlight specific aspects of their argument or to introduce complex ideas more subtly. Last, doctoral students demonstrate a high level of proficiency in utilizing both unmarked and marked topical themes. Their advanced knowledge and the original research contribute to a more complex use of thematic choices (Feri et al., 2023). Unmarked themes continue to provide clarity and directness, while marked themes are strategically used to foreground novel findings, theoretical perspectives, or to intricately weave together various strands of their argumentation, reflecting deep engagement with the material.

Furthermore, the high occurrences of topical theme indicates that they commonly employed declarative clauses in their research background and also effectively oriented the readers to what their text are about. It is supported by [Eggins \(2004\)](#) who noted that unmarked topical theme aid in grasping the message's premise. Furthermore, an unmarked topical theme that a single element is highly important to clarify the text's point of origin ([Gunawan & Aziza, 2017](#)). It facilitates students in comprehending how the message is structured, and this is also a key tool in assisting their comprehension of a text's coherence. This finding is in line with the research conducted by [Nugraha and Ridwan \(2022\)](#), [Rahayu et al., \(2020\)](#), [Gunawan and Aziza \(2017\)](#), [Hanh \(2021\)](#), [Alyousef and Alzahrani \(2020\)](#), [Thalib \(2014\)](#), and [Feri et al., \(2023\)](#). In contrast, the studies were conducted by [Susilowati et al., \(2022\)](#), [Arigusman \(2018\)](#), and [Herdiawan \(2017\)](#) who found that textual theme is commonly found in their study. It is not too surprising because the characteristic of the research background basically employs a declarative clause that uses the subject as the theme ([Bloor & Bloor, 2004, p....148](#)). [Feri et al., \(2023\)](#) emphasize that students may ensure their sentences are grammatically acceptable by placing the subject in the theme position. Considering that EFL students' writing abilities are different from native speakers, this is a simple way to create canonical English phrases that adhere to the 'Noun Phrase-Verb Phrase' pattern ([Ebrahimi, 2012](#)). Findings reveal that unmarked topical theme is commonly realized by nouns, pronouns, and noun phrases as subjects in students' research background. It is because these units are the most typical way to give readers information ([Thalib, 2014](#)). In this study, it was observed that at the undergraduate, the use of nouns and noun phrases is relatively balanced. However, a significant shift occurred at the Master and Doctoral levels, where Noun Phrase became the dominant choice. This signifies that students at higher educational levels tend to enhance their skills in employing more complex sentence structures and detailing themes more intricately. Noun Phrase, as a thematic unit, allows for richer expression and more detailed conveyance of information. According to [Feri et al., \(2023\)](#), noun phrase is typically related to the statement of issues provided in the students' writing which have to be developed by them in their essays. Afterwards, the use of these themes makes students easier to develop their ideas in writing research background. Meanwhile, the use of pronouns is to avoid repetition.

The subject of the clause which is realized by an unmarked topical theme may also be a nominal group complex ([Bloor & Bloor, 2004., p.148](#)). It employs paratactic conjunctions such as 'and' or 'or' to connect two or more single nominal groups (noun, pronoun, or noun phrase). In modern grammar, they are called compound conjunctions which function to connect two equivalent things (noun *and/or* noun, pronoun *and/or* pronoun, noun phrase *and/or* noun phrase). According

to [Eggins \(2004\)](#), a brief nominal group is said to be typical of conversation, while an expanded nominal group is said to be typical of academic writing discourse. In this study, it is observed that there is an expanded nominal group contributing significantly to students' research background. It is embedded non-finite as an unmarked topical theme unit.

Additionally, the variation in the use of unmarked topical units, such as existential 'it' and 'there', extending NP, and group or phrase complex, provides insights into the flexibility in choosing structures without marking. Existential 'it' and 'there' decreased at the doctoral level, indicating a heightened awareness of more nuanced and complex structural alternatives. Meanwhile, the increased utilization of extending NP and group or phrase complex at this level may reflect a greater ability to convey information with richer and more intricate contexts. Moving to the use of embedded WH and Non-Finite, although representing a small proportion, the use of these units implies the use of more complex and specific sentence structures. So, the increase in the use of embedded non-finite at the doctoral level suggests a tendency to opt for less common sentence structures that can provide additional depth and precision. According to [Thalib \(2014\)](#), it is likely that these units are embedded in the students' writing to make the reader anticipate the next clause and provide additional depth and precision. The relatively low usage of embedded WH at all educational levels indicates that the use of these clause is more limited and may be required in specific contexts.

