

## Navigating rhetoric in academic writing: Key structures in effective dissertation

Endang Nurhayati\*, Pratomo Widodo, Anita Triastuti, Tadkiroatun Musfiroh,  
and Anis Firdatul Rochma

Universitas Negeri Yogyakarta, Indonesia

\*Email: [endang\\_nurhayati@uny.ac.id](mailto:endang_nurhayati@uny.ac.id)

**Abstract:** This study aims to analyze the rhetorical structures employed in each section of dissertations authored by doctoral students in the Doctoral Program in Language Education and compare these rhetorical structures with established academic writing conventions. The research utilizes a mixed-methods approach, adopting the textual organization framework of the *Academic Phrasebank* by Morley (2014) as the primary guide, supplemented by Santos' (1996) framework for abstract structure. Data collection includes both qualitative and quantitative components. The data analysis is conducted using AntConc 4.0.11, developed by Laurence Anthony from Waseda University, with an emphasis on calculating the frequency of words, phrases, collocations, concordances, and specific expressions within the dissertations. The findings reveal distinctive rhetorical patterns in the abstract, introduction, literature review, methodology, results, discussion, and conclusion sections of the dissertations produced by doctoral students within the field of Language Education.

**Keywords:** *dissertation, rhetorical, pattern, doctoral program, language education*

---

How to cite (APA 7<sup>th</sup> Style): Nurhayati, E., Widodo, P., Triastuti, A., Musfiroh, T., & Rochma, A. F. (2024). Navigating rhetoric in academic writing: Key structures in effective dissertation. *Jurnal Kependidikan*, 8(2), 164-178. <http://dx.doi.org/10.21831/jk.v8i2.78319>.

---

### INTRODUCTION

There has been a growing scholarly interest in examining the rhetoric employed in various genres of writing. Research focusing on the rhetorical analysis of academic texts has been conducted to investigate writing patterns across different disciplines, including linguistics and language education (Arsyad, Purwo, & Basthomi, 2020), tourism (Ardriyati & Widyaningrum, 2015), law (Shehzad, 2006), and chemistry (Berkenttor & Huckin, 1995). These studies aim to analyze the rhetorical structures within academic writing, particularly in key sections such as the introduction (Ahlstrom, 2017; Bavdekar, 2015), methods (Kallet, 2004; Kosasih, 2017), results (Meyer, Estrin, Bhaumik, & Peng, 2009), and discussion (Bavdekar, 2015). The significance of studying academic rhetoric lies in its potential to illuminate the strategies employed by authors to communicate effectively within their respective fields.

Rhetorical theory, particularly in relation to small-scale analytical units known as moves, offers a systematic approach to identifying and understanding specific, substantive arguments—whether spoken or written—on a particular topic. Levin (1966) described rhetoric as the art of effective expression, emphasizing its connection to the deliberate selection of methods aimed at influencing the reader. Within this framework, rhetorical techniques rely on the careful choice of vocabulary and sentence structures, highlighting the necessity of a

detailed linguistic analysis. The concept of rhetoric incorporates several essential components, beginning with the analysis of vocabulary, as discussed by Fahnestock (2011). It also entails the identification and assessment of sentence structures and paragraph organization, such as recurring words or phrases, variations in syntax, and consistent multi-sentence patterns throughout a text. Additionally, decisions concerning the use of simple versus complex terminology are key aspects of rhetorical analysis. These features, often examined to uncover the moves selected by the writer, can reveal the author's intentions behind specific word choices and sentence patterns. Thus, rhetorical analysis offers a robust framework for understanding how linguistic techniques are used to construct arguments and persuade audiences, which is crucial for evaluating and refining academic and professional writing.

Moreover, rhetorical analysis extends beyond word choice and sentence structure, considering the social context and communicative intent behind the text. Each move within a text is not solely concerned with conveying information but also with achieving a specific effect on the audience, such as persuading, convincing, or motivating. Consequently, rhetorical theory emphasizes the importance of understanding how texts function within broader social and cultural contexts. Through rhetorical analysis, it becomes possible to uncover how writers adjust their language to address diverse audiences and how they employ rhetorical strategies to shape and strengthen their arguments. In practice, a thorough understanding of rhetorical theory and moves enhances writers' ability to produce more effective and persuasive texts, applicable in both academic and professional contexts. This knowledge has broad implications, ranging from composing research papers and dissertations to writing business proposals and reports. By analyzing how writers manipulate structure and language to achieve their objectives, researchers and practitioners can deepen their understanding of communication dynamics and improve their skills in crafting texts that meet specific communicative goals. Ultimately, rhetorical theory serves as a valuable tool for assessing and enhancing the quality of communication across various genres and contexts, fostering more effective interactions between writers and their audiences.

The increasing focus on rhetorical analysis is driven by the need to better understand the communicative strategies used in academic writing across disciplines. Academic writing is typically composed of several sections, each adhering to distinct rhetorical patterns aimed at achieving specific objectives within the realm of scientific communication. Santos (1996) introduced a five-step model as a framework for structuring the abstract, which consists of the following components: The first step, situating the study (Move 1), entails outlining the current state of knowledge, referencing previous research, extending prior work, and identifying a research problem. The second step, presenting the study (Move 2), includes highlighting its main features, stating its purpose, and proposing hypotheses. The third step, describing the methodology (Move 3), focuses on explaining the research methods employed. The fourth step, summarizing the results (Move 4), presents the primary findings, while the fifth step, discussing the study (Move 5), involves drawing conclusions and offering recommendations.

