



Article

Rhetorical Moves in Research Article Discussions: Does the Quartile Value of a Journal Matter?

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ABSTRACT

Journal rankings are assumed to represent the quality of a publication, and research articles published in differently ranked journals are therefore expected to display different rhetorical patterns in their discussion sections. However, studies investigating the rhetorical patterns of discussion sections in research articles published in journals across different quartiles remain limited. This study was conducted to determine whether the journal quartile values influence the rhetorical moves and rhetorical patterns in the discussion sections of research articles on ELT. A mixed-methods approach using content analysis, following Drisko and Maschi (2016), was applied in this research. The data were selected from 80 discussion sections of research articles on ELT that followed the IMRD pattern and were published in internationally reputable journals across different quartiles, based on the SCImago database of 2023. The rhetorical moves in each discussion section were identified and coded following Peacock's rhetorical move framework (2002). Quantitative analysis was conducted to determine the frequency of rhetorical move occurrences across different quartiles of journals and to identify the rhetorical pattern commonly found in each classification. The results reveal that higher-quartile journals use more complete rhetorical moves, while the lower-quartile journals tend to apply limited rhetorical moves. Consequently, this result leads to different patterns of rhetorical moves commonly found in the discussion sections of research articles published in journals across different quartiles. It is concluded that the quartile values of journals affect the use of rhetorical moves and lead to the development of common discussion-section patterns across different journal quartiles, which also contribute to well-structured research articles. The results have implications for academic writing courses, especially regarding current trends in the rhetorical structure of the discussion section of research articles based on the quartile value of the journals.

I. INTRODUCTION

The discussion section of research articles is where the writer elaborates on the results of the research by presenting knowledge claims related to the study. Composing this section is challenging for writers, especially those in the social and humanities disciplines (Arsyad, 2020; Irawati, 2022). In this section, the writers are expected not only to present the research results, but also to promote and advertise their findings (Arsyad, 2023;

Warsidi, 2023; Moreno, 2021; Abdi, J., & Sadeghi, K., 2018) in order to establish their position within a particular discourse. Moreover, writers also need to demonstrate their expertise in negotiating their research findings in the discussion section of a research article (Sadeghi, 2020). Therefore, the writers need to have sufficient knowledge and skills to critically evaluate the findings of previous research in order to make their claims logical and acceptable for publication by the journal reviewers.

Accordingly, writers have to be familiar with the rhetorical structures or the organizational patterns of the discussion sections of research articles, as these assist them in logically arranging ideas and information, effectively communicating a message, and subtly influencing the readers. Rhetorical patterns improve the coherence, clarity, and persuasiveness of academic writing. Moreover, rhetorical patterns help writers follow the conventions of their discipline by organizing claims, evidence, and interpretations in a logical sequence, which makes research articles easier to understand and more convincing to readers (Peacock, 2002; Kanoksilapatham, 2005; Hyland, 2004). If the rhetorical structure of the discussion section is not written appropriately, it will not be accepted by internationally reputable journals (Flowerdew, 2001).

Accordingly, Peacock's (2002) framework has been widely adopted in genre-based analyses of research article discussion sections across different disciplines and contexts (Yang & Allison, 2003; Basturkmen, 2012; Arsyad et al., 2020; Al-Shujairi et al., 2021). The framework includes presenting background information, reporting findings, commenting on expected or unexpected outcomes, relating findings to previous studies, explaining the results, highlighting the study's contribution, acknowledging limitations, and making recommendations for future research. By integrating these communicative functions, the framework provides a comprehensive model for analyzing how authors interpret, justify, and promote their research findings in discussion sections. Although several rhetorical move frameworks have been proposed over the past four decades, Peacock's (2002) eight-move model represents the culmination of these developments. Drawing on earlier frameworks while incorporating evidence from multiple disciplines and from both native and non-native English writers, the model provides a comprehensive and flexible description of the rhetorical organization of discussion sections. For this reason, this framework of rhetorical moves is used as the reference in analyzing the rhetorical moves in the discussion sections of ELT research articles published in journals across different quartiles.