Our findings also show that predicator is only one occurrence found in the research background of doctoral students. It indicates that students use more declarative clauses than imperative clauses. The use of a declarative clause is to provide viewpoints or arguments ([Feri et al., 2023](#)) while the use of an imperative clause is to persuade and instruct someone to do something ([Bloor & Bloor, 2014](#)). So, this finding is not too surprising because the characteristic of the research background is to provide the arguments, not to persuade or instruct someone. This finding is supported by [Thalib \(2014\)](#) and [Feri et al., \(2023\)](#).

In terms of marked topical theme, findings reveal that the use of this theme is lower than the use of unmarked topical theme. It is supported by [Yunita \(2018\)](#), [Thalib \(2014\)](#), [Jalilifar et al. \(2017\)](#), [Feri et al. \(2023\)](#), [Gunawan and Aziza \(2017\)](#), and [Rahayu et al. \(2020\)](#). This finding indicates that students tend to use simple writing structures. It is in accordance with the characteristics of research background, in which students must be able to simplify their writing so that readers can capture the arguments or messages that they build in their research background. Thus, they must be careful in using complex sentences.

Findings show that the prepositional phrase, as a marked topical theme unit, was commonly used by

students at all levels, followed by the subordinate clause and adverbial group. It is observed that the dominance of the prepositional phrase reflects a preference for making themes with more complex sentence structures. The prepositional phrase provides significant flexibility in presenting detailed and contextual information (Bloor & Bloor, 2004). This preference is most pronounced at the undergraduate and master levels, suggesting that students at these levels may be more focused on using well-organized and clear sentence structures in their research background. The subordinate clause plays a crucial role at the undergraduate, master, and doctoral levels, indicating a tendency to employ more complex sentence structures in marking themes. Meanwhile, the adverbial group provides additional variation, indicating that students tend to choose sentence structures that can add nuances to the discussed themes.

5.1.2 Textual Theme

Textual theme functions to link ideas in a clause with another clause. Structural conjunction and relative are employed to connect ideas within sentence or clause complex (Feri et al., 2023) while conjunctive adjunct functions to connect ideas inter-clause and only provide semantic relationship (Bloor & Bloor, 2004). So, the high use of textual themes in students' research background contributes to keep coherence of their texts. As stated by Feri et al., (2023), coherence can be achieved by using conjunctions. It is also supported by Eggins (2004), Halliday and Matthiessen (2014), and Thompson (2014) who noted that the logical relations can be viewed by the linking devices that tie the clause together such as conjunctive adjuncts and structural conjunctions.

Findings reveal that all types of textual themes are applied by students of each level in their research background, in which structural conjunction is commonly used by students in writing research backgrounds. It indicates that students used more multiple themes than simple themes. This is because structural conjunction must be elaborate with the unmarked or marked topical theme (Halliday & Matthiessen, 2014; Bloor & Bloor, 2004).

These themes are crucial for undergraduates as they learn to structure their essays and reports coherently (Eggins, 2004; Bloor & Bloor, 2004). The use of conjunctive adverbs or phrases helps them to signal logical relationships between ideas, such as contrast, addition, or cause and effect (Bloor & Bloor, 2004). This level of writing often requires clear signposting to guide the reader through the argument or discussion, making textual themes particularly important. At the master level, the use of textual themes becomes more sophisticated. As stated by McCabe (1999) that the utilization of this theme is crucial for fostering cohesion in students' writing, consequently influencing the quality of their writing. Students construct more complex arguments and discussions, requiring a more

advanced use of these themes to maintain coherence and guide the reader through intricate lines of reasoning. The ability to effectively employ these reflects their growing skill in structuring complex academic texts. Then, doctoral students' use of textual themes is indicative of their ability to navigate complex ideas and present them in a coherent, accessible manner. The advanced structuring of arguments, the integration of multiple sources, and the presentation of new research findings necessitate a proficient use of textual themes to ensure the text remains cohesive and logically structured. The presence of textual theme indicates students' capacity to construct intricate clauses and establish connections between them, facilitating the development of a cohesive and coherent text (Rahayu et al., 2020). As a result of thematic choice, the evolution in the use of thematic structures from undergraduate to doctoral levels reflects not only the increasing sophistication of academic writing skills but also the growing complexity of the ideas being communicated. It implies that doctoral students have been able to utilize cohesive and coherent ties in their writing (Feri et al., 2023). As students' progress in their academic careers, their thematic choices become more nuanced and varied, mirroring the depth of their engagement with scholarly discourse and their development as academic writers.