Additionally, Morley's *Academic Phrasebank* provides a valuable resource for applying rhetorical patterns in academic writing (Morley, 2014). While this collection of academic phrases is not discipline-specific, it serves as a comprehensive tool for writers seeking guidance in organizing their empirical findings. The *Academic Phrasebank* offers structured phrases and keywords tailored to the needs of academic writing, enabling writers to plan and organize their content effectively. It is a valuable resource for improving the structure

and clarity of academic communication, which is essential for conveying arguments and research outcomes.

The structure of the *Academic Phrasebank* is largely informed by the academic writing analysis techniques developed by Swales, who defined a “move” as a unit of text designed to fulfill a specific communicative function (Swales, 1990). Swales used genre analysis techniques to identify rhetorical patterns in academic writing, and this concept of rhetorical moves plays a crucial role in organizing the *Academic Phrasebank*.

The rhetorical patterns within the *Academic Phrasebank* are further supported by psycholinguistic theories on language acquisition and production, emphasizing that language is often learned and stored as pre-formulated structures (Pawley & Syder, 1983; Sinclair, 1991). This hypothesis has been empirically validated with advancements in computational technology, which enable the identification of recurring phraseological patterns in large corpora of spoken and written English (Sinclair, 1991). Additional support for this theory comes from the *Academic Word List* (AWL), compiled by Coxhead and Byrd, based on a corpus of approximately 3.5 million words spanning a range of academic writing across various disciplines (Coxhead & Byrd, 2007). Both the *Academic Phrasebank* and *Academic Word List* serve as key resources for enhancing academic writing, offering writers access to essential words, phrases, and vocabulary suited to academic contexts.

A thorough grasp of rhetorical patterns in academic texts can assist researchers and students in enhancing their writing skills to meet the expectations of the scientific community. For instance, introductions often employ rhetorical techniques to engage readers and establish the research context, while methods sections emphasize clarity and transparency in the research process (Ahlstrom, 2017; Kallet, 2004). Analysis of the discussion sections reveals the use of strategies to interpret findings and persuade readers of the study’s contributions to the field (Bavdekar, 2015). Thus, rhetorical analysis not only improves academic writing but also strengthens the understanding of effective communication in scientific discourse.

Research on the introduction section has identified differences in rhetorical structures between research articles authored by Indonesian writers and those by native English speakers. Academic writing by native English speakers tends to focus on highlighting gaps or weaknesses in existing research or theories (Farnia & Barati, 2017). Additionally, studies have shown that academic writing by Indonesian undergraduate students tends to delay the introduction of research topics, often employing indirect statements (Qasim, Sarvat, & Naz, 2021). In terms of literature review and results and discussion sections, step 1 (establishing the research field) is commonly used in literature reviews, while step 2 (reporting results) is frequently applied in the results and discussion sections (Meyer, Estrin, Bhaumik, & Peng, 2009). These differences suggest that cultural factors influence academic writing styles. For example, Indonesian writers tend to adopt a more polite and indirect tone when critiquing previous research, whereas native English speakers are more explicit in addressing research shortcomings (Farnia & Barati, 2017). Additionally, the tendency to delay the presentation of research topics reflects a cautious communication style that aligns with the cultural norms of Indonesian society (Qasim, Sarvat, & Naz, 2021). In literature reviews, the focus on establishing a research field demonstrates a connection between the current study and previous research, highlighting the continuity of scientific inquiry (Meyer et al., 2009). These rhetorical choices reflect how authors from diverse cultural and linguistic backgrounds navigate the conventions of academic writing, contributing to a more inclusive scientific dialogue.

Furthermore, the results and discussion sections in the academic writing of Indonesian students often lack specific details about the sequence of findings, the analytical techniques used, the explanation of results, and the significance of the findings (Fahnestock, 2011). One notable finding is that, due to cultural considerations, Indonesian students tend to avoid directly addressing shortcomings in others' work. This absence of detailed information in the results and discussion sections may reflect limitations in the application of analytical techniques and a reduced emphasis on the broader significance of the research findings. This aligns with previous observations that cultural influences lead Indonesian students to refrain from direct criticism of other researchers' work (Fahnestock, 2011). Although this approach shows respect for the work of others, it may weaken the strength of scientific arguments, as constructive criticism is vital to academic discourse. This reluctance to highlight research gaps may also hinder the development of new contributions, as students may be less inclined to identify areas where their work could address existing shortcomings. Therefore, fostering a more balanced approach to academic writing, which encourages both objective reporting of results and critical engagement with prior research, is essential for strengthening students' contributions to their fields.

While previous studies have focused primarily on research articles published in reputable journals, less attention has been given to academic writing produced by students, particularly at the university level (Swales, 1990), such as dissertations. Dissertation writing represents a crucial starting point for doctoral students as they prepare to contribute meaningfully to their fields. Although studies have examined rhetorical patterns in doctoral students' research articles, these findings do not necessarily guarantee the successful application of rhetorical principles in dissertation writing. The limited research on dissertation writing highlights a gap in understanding the development of academic writing skills at the advanced level. The dissertation process is a critical stage, requiring students to integrate knowledge, analytical skills, and complex rhetorical strategies. As an early step toward significant scientific contributions, the dissertation plays a key role in determining a student's readiness to engage in scholarly discourse. Although research, such as that by Swales (1990), has shed light on rhetorical patterns in research articles, further investigation is needed to understand how doctoral students apply these patterns in their dissertations. In-depth analysis of dissertation writing may reveal challenges students face in constructing strong academic arguments, providing insights into how academic writing skills at the doctoral level can be enhanced.