The rhetorical organization of academic texts across various genres and sections of research articles have been examined extensively by

scholars. The investigation of rhetorical moves of book reviews (Juansyah, 2025) as well as different sections of research articles, including titles (Arsyad et al., 2024), abstracts and introductions (Arianto & Jufrizal, 2023), methodology sections (Risnawati et al., 2025), and results, discussion, and conclusion sections (Mohammad & Moghadam, 2015; Morales, 2012), has been conducted by previous researchers. These studies indicate that rhetorical move analysis has become an important approach for understanding how academic writers organize information to achieve specific communicative purposes.

Among the various sections of research articles, the discussion section has attracted considerable scholarly attention because it is the primary site where authors interpret findings, establish their contributions, and position their studies within existing knowledge. Previous studies on discussion sections (Al-Shujairi et al., 2021; Arsyad et al., 2020; Ash'ari et al., 2023; Suherdi et al., 2020) have mainly examined the rhetorical organization of articles published in high-impact (Q1) applied linguistics journals. These studies have contributed to insights into the communicative functions and rhetorical patterns employed by successful authors, but have largely focused on a single journal quartile and disciplinary context. Nevertheless, comparative investigations of rhetorical move patterns across Q1–Q4 journals remain limited. In fact, journal quartiles may reflect differences in publication standards, editorial expectations, and rhetorical conventions, which could influence how authors construct discussion sections (Arsyad & Zainil, 2023; Kurniawan et al., 2019). To address this gap, the present study investigates the rhetorical structure of discussion sections in ELT research articles published in internationally reputable journals across different quartiles. The findings are expected to contribute to the literature on academic writing and genre analysis, while providing practical guidance for novice and non-native English writers in producing discussion sections that meet the expectations of internationally reputable journals. Accordingly, this study addresses the following research questions:

1. What rhetorical moves are used by the authors in the discussion sections of ELT research articles published in reputable journals across different quartiles?
2. What differences, if any, exist in the rhetorical

patterns of discussion sections in ELT research articles published across different journal quartiles?

II. METHODS

The research employed a mixed-methods approach that combined quantitative and qualitative methods as suggested by Carvalho (2020). According to White and Marsh (2006), the content analysis method has been used to produce findings and contextualize a variety of analytical tools used in conjunction with qualitative, quantitative, and mixed-methods research frameworks. In addition, Drisko and Maschi (2016) stated that this approach is relevant for analyzing texts or other materials in the context used and from various backgrounds of participants. Content analysis was applied to qualitatively describe the rhetorical moves and rhetorical patterns used by authors in the discussion sections of ELT research articles published in internationally reputable journals across different quartiles.

Corpus of the Data

This study investigates the rhetorical moves of Research Article Discussions (RADs) in English Language Teaching across different quartiles of internationally reputable journals. The journals were selected based on the SCImago database (2023) from (www.scimagojr.com), which are categorized as Q1 to Q4 Journals. The Q value for foreign journals is available on the SCImago Journal and Country Rank website (<https://www.scimagojr.com/journalrank.php>). In the SCImago Journal Rank (SJR) system, Q1 journals represent the top 25% of journals in a field, followed by Q2 (25–50%), Q3 (50–75%), and Q4 (bottom 25%). Since journals in different quartiles differ in citation impact, selectivity, and publication standards, they may also exhibit differences in rhetorical organization and academic writing practices. Moreover, the writers of research articles in reputable journals are categorized as good writers since they have gone through the steps of reviewing, editing, and publishing the paper (Boonyuen, 2017). English Language Teaching journals were selected as this field of study represents an interdisciplinary area that integrates research on language pedagogy, discourse practices, second language acquisition, and contemporary educational issues within global and local contexts (Richards & Rodgers, 2014; Ellis & Levy, 2008; Hyland, 2009). In addition,

the number of internationally reputable journals in English Language Teaching indicates that this research area is dynamic and continues to attract scholarly attention, as evidenced by more than 400 open-access journals categorized from Quartile 1 (Q1) to Quartile 4 (Q4) on the SCImago ranking database (2023). This suggests that topics in this field remain under development, are debatable, and open to critique.