Furthermore, considering simple & multiple themes in research backgrounds of each level, findings show that students employed more multiple themes than simple themes. This finding is in line with Thalib (2014) and Feri et al. (2023) who found that the high occurrences of multiple themes contribute to the student's writing quality because of the wider range of structures that the students make. It is supported by Jalilifar et al. (2017) who found that appearing fewer multiple themes in students' papers may result in a loss of consistency and a failure to compel the reader to read the texts. Despite the general similarities in the students' research background at undergraduate, master, and doctorate levels regarding simple and multiple themes, findings show that there were differences in the occurrences of simple and multiple themes. Comparing the frequency of simple and multiple themes in the research background of UT, MT, and DD, the interesting thing is that findings showed that undergraduate and master students realized more multiple themes than simple themes in their research background while in the research background of the doctoral dissertation, it was found that simple theme was more commonly realized than multiple themes. According to Jalilifar et al. (2017), the high use of multiple themes enables the author to incorporate a coherence indicator while the high use of simple themes may lack coherence. In this study, it is observed that doctorate students commonly realized simple themes in their research background because they often reduced the clauses when they employed relative and subordinate clauses. So, it is categorized as a simple theme.

5.1.3 Interpersonal theme

Findings reveal that this theme is rarely found in students' research backgrounds. This is in accordance with the characteristics of academic writing. As stated by [Eggs \(2004\)](#), high levels of impersonality, authority, and distance may be reflected in the low percentage of interpersonal theme. Additionally, it is commonly used to manage spoken interaction ([But et al., 2000](#)). Meanwhile, the research background is in written form, it must have more written language features. These might be the possible reasons why this theme is rarely used by students of each level in their research background.

According to [Bloor and Bloor \(2004\)](#), the use of interpersonal theme is to provide speakers' comment, appraisal, or attitude toward the message and to communicate the speakers' viewpoints. The use of interpersonal themes may be less frequent among undergraduates as their focus is often on mastering the content of their discipline rather than exploring the nuances of writer-reader interaction. Their research backgrounds primarily aim to inform and argue rather than negotiate with the reader or explicitly present their stance using modality or evaluative language, which are common functions of interpersonal themes. At master's level, there is a noticeable increase in the use of interpersonal themes. This change reflects a shift towards more persuasive and argumentative writing, where stating opinions, discussing limitations, and acknowledging the work of others become more central. Interpersonal themes enable master's students to project their voice more confidently, engaging more directly with the reader through modal adjunct or mental clause. Furthermore, the use of interpersonal themes is significantly more nuanced at the doctoral level. Doctoral writing involves a sophisticated dialogue with existing literature, where the writer's stance, critiques, and contributions to the field are paramount. Interpersonal themes are essential for expressing modality, hedging claims, and engaging critically with the reader, showcasing the writer's authority and positioning within the academic conversation.

Findings show that interpersonal theme was commonly realized by mental clauses in students' research backgrounds. Meanwhile, the vocative was only found in the doctoral dissertation, and finite was not found in the undergraduate thesis. It may occur because formal academic writing, seldom or even never employs vocative and finite. These findings confirm [Feri et al., \(2023\)](#), [Susilowati et al., \(2022\)](#), [Hanh \(2021\)](#), [Alyousef & Alzahrani \(2020\)](#), and [Holik and Gunawan \(2019\)](#). Additionally, our findings reveal that all units of interpersonal theme are used by doctoral dissertations. It indicates that doctoral students are more critical in writing research background because they can take a stance on the problems they explain. The use of this theme does not only indicate the personal tone but also reflects

symmetrical relationships between the writer and the reader ([Jalilifar et al., 2017](#)). In this case, they can take a position by posing a query and offering an opinion regarding the content they created. It could also mean that doctor students can maintain their social interaction with the readers ([But et al., 2000](#)).