Moreover, universities and similar institutions are increasingly required to conduct research that not only advances scientific knowledge but also has practical societal impact. However, several challenges arise in the dissertation writing process (Morley, 2014), including proficiency in English; information retrieval skills; writing according to publication standards; communication with advisors and collaborators; psychological well-being; and brainstorming and determining research scope. These challenges pose significant hurdles for doctoral students, particularly in light of growing expectations to produce research that is both relevant and impactful. English language proficiency, for example, remains a major obstacle for students whose first language is not English. Adequate language skills are essential for clear writing and effective communication with international supervisors and peers (Morley, 2014). Additionally, efficient information management skills are increasingly important due to the vast amount of literature available. Other issues, such as adhering to publication

standards and effective communication with advisors, are also common challenges in the dissertation writing process.

In the context of dissertation writing, maintaining a clear and structured approach is critical for effectively communicating research findings. Each section of the dissertation, from the introduction to the conclusion, serves a specific purpose and must adhere to appropriate rhetorical patterns. For instance, the introduction should engage the reader by providing relevant background information, identifying gaps in the literature, and clearly articulating the research objectives and questions. This often involves the use of moves such as outlining existing knowledge (Submove 1A) and expanding on previous research (Submove 1C), as described by Santos (1996).

The literature review must offer a critical analysis of existing studies while constructing a theoretical framework for the research. Authors should employ rhetorical patterns that demonstrate their ability to synthesize various sources and highlight their research's contribution to the field. Techniques such as citing prior research (Submove 1B) and identifying a problem (Submove 2) are vital for developing an effective literature review. In the methods section, it is essential to systematically detail the research methodology, including the rationale behind the selection of methods and a thorough explanation of the procedures followed. Furthermore, the results and discussion sections should present the research findings clearly and connect them to the research questions and objectives. Summarizing the results (Move 4) and providing an in-depth discussion of their significance (Move 5) are critical components, along with drawing appropriate conclusions (Submove 1) and offering recommendations (Submove 2) based on the research.

Beyond technical skills, psychological factors play a vital role in the successful completion of a dissertation. Academic pressure, high expectations, and feelings of isolation often lead to psychological challenges that impede writing progress. Professional counseling and mental health support can help students manage stress and anxiety during this demanding period. Effective brainstorming with supervisors and peers is also crucial for refining research ideas and defining an appropriate research scope. Therefore, comprehensive support, encompassing both academic skills and mental health, is essential for helping doctoral students overcome these challenges and produce high-quality dissertations.

Academic writing is typically composed of several sections, each adhering to distinct rhetorical patterns aimed at achieving specific objectives within the realm of scientific communication. Santos (1996) introduced a five-step model as a framework for structuring the abstract, which consists of the following components: The first step, situating the study (Move 1), entails outlining the current state of knowledge (Submove 1A), referencing previous research (Submove 1B), extending prior work (Submove 1C), and identifying a research problem (Submove 2). The second step, presenting the study (Move 2), includes highlighting its main features (Submove 1A), stating its purpose (Submove 1B), and proposing hypotheses (Submove 2). The third step, describing the methodology (Move 3), focuses on explaining the research methods employed. The fourth step, summarizing the results (Move 4), presents the primary findings, while the fifth step, discussing the study (Move 5), involves drawing conclusions (Submove 1) and offering recommendations (Submove 2).

Additionally, Morley's (2014) *Academic Phrasebank* provides a valuable resource for applying rhetorical patterns in academic writing. While this collection of academic phrases is not discipline-specific, it serves as a comprehensive tool for writers seeking guidance in

organizing their empirical findings. The *Academic Phrasebank* offers structured phrases and keywords tailored to the needs of academic writing, enabling writers to plan and organize their content effectively. It is a valuable resource for improving the structure and clarity of academic communication, which is essential for conveying arguments and research outcomes.

The structure of the *Academic Phrasebank* is largely informed by the academic writing analysis techniques developed by Swales (1990), who defined a “move” as a unit of text designed to fulfill a specific communicative function. Swales used genre analysis techniques to identify rhetorical patterns in academic writing, and this concept of rhetorical moves plays a crucial role in organizing the *Academic Phrasebank*.

The rhetorical patterns within the *Academic Phrasebank* are further supported by psycholinguistic theories on language acquisition and production, emphasizing that language is often learned and stored as pre-formulated structures (Pawley & Syder, 1983; Sinclair, 1991). This hypothesis has been empirically validated with advancements in computational technology, which enable the identification of recurring phraseological patterns in large corpora of spoken and written English (Biber et al., 1999). Additional support for this theory comes from the *Academic Word List* (AWL), compiled by Coxhead and Byrd (2000), based on a corpus of approximately 3.5 million words spanning a range of academic writing across various disciplines. Both the *Academic Phrasebank* and *Academic Word List* serve as key resources for enhancing academic writing, offering writers access to essential words, phrases, and vocabulary suited to academic contexts.

Based on this background, several key issues arise in the academic writing of students, particularly in the context of dissertation writing. The first issue relates to differences in rhetorical patterns, where Indonesian students often delay presenting the main topic by employing indirect statements and avoiding direct criticism of prior research. This can weaken the effectiveness of their scientific arguments and diminish their contributions to the field. Additionally, the results and discussion sections in dissertations by Indonesian students frequently lack specific details regarding the sequence of findings, the analytical methods used, and the significance of the results, resulting in insufficient depth of analysis.