The discussion sections were selected from 4 different quartiles of reputable journals on English Language Teaching; each quartile is represented by 2 journals and 10 research articles; thus, the total data being analyzed are 80 discussion sections. The journals are selected based on 4 criteria for selecting documentation data, based on Flick (2018). The first criterion is the originality of the documents; only research articles published in official, peer-reviewed international journals were included to ensure that the data were original and reliable. The second criterion concerns the trustworthiness and quality of the documents. The selected journals were indexed in internationally recognized databases and classified into SCImago Journal Rank (SJR) quartiles (Q1–Q4), ensuring that the articles had undergone rigorous peer-review processes. The third criterion related to whether the selected documents adequately represent the phenomenon under investigation. Accordingly, the corpus comprised discussion sections from ELT research articles across four journal quartiles, allowing comparisons among journals with different levels of impact and publication standards. Finally, the last criterion relates to the relevance of the documents to the research objectives. Only articles written in English, focusing on English Language Teaching (ELT), and following the IMRD structure with a separate discussion section were selected because they provided data directly relevant to the analysis of rhetorical moves.

The selected research articles used as the corpus of the data are taken from 8 internationally reputable journals, namely: Language Learning and Technology (LLT_Q1), Teaching English as Second or foreign Language (TESL_EJ_Q1), Journal of Asia TEFL (ASIA TEFL_Q2), Applied Research on English Language (AREL_Q2), Journal of Teaching English for Specific and Academic Purposes (JTESAP_Q3), Issues in Language Studies (ILS_Q3), A Journal on Language and Language Teaching (LLT_Q4), Research in Language (Q4).

Data Collection Procedure

The first step in collecting the data is accessing the journal's website and searching for the latest publication (2023/2024). Only articles written in English and following the IMRD (Introduction, Methodology, Results and Discussion) pattern were used as the data. Then the discussion section was copied to Word documents and stored in a separate folder. The Word documents of the discussion sections were coded based on the journal, for example, Q1_LLT_01 means the data taken from the discussion section of journal Q1, Language Learning and Technology data no.01. The full version of the discussion section was used as the corpus of the data.

Data Analysis Procedure

The data analysis procedures were carried out in several steps to answer the research questions. To answer Research Question 1, the rhetorical moves model based on Peacock et al. (2002) was used as the framework for analyzing the rhetorical

moves in the discussion sections of research articles in different quartiles of internationally reputable journals. The Model of Rhetorical Moves by Peacock is presented in Table 1.

Referring to the model in Table 1, the frequency of rhetorical moves in the discussion sections were calculated. Quantitative analysis was conducted by identifying the frequency of rhetorical moves (RMs) in the discussion sections of ELT research articles. Each rhetorical move was color-coded and recorded in a checklist table; repeated occurrences within the same article were counted as a single occurrence. The frequency data were then summarized in recap tables to compare the distribution of RMs across journal quartiles (Q1–Q4). The qualitative analysis focused on examining how the rhetorical moves were realized in the discussion sections of research articles across different journal quartiles. The identified moves were analyzed to determine their rhetorical functions, sequencing, and patterns of realization. Particular attention was given to similarities and differences in how authors from

Table 1. Model of Rhetorical Move of Discussion Section by Peacock (2002)