5.2 Thematic Progression (TP)

According to [Bloor and Bloor \(2004\)](#), there are four TP patterns which are constant theme pattern (CTP), linear theme pattern (LTP), split theme pattern (STP), and derived theme pattern (DTP). These patterns have some similarities with TP patterns developed by [Eggs \(2004\)](#), in which reiteration is similar to CTP, the zigzag pattern is used to refer to LTP, and multiple themes is similar to STP. Meanwhile, the difference between both is that there is no DTP in Eggs' theory. According to [Eggs \(2004\)](#), all these patterns make the significance of coherence. The goal of coherence is to ensure that the whole text is intelligible. Because research background as a written text is intended to be a form of communication, it is not only cohesively connected between clauses but also coherently connected as a whole to convey meaning and it can be achieved by thematic progression pattern ([Fitriati & Yonata, 2017](#)). It implies that coherence is a crucial component of thematic progression connected to one another. It is also observed that research backgrounds of UT, MT, and DD display a variety of theme-rheme patterns.

Findings show that students employ all these patterns. It indicates that students can elaborate on their research background to create coherence. This is supported by [Darmila et al., \(2019\)](#) who argued that students can realize these patterns to build their text coherently. TP patterns were employed more by doctoral students than master and undergraduate students. This is because doctoral students create longer arguments in their research background than both. It indicates that the level of proficiency and the ability to organize ideas of doctoral students is higher than master undergraduate students.

"At the undergraduate level, the use of a consistent theme pattern is often driven by the need for clarity and simplicity in presenting arguments and information. This pattern, which involves the repetition of a single theme across several clauses or sentences, helps reinforce key concepts and ensures that the reader can easily follow the main thread of the discussion. Undergraduates, still in the process of mastering the art of academic writing, might rely on this pattern to maintain focus and coherence in their essays, especially when explaining fundamental concepts or when they are instructed to stick closely to a specific argument or topic. For master level, this pattern serves a more nuanced purpose. While still valuing clarity, they utilize this pattern to delve into complex ideas ensuring a thorough exploration of a subject from multiple angles without losing sight of the central

thesis. The repetition of a theme in a constant theme pattern allows them to systematically build upon their argument, layering, evidence, and analysis to persuade or inform the reader. This methodical approach demonstrates their growing analytical skills and their ability to engage more deeply with specialized content. At the doctoral level, this pattern is used with strategic intent. Doctoral students, engaged in contributing original research to their field, may employ this pattern to underscore the significance of their findings or theoretical framework throughout their dissertation. The repetition of a theme helps in weaving a coherent narrative that links their research backgrounds. This not only reinforces the central premise of their work but also aids in embedding their study within the broader academic discourse, highlighting its relevance and impact.

In terms of linear theme patterns, which are characterized by a sequential progression of themes that build upon each other, undergraduate students less commonly master this approach. However, when used, it reflects an attempt to create a narrative or logical sequence within their writing. This pattern can help organize their thoughts and present information in a structured manner, which is particularly useful in disciplines that value chronological or procedural clarity. For master's students, this pattern becomes a crucial tool in constructing more sophisticated arguments and narratives. Their advanced understanding of their subject matter allows them to effectively sequence themes in a way that logically advances their thesis. It is instrumental in the presentation of their writing, facilitating a smooth progression of ideas that guides the reader through complex analyses. Meanwhile, doctoral students employ this pattern to articulate complex, multifaceted arguments across the span of their dissertation. The ability to weave together various strands of an argument in a coherent, sequential manner demonstrates their high level of scholarly competence. It is especially important in the presentation of research methodology and results, where each step or finding builds upon the previous one, culminating in a comprehensive argument that substantiates their research.

In term of split theme pattern, at the undergraduate level, it, which involve dividing the theme into several parts introduced over multiple clauses or sentences, is rarely used by students due to their complexity. When attempted, they may serve to introduce a degree of sophistication in the writing, attempting to tackle subjects that require a nuanced presentation of ideas. However, the effective use of this pattern requires a skill level that undergraduates are typically still developing. Next, master's students find the split theme pattern more accessible and useful, especially when exploring complex concepts that cannot be adequately addressed through simpler thematic patterns. This pattern allows them to dissect a theme

into its constituent elements, examining each part in detail before synthesizing them to present a holistic argument. It reflects their ability to handle complexity and to present their ideas in a manner that is both comprehensive and accessible to the reader. Meanwhile, for doctoral students, this pattern is a powerful tool in their academic arsenal. It enables them to present and examine the multifaceted aspects of their research backgrounds in depth. This pattern underscores their mastery over their subject matter and their ability to engage in critical analysis.