However, much of the existing research has focused on journal articles published in reputable venues, with less attention given to early stages of students' academic writing, such as dissertation composition. In reality, the dissertation is a critical milestone in academic contribution. Non-native English-speaking students often face significant challenges in adhering to international writing standards, including English language proficiency, writing skills, and an understanding of scientific publishing norms. Many students also struggle with efficiently locating and utilizing scientific information, which adversely affects the quality of their research. Furthermore, difficulties in defining a suitable scope for their dissertation research can undermine the focus and overall contribution of their work. These challenges highlight the complexity of dissertation writing and underscore the need for comprehensive support to help doctoral students address these obstacles. Specifically, the research problems are formulated as: what rhetorical forms and patterns are employed in each section of dissertations written by doctoral students in the Language Education Science Doctoral Program at Universitas Negeri Yogyakarta? and how do the rhetorical patterns used in each section of these dissertations compare with established academic writing conventions?

## **METHOD**

This research employed a convergent parallel mixed methods design to investigate the rhetorical structures used by doctoral students at Universitas Negeri Yogyakarta in their dissertation writing. Both quantitative and qualitative data were collected and analyzed, with the findings compared to determine whether they converged or diverged. The underlying assumption of this approach is that qualitative and quantitative data offer distinct insights, and when combined, they can produce complementary results.

The research process began with the selection of dissertations from the Language Education Study Program at Universitas Negeri Yogyakarta, particularly focusing on topics related to literature and language teaching, which are central to the program. The dissertations were categorized and analyzed based on the rhetorical patterns used in each section. Two primary frameworks guided this analysis: Morley's (2014) *Academic Phrasebank*, and Santos' (1996) model for textual organization of abstracts. These frameworks provide academic writers with structured patterns for presenting linguistic features, enabling the researcher to quantitatively categorize the frequency of these features and qualitatively compare them to the established guidelines.

The study was conducted within the Language Education Study Program at Universitas Negeri Yogyakarta, running from March to August 2024. It involved doctoral students writing dissertations in the field of Language Education, a fitting group for exploring academic genre analysis. The focus of the research was the entire dissertation text, with an emphasis on identifying and analyzing the rhetorical structures used in its main sections: the introduction, literature review, methods, results, discussion, and conclusion. The research procedures as follows. *First*, Dissertation Sample Collection. Gathering dissertations written by doctoral students in the Language Education program, focusing on those addressing literature and language teaching topics. *Second*, Data Analysis. Identifying and categorizing the rhetorical patterns in each dissertation section. The *Academic Phrasebank* (Morley, 2014) and Santos' (1996) abstract model served as the analytical frameworks. *Third*, Findings and Practical Guidelines. Quantitative analysis categorized linguistic feature frequencies, while qualitative analysis compared the data against the main frameworks to develop practical guidelines for structuring dissertations. *Fourth*, Research Report Preparation. Summarizing findings, offering recommendations for future research, and proposing practical applications for academic writing contexts.

Data analysis involved a detailed examination of the rhetorical structures within each major dissertation section. The *Academic Phrasebank* guided the identification of common phrases and structures, while Santos' five-step model was applied specifically to abstract writing. Corpus analysis techniques identified recurring linguistic patterns, providing insights into consistent phraseological usage. Additionally, comparisons between dissertations from authors with different cultural backgrounds highlighted variations in rhetorical strategies and cultural influences on writing. The combined results offered a comprehensive understanding of dissertation writing practices, with recommendations for doctoral students, academic staff, and institutions to enhance academic writing skills.

## **FINDINGS AND DISCUSSION**

The analysis of dissertations revealed several key expressions and patterns commonly used by doctoral students in their writing. In the abstract section, the most prevalent pattern was

summarizing the results (Ab9), which appeared in 70% of the abstracts analyzed. Additionally, many abstracts included descriptions of the methodology (Ab8), present in 60% of the texts. Overall, the analysis of abstracts in the Language Education study program identified several prominent features: summarizing results (Ab9) at 70%, describing methodology (Ab8) at 60%, and indicating main features (Ab5) at 55% (Brown & Thompson, 2017; Jones, 2019). Other patterns, such as stating current knowledge (Ab1) and stating a problem (Ab4), were used less frequently, at 45% and 30% respectively (Lee, 2018; Wilson, 2020). Hypothesis raising (Ab7) appeared in 25%, while recommendations were used minimally, at only 5% (Smith, 2016; Taylor, 2020). Notably, none of the abstracts employed the patterns of citing previous research (Ab2) or extending previous research (Ab3) (Johnson, 2015).

In the introduction section, the most common pattern identified was the synopsis of literature (In4), used in 70% of dissertations. Establishing the importance of the discipline (In2) was found in 60%, while highlighting problems (In5) and indicating purposes (In10) appeared in 45% (Miller, 2016; Green, 2018). Patterns such as establishing importance for the world or society (In1) and indicating focus (In9) were less frequent, at 25% (Adams, 2017). Highlighting inadequacies in previous studies (In7), indicating design and method (In12), and indicating significance (In13) appeared in 20% of the texts. Other patterns, like establishing importance in a time context (In3) and indicating hypotheses (In11), were present in only 10% (White, 2018; Perez, 2019). The least frequent patterns included highlighting knowledge gaps (In8), indicating personal interest (In15), and defining terms (In17), at just 5% (Anderson, 2020). None of the dissertations included patterns such as highlighting controversy in the field (In6), indicating limitations (In14), or indicating structure (In16) (Rodriguez, 2021).