Move	Description	Samples
Move 1: Background	Information about the research, or a statement about “theoretical and technical information” as already addressed earlier in the RA.	The central research questions sought to determine the effectiveness of using AI apps
Move 2: Statement of the result	Claim made by the writer as a direct answer to the research question	The results clearly demonstrated that L2 pronunciation training using AI apps significantly improved L2 perceptual competence.
Move 3: Statement of (Un)expected finding	Statement or comment on whether or not the research results or findings are as expected.	It is noteworthy that improvements persisted over time with relatively strong test-retest reliability, indicating rare practice effects among test-takers.
Move 4: Reference to previous relevant study	Rhetorical attempt by the writer to link the present research findings to the available relevant knowledge or information, for the purpose of comparison or support.	The results were consistent with the findings from studies by Kim and Emeliyanova (2021) and Mujtaba et al. (2021) (Q1_LLT_03)
Move 5: Explanation of research results	Author's rhetorical attempt to logically convince readers why such unexpected or extraordinary results or findings of the present study occurred.	The observed benefits of AI apps for both L2 perception and L2 learning motivation intensity could be attributed to feedback from ASRs.
Move 6: Illustration to support the research results	Illustrations or samples to strengthen or support the explanation of research findings.	When AI apps responded to learners' voice commands, such as scheduling alarms, adjusting settings.
Move 7: Deduction and hypothesis or interpretation of research findings	Author's claim about the interpretation of the research findings within a broader topic or context.	This finding implies that conveying the weaknesses of previous research findings.
Move 8: Suggestions or recommendation	Author's suggestions on the practical application or implementation of the research findings and/or recommendations for further studies on the same or a similar topic.	The theoretical distinction of rhetorical categories, in particular, needs to be accompanied and further substantiated by deliberations on disciplinary preferences and emphases.

Table 2 Inter-Coder Accuracy of Rhetorical Moves in Research Article Discussion of IRJs

Category of Analysis	Subcategory	Rater	Co-Rater	Cohen's Kappa Agreement
Rhetorical Move	Move 1	5	6	0.87
	Move 2	16	16	
	Move 3	8	8	
	Move 4	16	16	
	Move 5	15	15	
	Move 6	14	14	
	Move 7	13	14	
	Move 8	6	6	

Q1, Q2, Q3, and Q4 journals constructed their discussions to interpret findings, relate them to previous studies, explain unexpected results, state implications, acknowledge limitations, and provide recommendations.

To answer Research Question 2, the use of rhetorical moves in discussion sections of ELT research articles from different journal quartiles was categorized according to Kanoksilapatham (2005), who classified moves based on the percentage of occurrence: obligatory (100%), conventional (60% to 99%), and elective (less than 60%). The category of each move in different quartiles of journals was compared to determine characteristic rhetorical structures associated with Q1, Q2, Q3, and Q4 journals. The qualitative analysis complemented the quantitative findings by explaining not only the frequency of each move but also the ways in which the moves contributed to the overall organization and communicative effectiveness of the discussion sections, ultimately leading to a clearer understanding of the rhetorical move patterns across different journal quartiles.

To ensure the validity of the data analysis results, the findings were evaluated by an independent coder and examined side by side by applying Cohen's kappa statistic to see the inter-coder correlation agreement. Cohen's kappa statistic is used to measure the level of agreement between the researcher and independent coder. The scores below 0.40 were categorized as poor, 0.40-0.59 moderate, 0.60-0.74 adequate, and 0.75 or higher extraordinary (Kanoksilapatham, 2005). As can be seen in Table 2, the obtained mean Cohen's kappa score is 0.87 or 87%, showing an extraordinary total inter-coder reliability. These quantitative results were used to identify occurrence patterns, present the findings in tables, and develop models of rhetorical moves based on their distribution across different journal quartiles. Accordingly, the

patterns of rhetorical moves in different quartiles of journals were then identified based on the category of rhetorical move occurrences.

The result of inter-coder correlation reached 87%, which is considered an excellent inter-coder agreement (Orwin, as cited in Kanoksilapatham, 2005). Based on the result, the data is confirmed as valid.

III. RESULTS

The first research question addresses the rhetorical moves in the discussion sections of research articles on ELT published in different quartiles of internationally reputable journals. The results show that almost all rhetorical moves were applied by the authors in writing the discussion sections of ELT research articles published in Q1 through to Q4 journals. It proves that authors across all journal quartile levels generally follow established rhetorical conventions in constructing discussion sections. However, each move occurs in different categories, indicating that the authors selectively decided which moves should be included or omitted. The rhetorical moves in the discussion sections of ELT research articles, based on the quartile values of the journals, are presented in Table 3:

Table 3 shows that, among the eight moves proposed by Peacock (2002), only Move 2 reached 100% occurrences across all journals' quartiles. This result is reasonable since Move 2 directly answers the research questions and functions as the core move of the discussion section which cannot be omitted. In addition, most of the moves (Move 1, 3, 4, 5, and 6) identified occurred in between 60% and 95% of the data sets, with two others moves (Move 7 & Move 8) found in less than 60% occurrences.