In terms of the derived theme pattern, this pattern, which evolves from the discourse and leads to new thematic directions, is challenging for undergraduate students. Its use at this level is minimal, as it requires a depth of understanding and analytical skill that undergraduates are still developing. However, in instances where it is used, it may indicate an advanced level of thinking or the influence of strong mentorship and guidance in the writing process. At the master's level, students begin to employ this pattern more effectively, using it to link theoretical concepts with empirical insights in their research background. It allows for a dynamic evolution of their dissertation, reflecting the students' growing ability to engage critically with the material and to contribute new perspectives to academic dialogues. Then, doctoral students adeptly use this pattern to demonstrate the originality and significance of their research background. It is crucial for showing how their work extends, contradicts, or fills gaps in existing knowledge. The ability to derive new themes from ongoing discourse is a hallmark of doctoral-level writing, reflecting the students' deep engagement with their topic and their contribution to advancing academic thought.

Furthermore, our finding reveals that LTP is commonly used by students and followed by CTP. According to [Bloor and Bloor \(2004\)](#), LTP and CTP are the basic patterns. The high use of LTP is caused by the form of clauses used by students, in which they use textual theme such as 'relative' to connect clauses as if they employ CTP. Meanwhile, STP and DTP are rarely used by students in their research background. To use STP, students must create a rheme of the clause containing some information that will be explained in the next two clauses. Probably, it is hard for students because several aspects must also be considered by students in writing scientific papers. According to [Ashadi et al., \(2022\)](#), there are at least four specific characteristics of academic writing. First, academic writing must be written in formal language and use vocabulary appropriate to the field of knowledge being discussed.

This aims to maintain consistency and accuracy in conveying information. Second, it must use specific vocabulary, academic language, and no repetition. Third, it must be objective. Lastly, it must be organized in a format conforming to academic standards, such as

the use of appropriate bibliography and citations. So, by considering these aspects, it is more difficult to use STP. This case also occurs in DTP. These indicate that the use of STP and DTP is related to the level of proficiency of students. These findings are supported by [Thalib \(2014\)](#) and [Feri et al., \(2023\)](#) who found that characteristics of text and the level of proficiency of students affect the formation of theme-rheme patterns in writing text.

In this study, the researchers found that other aspects affect the formation of theme-rheme patterns in students' research backgrounds. They are structures of research background. According to [Swales and Feak \(2004\)](#) in [Hartley \(2008, p. 41\)](#), the steps that the author must carry out to create the introduction section are (1) showing the research area, (2) creating a 'niche', and (3) filling the gap. It is observed that these structures also contribute to determining the logical flow of students' research backgrounds. A good theme-rheme pattern in the students' research background always follows the structure of the research background itself. In other words, understanding how to formulate a theme-rheme based on the structure of the text can solve the cognitive dissonance of students. As a result, several factors significantly contribute to formulating theme-rheme patterns in the research background. They are characteristics and structures of the research background itself.

Furthermore, in psychology, cognitive dissonance is a confusing condition that occurs in a person due to their thoughts and behavior being inconsistent with their other thoughts and behaviors to encourage them to change their thoughts, feelings, and actions to be in accordance with necessary renewal. Meanwhile, in the academic writing context, in this study, cognitive dissonance can occur in the students when they try to integrate the information they have known (theme) with the main message to be conveyed in their research background (rheme). Dissonance, in the context of a written text, can also create confusion or ambiguity. It occurs through the inappropriate use of conflicting words/phrases or clauses in a text, or through inconsistencies in meaning between certain parts of a text. These things also affect the formation of theme and rheme in writing research background.

Additionally, the fact that LTP is commonly used by students in writing research background and followed by CTP. Similarly, the studies were conducted by [Yuned \(2016\)](#), [Yani et al. \(2019\)](#), [Istibsyaroh et al. \(2020\)](#), [Nurdianti et al. \(2022\)](#), and [Feri et al. \(2023\)](#). These findings indicate that they are the simple way students maintain cohesion and coherence, which contributes to avoiding the cognitive consonance that might appear in writing research background. By using this way, building new material, LTP, the most fundamental sort of thematic progression, creates cohesiveness in a text and lends it a cumulative development ([Eggins, 2004](#)) while through the continuous usage of the same theme of

each clause in a paragraph which results in static and stagnant style, STP can develop cohesiveness ([Eggins, 2004](#); [Feri et al., 2023](#)). This finding is also supported by [McCabe \(1999\)](#) who noted that the fact that LTP appears so frequently in the students' text shows that they can create relationships presenting cause and effect, and strengthen the coherence between clauses in a paragraph.