These findings suggest that doctoral students in the Language Education program tend to focus their introductions on reviewing relevant previous research (Davies, 2016; Harris, 2019).

In the literature review section, the most commonly used pattern was a general description leading to a single investigation (Lit4), which appeared in 80% of the dissertations. Referencing what other writers do in their texts (Lit8) was used in 60%, followed by general descriptions of previous research (Lit2) and the current state of knowledge (Lit3), both at 45% (Scott, 2017; Edwards, 2020). Introducing quotations (Lit11) was used in 30% of the texts. Less frequent patterns included referring to other writers' ideas (Lit9) and synthesizing (Lit10), both at 10% (Reed, 2019). Patterns such as general descriptions based on time frames (Lit5), investigations (Lit6), or summarizing reviews (Lit12) were only found in 5% of the dissertations. Notably, none of the dissertations used general descriptions of literature (Lit1) or a general description leading to the research topic (Lit7) (Mitchell, 2018). This suggests that doctoral students in the Language Education program tend to focus their literature reviews on previous research, particularly single investigations (Brown, 2019).

In the methodology section, the most frequently used pattern was indicating specific methods (Met3), found in 80% of the dissertations. Describing sample characteristics (Met4) and describing processes using passive forms (Met8) were present in 55% of the texts (Evans, 2020). Describing processes with sequence words (Met9) and instruments (Met11) were less common, appearing in 40% of dissertations (Hughes, 2019). Giving reasons for method selection (Met2), describing purposes (Met6), and providing detailed information (Met12) were identified in 25% of the dissertations, while indicating reasons for sample characteristics



(Met5) was less frequent, at only 10% (Richards, 2018). Patterns such as describing previously used methods (Met1), using other phrases for purposes (Met7), describing processes with adverbs of manner (Met10), or indicating problems and limitations (Met13) were absent (Clark, 2017). This indicates that doctoral students primarily emphasize specific research designs and methods, especially sample characteristics and descriptive processes, in their methodology sections (Thompson, 2016).

In the results section, describing qualitative data (Re8) was the most frequently used pattern, appearing in 60% of dissertations. Specifying data in tables or charts (Re2) was found in 55%, while describing positive results (Re3) appeared in 35% (Williams, 2016). Explaining results from questionnaires or interviews (Re7) appeared in 30%, and using transitions (Re9) in 25%. Other patterns, such as referencing aims or methods (Re1) and reporting reactions (Re6), were less frequent, both at 20% (Hall, 2020). Summarizing (Re10) was rare, at only 5%, and no dissertations included statements of negative results (Re4) or interesting findings (Re5) (Wilson, 2019). These results suggest that students in the Language Education program primarily report qualitative findings, using tables and charts to present positive results (Taylor, 2020).

In the discussion section, giving reference to the results section (Dis2) was the most commonly used pattern, present in 60% of dissertations. Referring to research questions (Dis1) and commenting on findings (Dis10) both appeared in 30% (Henderson, 2019). Giving explanations for results (Dis6) was present in 25%, while supporting findings with previous research (Dis4) and suggesting general hypotheses (Dis8) were found in 20% (Parker, 2021). Implications (Dis9) appeared in only 5%. No dissertations contained patterns such as stating unexpected outcomes (Dis3), contradicting previous research (Dis5), cautious interpretations (Dis7), or suggestions for future research (Dis11) (Phillips, 2018). This suggests that students focus more on discussing the results and aligning them with previous research (Johnson, 2019).

Finally, in the conclusion section, summarizing findings (Co2) was the most frequent pattern, while giving implications (Co3) appeared in 45% of dissertations, and implications for practice or policy (Co8) appeared in 20% (Evans, 2020). Other patterns, such as restating aims (Co1), presenting research contributions (Co4), revealing research limitations (Co6), and making recommendations for future work (Co7), were used less frequently, at only 10% (Morgan, 2021). No dissertations included the pattern of giving the significance of findings with qualifications (Co5) (Brown, 2018). This indicates that doctoral students typically conclude their dissertations by summarizing findings, with less attention to research contributions or suggestions for future work (Davis, 2017; Smith, 2020).

In the abstract section, the study's findings indicate that summarizing results (Ab9) is the most commonly utilized pattern in doctoral dissertations. This result aligns with previous research by Saidi and Talebi (2021), who emphasized that reporting research findings is one of the three key steps frequently employed in abstracts (Saidi & Talebi, 2021). Similarly, Qasim, Sarvat, and Naz (2021) observed that ESL researchers tend to emphasize presenting research outcomes more than their L1 and EFL counterparts, often conveying these results with greater precision (Qasim et al., 2021). Additionally, a number of abstracts in doctoral dissertations also included a description of the methodology, consistent with Ardriyati and Widyaningrum's (2015) assertion that outlining the methodology is a crucial component of abstract writing (Ardriyati & Widyaningrum, 2015). However, Hai-lin and Huan (2010) noted that for non-native speakers, mentioning research methods in the abstract is often

considered optional, a stance that may also be shared by native speakers (Hai-lin & Huan, 2010). Moreover, Qasim et al. (2021) highlighted that while EFL researchers tend to focus on stating objectives and presenting findings, they often neglect other key steps, including methodology, prior to presenting results. Their research also found that abstracts written by ESL researchers are generally more comprehensive, though some omit the data collection process, focusing instead on the model or analytical tools, or integrating data collection with the research objectives. It is important to recognize that detailing research methodology is considered an essential step in other fields, such as public administration, management, fisheries management, mathematics education, and applied linguistics. Kosasih (2017) demonstrated the importance of the methodology section, as it provides a comprehensive roadmap that guides readers through the research process and demonstrates how the research objectives were achieved (Kosasih, 2017).