Move 1 is defined as information about the

Table 3. The Rhetorical Moves of Discussion Sections of RAs on ELT Based on Different Quartile Values of the Journals

Move	Q1=20		Q2=20		Q3=20		Q4=20	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Move 1	17	85%	15	75%	12	60%	15	75%
Move 2	20	100%	20	100%	20	100%	20	100%
Move 3	19	95%	19	95%	16	80%	11	55%
Move 4	20	100%	20	100%	19	95%	18	90%
Move 5	20	100%	18	90%	17	85%	19	95%
Move 6	20	100%	18	90%	17	85%	13	65%
Move 7	10	50%	8	40%	8	40%	8	40%
Move 8	7	35%	2	10%	6	30%	7	35%

research or a statement about ‘theoretical and technical information’ as addressed earlier in the introduction section. This move is regarded as the conventional move in the discussion section of a research article. Move 1 is commonly presented by restating the research question or the objective of the research. The example of the use of Move 1 from the data sets is presented in the following extract:

Extract 01

The first research question asks whether the chatbot activities were evaluated with higher scores than the worksheet activities. (Q1_LLT_01)

The extract above is cited from an article published in a Q1 journal. As seen in the extract, the authors begin the discussion section by restating the first research question. This sentence functions as an opening sentence to recall the research question, which has been presented in the introduction. Besides restating the research questions, this move is also applied by first presenting the topic of the research or the method used in the research. Commonly, this sentence leads the readers to the presentation of the research findings (Move 2).

Move 2, which is defined as a claim made by the authors as the direct answer to their research questions, is categorized as obligatory in all the data sets. This move is commonly identified by the statements presenting the research findings, which is the main part of the discussion section. The following are extracts of Move 2 found in the data sets:

Extract 02

The results suggested that both the teachers and learners believed that task rehearsal had positive effects on different dimensions of task performance conceived in terms of CALF. (Q2_AREL_01)

Extract 02 above is taken from the discussion section of a research article published in a Q2

journal. From the above extract, it can be seen that the writers present the result through the direct statement ‘the results suggested that...’ This statement directly guides the readers to the findings or results of the research. Others phrase commonly found in presenting this move from the data sets include: ‘**The findings showed that...**’, ‘**The current findings demonstrated that...**’, ‘**The present study found that...**’

Move 3, which is defined as a statement or comment on whether or not the research results or findings are as expected, is categorized as conventional in the data sets. This move is commonly presented by expressions such as ‘it is noteworthy’ and ‘interestingly’ to show whether the recent results meet the expectations of the researchers or not. The following extract presents the use of Move 3 from the data sets:

Extract 03

The recognition and production of grammatically correct sentences as well as comprehension of their propositional content **are critical** in the creation of discourse (Celce-Murcia & Larsen-Freeman, 2007; Flowerdew, 2013). (Q3_ILS_08)

The above extract is taken from a discussion section of a research article published in a Q3 journal. From this extract, it is noted that the writer comments on the previous sentence, which presents the findings and states that their claims are related to the findings. They also support their comments by referring to experts’ sources to strengthen the statement. This sentence functions to reinforce their claims about the findings.