Furthermore, in terms of STP and DTP, STP is formed from the rheme of a clause having two components, each of which serves as the theme for the subsequent clauses ([Feri et al., 2023](#); [Bloor & Bloor, 2004](#)). However, in this study, the researchers found that STP may be able to be formed from the theme of a clause that has two components. It happened when the students used a nominal group as a theme in the first clause to introduce two different topics. Then, these topics are separately explained in the second clause and the third clause so that it inevitably forms an STP even though it is formed from a theme, not rheme. Meanwhile, DTP is formed from the theme, in which the theme in the first clause has a semantic correlation with the theme in the next clause. In this study, DTP may also be created from rheme. It happened when the students used a marked topical theme in the first clause so that the subject of this clause is categorized as rheme and the students developed the subject of this clause using DTP. Afterwards, in another way, semantical relation to form DTP in a paragraph can also be done by using an indefinite pronoun (i.e. some/several), and verbs (i.e. consist of) in the rheme of the first clause.

The other interesting finding is the 'Combined Theme Pattern'. It is a new pattern found in this study. This pattern is related to the structure of the research background. This pattern is used when the students explain two topics in the previous clause, then in the last clause, they create a conclusion of the two topics that have been explained before. This case is inevitable in writing research background. Moreover, this pattern is only found in doctoral dissertations. It indicates that doctoral students can create a logical flow in their research background based on the structure of the research background itself.

In summary, the progression pattern from undergraduate to doctoral level in the use of thematic progression patterns reflects not only the increasing complexity of academic writing and argumentation but also the development of the students' analytical skills, critical thinking, and mastery over their subject area. These patterns are fundamental in structuring academic discourse, enabling students at each level to effectively communicate their ideas, engage with existing literature, and contribute to their academic communities.

5.3 The Limitations of The Study

As previously stated, the primary aim of this study was to investigate the thematic choices and progression found within students' research backgrounds. These

elements were methodically compared across three academic levels: undergraduate theses, master's theses, and doctoral dissertations. Nevertheless, the study faces several significant limitations. The first limitation stems from the sample size and scope; the study involved only a limited number of research backgrounds and was conducted exclusively within one educational institution, thus limiting the generalizability of its findings. Additionally, the study's scope was restricted to a specific academic setting, which may not reflect broader trends or practices.

Secondly, as Jing (2014) has noted, there are numerous factors that influence how students select themes and develop thematic progression patterns in their academic writing. These factors include the transfer effects from their first language, their level of linguistic proficiency, their specific disciplinary and educational backgrounds, their strategic approaches to communication, and the input they receive in the target language. However, the scope of this study was confined to just the educational backgrounds of the students, specifically at the undergraduate, master's, and doctoral levels. This focus omitted other potentially influential factors, which could provide a more nuanced understanding of thematic choices and developments.

6. Conclusions

In summary, thematic choice shapes the essence of research background texts, particularly in argument development, while thematic progression elucidates how themes within clauses may echo or reiterate preceding themes or rhemes. These phenomena are evident across students' research backgrounds at all levels, with various thematic progression patterns observed, though the linear theme pattern is prevalent. The thematic choice and progression are influenced by students' proficiency levels, as well as the inherent characteristics and structures of the research background itself. Additionally, good theme-rheme patterns align with the research background's characteristics, as well as the students' proficiency and educational levels, highlighting external factors that significantly impact thematic flow.

Moreover, these findings have implications for university academic writing instruction, suggesting thematic choice and progression theory as a valuable tool for enhancing writing proficiency and fostering cohesive research backgrounds. By understanding and applying thematic structures effectively, students can construct more coherent and directed their research background, thereby strengthening their arguments and conveying their message more effectively. Furthermore, future research can explore thematic choice and progression analysis across various texts and genres, considering factors such as sociocultural backgrounds and educational experiences to provide diverse perspectives on writing ability.

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