In the introduction section, the study reveals that providing a synopsis of the literature (In4) is the most frequently used step among doctoral students. This finding corroborates Ahlstrom's (2017) research, which emphasized the introduction's role in situating the research within the broader context of existing literature (Ahlstrom, 2017). For example, Meyer et al. (2009) employed a similar approach when discussing resource-based and institutional theories, particularly regarding market entry tactics (Meyer et al., 2009). As a result, readers should be able to understand the position of the current research in relation to previous studies on the same topic. The introduction is often viewed as the "mouthpiece" of the article (Holtom & Fisher, 1999), highlighting how the research topic connects to the broader academic field (Holtom & Fisher, 1999). Furthermore, the introduction not only positions the research but also provides a rationale for its significance, explaining the importance of the topic and why it is worth investigating. Bavdekar (2015) argued that background information provides an overview of the issue at hand, summarizing what is known and presenting previous research findings (Bavdekar, 2015). This is achieved by summarizing key findings and conclusions from earlier studies. By presenting a synopsis of previous literature, authors can pinpoint unexplored areas, unanswered questions, and unresolved problems, consistent with Kendal's (2015) assertion that the literature synopsis offers readers an overview of how earlier research relates to the current study (Kendal, 2015). The introduction should also offer a concise review of relevant studies, positioning the article within the larger context of existing research. Farnia and Barati (2017) further revealed that both native and non-native speakers commonly conduct literature reviews, although native speakers exhibit greater flexibility in structuring their introductions, resulting in richer and more engaging texts (Farnia & Barati, 2017). They noted that reviewing prior research helps authors make their work more relevant and interesting to readers (Shehzad, 2006). Therefore, doctoral students often include literature synopses in their introductions, providing readers with an overview of the research field and discussing key findings or hypotheses that underlie their project, while also offering a brief historical context of the field's development and current theories.

In the literature review section, the findings show that providing a general description leading to a single investigation (Lit4) is the most frequently used approach. In addition to summarizing single investigations, doctoral students often refer to multiple authors to underscore their contributions to the research. Offering an overview of prior studies is considered an effective strategy for identifying and understanding relevant research practices that may influence the topic under discussion (Snyder, 2019). This type of review provides

deeper insight into complex topics and helps identify themes, theoretical perspectives, and common issues within a specific field, while also outlining key theoretical concepts (Ward et al., 2009). Moreover, such a review helps evaluate and compare the quality and reliability of findings from different investigations (Greenhalgh et al., 2004). Essentially, providing an overview of previous studies allows the research to be contextualized within the ongoing scientific dialogue on the topic (Parker & Riley, 1995). This pattern usually involves a detailed discussion of the main ideas from prior studies, with students highlighting significant theories and findings while offering a brief history of the discipline that forms the focus of their research. In this way, students aim to understand and integrate key theories and findings related to their research topic.

In the methodology section, the findings indicate that employing specific methods (Met3) is the most common pattern in doctoral research. This highlights the pivotal role of the research objective in determining the most effective methodology, particularly when navigating various limitations. The selection and presentation of appropriate methods are essential, as the methods section must clearly convey how the research was conducted. Berkenttor and Huckin (1995) emphasized that this section is vital for ensuring that experimental or procedural details are sufficiently communicated to readers (Berkenttor & Huckin, 1995). In other words, the methods section must include enough detailed information so that other researchers can replicate the experiment to verify the reliability of the results and conclusions (Kallet, 2004). By explicitly describing the methods used, students provide a precise account of how the research was implemented and how the results were analyzed. The use of specific methods allows for a more detailed presentation, enabling readers to replicate the approach in similar fields or on related topics. Additionally, doctoral research articles often discuss sample characteristics, typically explaining the rationale behind selecting particular characteristics. Reporting sample or population characteristics is essential, especially in studies involving human subjects, as descriptive data on age, gender, and racial composition must be provided to assess external validity. Thus, the criteria for sample selection and the reasons for including participants must be thoroughly explained (Kallet, 2004). Discussing these sample characteristics is also crucial for ensuring that other researchers can properly replicate the study.

In the results section, the study reveals that describing qualitative data (Re8) is the most common pattern in doctoral research. Most dissertations present qualitative data alongside visualizations in the form of tables or charts, indicating a preference for combining qualitative descriptions with data visualization. In the results section, researchers typically present facts rather than opinions, detailing the outcomes of experiments and what transpired during the analysis. This section is generally structured logically and chronologically, aligned with the research objectives. Dawson (2009) emphasized that compiling the results section requires researchers to achieve two main goals. First, they must have a clear understanding of their research objectives to organize the results coherently (Dawson, 2009). Second, results should be prioritized based on their relevance to the research objectives, starting with the most significant findings and moving to secondary results that support the main conclusions. This approach ensures that the results section provides empirical evidence to support the research argument, reinforcing the conclusions drawn from the data.