Move 4 is the rhetorical attempt of authors to link the present research findings to the available relevant knowledge or information for the purpose of comparison or to support the present findings identified as a conventional move. However, this move occurs the most frequently compared to the other conventional moves. In other words, it can be

stated that most of the discussion sections of research articles on ELT apply this move. Move 4 functions to support the claims about the research findings by showing that the recent research findings are in line with, different from, or contradict the previous research findings. Examples of this move from the data set are presented below:

Extract 04

This is in line with Kennedy and Trofimovich (2008), where decontextualization lowers intelligibility. (Q4_RiL_04)

Extract 04 above is taken from the discussion section of a research article published in a Q4 journal. It is noticed from the extract that the authors stated that their recent result is in line with a previous study, which functions to show the acceptability of their research findings in a certain discourse community. The other way to present Move 4 is by stating the differences between the recent result and the previous study, as presented in the following extract:

Extract 05

This fact is not in line with previous findings (Al-Issa, 2017; Ennis, 2018; Jia & Hew, 2021) which stated that the speaking ability of lecturers is in line with the understanding of teaching practice using EMI (Q3_ILS_05)

Extract 05 above is taken from the discussion section of a research article published in a Q3 journal. In this extract, the writers stated the differences between recent research findings and previous studies by denying the statement 'not in line with.' By stating the differences, the authors indirectly propose the novelty of the recent research findings compared to previous studies. Moreover, this move is also applied by stating contradictions between the previous research findings and the previous studies. By showing the contradiction, the authors not only present different findings, but also refute previous findings and propose the novelty of their recent research findings at the same time.

Move 5, which was identified as the author's rhetorical attempt to logically convince readers why such unexpected or extraordinary results or findings of the present study occur, was identified as a conventional move. However, the occurrence of this move was consistently high across all datasets, although it did not reach 100% of the analyzed articles. The high frequency of Move 5 occurrence shows that this move is regarded as an essential move in the discussion sections of research articles

in journals across all quartiles. This move functions as the additional attempt of the writers to persuade the readers by providing examples to support their claims. The use of modals such as *might be* and *could be* commonly signals the use of this move. The following extract shows the realization of Move 5 in the data set:

Extract 06

Furthermore, the chatbot design activities for language teaching were conducted using course content and goals explicitly illustrated in digital textbooks. **This might** explain their high TPACK levels for Instructional Strategies & Technologies and Fit. (Q1_LL_T_02)

Extract 06 above was taken from the discussion section of a research article published in a Q1 journal. The use of the modal *might* shows that the writers try to convince the readers by giving possibilities as to why such findings are identified. The authors provide explanations to support their claims based on the research findings, thereby convincing readers that their findings are credible and worthy of consideration.

The last conventional move is Move 6, which provides illustrations or samples to strengthen or support the explanation of research findings. The descriptions or examples are commonly about the research process, which supports the claims regarding the research findings. Linguistic markers, such as *for example*, commonly signal the presence of this move. The following extract shows the realization of Move 6 from the data sets:

Extract 07

Notably, the lesson plans with high-level TPACK aimed at maximizing students' engagement and learning through the innovative use of chatbots. **For instance**, Group 2's lesson plan not only supports... (Q1_LL_T_02)

Extract 07 above is taken from a research article published in a Q1 journal. From extract 07 above, it is notable that the writers provide an illustration of the research process, which is signified by the phrase *for instance*, followed by the description of what happened during the research process which is categorized as Move 6. By providing the illustration, the authors add the additional information that supports the claims of recent research findings.

Moves 7 and 8 are categorized as elective, as they occur in less than 60% of the datasets across all journals' quartiles. Move 7, which is identified as the author's claim about the interpretation of

the research findings to a larger scope of topic or area, is commonly signaled by the use of linguistic features such as implied, interpret etc. The example of the realization of this move is presented below:

Extract 08

Most importantly, **the findings of this study offer a comprehensive understanding ... This insight can be valuable for educators...** (Q1_TESL-EJ_06)

Extract 08 above is taken from the discussion section of a research article published in a Q1 journal. From extract 08 above, it is noticed that the writers present their interpretation about the recent research findings and relate the findings to the broader domain.