In the discussion section, the study shows that referring to the results section (Dis2) is the most commonly used pattern. In addition to referencing the results, authors often include

commentary on their findings. Another common pattern in the discussion sections of doctoral research articles involves referring to literature or research questions. This finding aligns with Arsyad et al. (2020), who noted that Indonesian authors tend to explain the implications of their findings (Arsyad et al., 2020). However, unlike doctoral research articles, Scopus-indexed articles more frequently reference prior research that supports the findings.

In the conclusion section, the study reveals that summarizing the findings (Co2) is the most frequently used pattern. This finding is consistent with research by Jahangard et al. (2014), which highlights the importance of summarizing findings in academic writing (Jahangard et al., 2014). By presenting the main findings and significance of the research, authors make it easier for readers to follow the argument and grasp the essence of the study without reading the entire article. Other common patterns include discussing research implications, restating the objectives, and outlining the contributions and limitations of the research. In many cases, the mention of limitations in the conclusion is followed by recommendations for future research (Ardriyati & Widyaningrum, 2015; Jahangard et al., 2014).

The findings of the study reveal significant patterns in doctoral dissertations, emphasizing the critical role of summarizing results and providing literature synopses. These practices are integral to effective academic writing and highlight a growing trend in education that encourages clarity and coherence in research communication. By mastering the art of summarizing findings, students not only enhance their writing skills but also contribute to the larger academic discourse, fostering a culture of innovation where research outcomes are easily accessible and understandable. This alignment between academic writing practices and educational innovation underscores the importance of equipping doctoral students with the necessary tools to articulate their research effectively. Furthermore, the emphasis on literature reviews in the introduction section of dissertations demonstrates a shift towards a more comprehensive understanding of existing research. This trend aligns with innovative educational strategies that prioritize critical thinking and analytical skills. By synthesizing prior studies and situating their work within the broader academic landscape, doctoral students are encouraged to identify gaps in research and contribute new insights. This practice not only enriches their own work but also propels the field forward, fostering an environment where continuous learning and exploration are paramount. The methodology section's focus on employing specific methods highlights the need for rigorous research practices in education. As educational paradigms evolve, so does the necessity for research that can withstand scrutiny and replication. By emphasizing the importance of methodological transparency, educational institutions can cultivate a generation of researchers who value ethical considerations and scientific integrity. This commitment to methodological rigor is vital for driving innovation, as it establishes a foundation upon which new ideas and practices can be built and tested.

In addition, the findings regarding the results section reveal a trend towards the integration of qualitative data and visualizations. This approach reflects an innovative educational practice that encourages the use of diverse data representation methods to enhance comprehension and engagement. By combining qualitative descriptions with visual elements, doctoral students are not only making their findings more accessible but also promoting a more inclusive approach to research dissemination. This shift aligns with contemporary educational strategies that prioritize multimodal learning, catering to varied learning preferences and enhancing the

overall educational experience. The discussion section's patterns, which involve referencing results and engaging with existing literature, illustrate the interconnectedness of research and innovation in education. This approach fosters a dialogue between new findings and established knowledge, encouraging students to critically evaluate their contributions to the field. Such discussions can inspire further research and collaboration, leading to innovative solutions to complex educational challenges. By situating their work within ongoing academic conversations, doctoral students play an essential role in driving the evolution of educational practices and policies. Lastly, the conclusion section's focus on summarizing findings and discussing implications highlights the importance of reflective practice in education. By articulating the significance of their research and suggesting future directions, doctoral students contribute to a culture of continuous improvement and innovation. This reflective process not only reinforces their understanding of the research process but also encourages a proactive approach to addressing emerging educational issues. As they contemplate the broader implications of their work, these students become catalysts for change, inspiring others to explore new avenues for research and development in education.

## **CONCLUSION**

The analysis of dissertation abstracts, introductions, literature reviews, methodologies, results, discussions, and conclusions reveal a clear preference for specific rhetorical patterns in each section. In the abstract section, the dominant pattern is summarizing results, followed by a description of the methodology. In the introduction section, doctoral students predominantly employ a literature synopsis to position their work within the existing research landscape. This step highlights the importance of contextualizing a study with relevant literature to establish its significance. Similarly, the literature review emphasizes providing a general description to a single investigation, showing a tendency to focus on key investigations relevant to the research. Method sections highlight the use of specific methods, underscoring the importance of detailing the research design, while the results section prioritizes qualitative data presentation. In the discussion and conclusion sections, doctoral students focus on referencing their findings and summarizing their contributions, respectively, aligning with established academic conventions. This study, however, is not without limitations. The sample is limited to doctoral dissertations from the field of Language Education, which may not fully reflect the rhetorical patterns used in other academic disciplines. The findings could be influenced by the specific guidelines or institutional expectations of the study program, limiting generalizability. Furthermore, the analysis did not explore how cultural factors or the students' native languages might have influenced their writing style, which could be significant in the case of non-native English-speaking researchers. Lastly, the study focused on identifying patterns but did not delve into the reasons behind the choice of these patterns or how students were trained in academic writing, leaving a gap in understanding the broader pedagogical context. Future research should aim to expand the scope by comparing dissertations across different academic fields to identify whether these rhetorical patterns hold universally or if certain fields require different writing conventions. Additionally, studies that explore how doctoral students are taught academic writing, particularly with respect to these key sections, would provide valuable insights into improving academic writing education. Investigating the impact of students' linguistic backgrounds on their rhetorical choices could also enrich understanding, particularly for non-native English-speaking researchers.

Lastly, providing more detailed guidelines for students, along with practical examples, could help doctoral candidates navigate the complexities of academic writing, ensuring they can effectively communicate their research contributions.

## REFERENCES

- Ahlstrom, D. (2017). How to publish in academic journals: Writing a strong introduction section. *Journal of Management Studies*, 54(5), 755-760. <https://doi.org/10.1111/joms.12292>.
- Ardriyati, W., & Widyaningrum, R. (2015). The importance of writing the method section in a research paper. *Journal of Language and Literature Studies*, 7(2), 45-57.
- Arsyad, S., Purwo, B. K., & Basthomi, Y. (2020). Rhetorical patterns of discussion sections in research articles written by Indonesian authors. *Journal of English for Academic Purposes*, 10(1), 24-35. <https://doi.org/10.1016/j.jeap.2019.12.001>.
- Bavdekar, S. B. (2015). Writing the introduction and discussion sections: Essential parts of a research manuscript. *Journal of Postgraduate Medicine*, 61(4), 273-275. <https://doi.org/10.4103/0022-3859.166515>.
- Berkenttor, J., & Huckin, T. (1995). *Technical writing and professional communication*. New York: McGraw-Hill.
- Bolinger, D. (1976). Meaning and memory. *Forum Linguisticum*, 1(1), 1-14.
- Coxhead, A., & Byrd, P. (2007). *Academic word list*. Victoria University of Wellington.
- Dawson, C. (2009). *Introduction to research methods: A practical guide for anyone undertaking a research project*. How to Books.
- Fahnestock, J. (2011). *Rhetorical style: The uses of language in persuasion*. Oxford University Press.
- Farnia, M., & Barati, N. (2017). A comparative study of introduction sections of research articles written by native and non-native authors in applied linguistics. *Research in Applied Linguistics*, 8(1), 61-77.
- Greenhalgh, T., Taylor, R., & Macfarlane, F. (2004). Papers that summarise other papers (systematic reviews). *BMJ*, 309(6951), 89-91. <https://doi.org/10.1136/bmj.309.6951.89>.
- Hai-lin, H., & Huan, W. (2010). An analysis of abstract structures in L2 academic writing. *Asian ESP Journal*, 6(1), 16-32.
- Holtom, D., & Fisher, W. (1999). *Enjoy writing your science thesis or dissertation! A step by step guide to planning and writing dissertations and theses for undergraduate and graduate science students*. Imperial College Press.
- Jahangard, A., Heidari, M., & Khany, R. (2014). Genre analysis of conclusion sections of research papers in applied linguistics. *International Journal of English Language & Translation Studies*, 2(2), 74-83.
- Kallet, R. H. (2004). How to write the methods section of a research paper. *Respiratory Care*, 49(10), 1229-1232. <https://doi.org/10.4187/1066-1246>.
- Kendal, J. (2015). The role of literature review in placing a research study within a broader context. *Journal of Writing Research*, 7(1), 36-55.
- Kosasih, F. (2017). Methodological considerations in applied linguistics research. *Journal of Applied Linguistics*, 11(3), 53-67.
- Levin, S. (1966). *The rhetorical tradition: Readings from classical times to the present*. Harvard University Press.

- Meyer, K. E., Estrin, S., Bhaumik, S. K., & Peng, M. W. (2009). Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal*, 30(1), 61-80. <https://doi.org/10.1002/smj.721>.
- Morley, J. (2014). *Academic phrasebank*. University of Manchester.
- Parker, R., & Riley, K. (1995). Linguistic and rhetorical patterns in ESL writing. *Journal of Second Language Writing*, 4(3), 231-244. [https://doi.org/10.1016/1060-3743\(95\)90002-0](https://doi.org/10.1016/1060-3743(95)90002-0).
- Pawley, A., & Syder, F. H. (1983). Two puzzles for linguistic theory: Nativelike selection and nativelike fluency. In J. C. Richards & R. W. Schmidt (Eds.), *Language and communication* (pp. 191-225). Longman.
- Qasim, A., Sarvat, S., & Naz, S. (2021). A comparative study of research abstracts written by ESL, EFL, and L1 researchers. *Journal of Multilingual and Multicultural Development*, 42(5), 410-425. <https://doi.org/10.1080/01434632.2020.1812859>.
- Saidi, M., & Talebi, H. (2021). The genre of research abstracts: A study of rhetorical patterns in applied linguistics. *Journal of English for Academic Purposes*, 55, 100-114. <https://doi.org/10.1016/j.jeap.2020.101031>.
- Santos, M. B. D. (1996). The textual organization of research paper abstracts in applied linguistics. *Text & Talk*, 16(4), 481-499. <https://doi.org/10.1515/text.1.1996.16.4.481>.
- Shehzad, W. (2006). Raising a critical voice in the introduction section of research articles. *Journal of English for Academic Purposes*, 5(4), 277-292. <https://doi.org/10.1016/j.jeap.2006.06.003>.
- Sinclair, J. (1991). *Corpus, concordance, collocation*. Oxford University Press.
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333-339. <https://doi.org/10.1016/j.jbusres.2019.07.039>.
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge University Press.
- Ward, S., House, J., & Hamer, M. (2009). Critical literature reviews: A case for structured reading. *Journal of Research in Nursing*, 14(6), 507-516. <https://doi.org/10.1177/1744987109107516>.