Move 8, which presents the writers' suggestions for the application or implementation of the research findings in practical ways and/or suggestions for further studies in the same or similar topic, occurs the least frequently, reaching 27.5% occurrences. It shows that presenting suggestions is considered a non-essential component of the discussion section in research articles. Words such as *suggest* are commonly used in this move. The example of this move from the data sets is presented in the following extract:

Extract 09

However, further research is needed to support and validate these findings... Therefore, more studies are necessary to determine the consistency of these findings ... (Q3_ILS_03)

Extract 09 above was taken from a discussion section of a research article published in a Q3 journal. From this extract, it is clear that the writers suggest further research to support the recent findings by the expressions 'further research is needed' and 'more studies are necessary.' Thus, this extract is categorized as Move 8.

The results show that journals across different quartile values applied the rhetorical moves in the

discussion section differently in terms of frequency and variation. The authors in higher-ranked journals are more likely to include a wider range of rhetorical moves and present them more thoroughly, whereas lower-ranked journals may omit certain moves or realize them less comprehensively. In addition, the higher-quartile journals place greater emphasis on rhetorical completeness, clarity of argumentation, and adherence to established academic writing conventions.

The second research question is whether different quartiles of journals influence the rhetorical patterns of discussion sections. The results show that there are differences in the rhetorical patterns of the discussion sections of research articles published in journals across various quartiles. The differences of rhetorical patterns based on different quartile values of the journals are presented in Table 4.

Table 4 shows the category of rhetorical moves found in different quartile values of journals. This result shows that the authors of higher-level journals use more complete and more comprehensive rhetorical patterns in presenting their discussion sections. As a result, the discussion sections of research articles published in higher-quartile-value journals tend to be longer compared to those in lower-level journals.

The rhetorical pattern of discussion sections in RAs on ELT published in Q1 journals shows that there are 4 moves that occur in all the data sets of Q1 journals, and are categorized as obligatory moves. The four moves are Move 2, 4, 5, and 6. This shows that the discussion sections of research articles on ELT published in Q1 journals generally follow the M2M4M5M6 pattern. The example of the application of this rhetorical pattern in Q1 journals is presented below:

Table 4. The Rhetorical Pattern of Discussion Sections of Research Articles on ELT Published in Different Quartile Values of the Journals

Journal Quartile	Category of Rhetorical Moves								Common Pattern of Rhetorical Structure
	M1	M2	M3	M4	M5	M6	M7	M8	
Q1	Con	Ob	Con	Ob	Ob	Ob	El	El	M2 M4.M5 M6
Q2	Con	Ob	Con	Ob	Con	Con	El	El	M2 M4
Q3	Con	Ob	Con	Con	Con	Con	El	El	M2
Q4	Con	Ob	Con	Con	Con	Con	El	El	M2

Ob; Obligatory ; Con : Conventional; El ; Elective

Extract 10

For RQ 1, **the findings showed that** the participants' TPACK levels, as reflected in their lesson plans, were medium to high on average. (Move 2) **This result somewhat contrasts** with Crosthwaite et al.'s (2023) findings, ... (Move 4). Furthermore, the chatbot design activities for language teaching were conducted using course content and goals explicitly illustrated in digital textbooks. **This might explain** their high TPACK levels for Instructional Strategies & Technologies and Fit. ... (Move 5) **For instance**, Group 2's lesson plan not only supports ... (Move 6) (Q1_LLT_02)

Extract 10 above is taken from an article published in the Language Learning and Technology journal (LLT). From the extract, it is evident that the authors first provide the research result (Move 2), followed directly by referencing previous research (Move 4) to show their position regarding the recent findings. In this case, the authors demonstrate that their results support or are relevant to previous research on a similar topic. To further emphasize their findings, the authors justify the results by presenting a logical sequence showing how the results were achieved. Additionally, the authors support their justification with data illustrations. Moves 4, 5, and 6 are sequenced to display the authors' efforts to persuade readers to appraise their recent results. All data from Q1 journals show the application of the M2M4M5M6 pattern in the discussion sections of ELT research articles.

On the other hand, the data from the discussion sections of research articles published in Q2 journals show that there are two obligatory moves, namely presenting the result (Move 2) and referring to previous studies (Move 4), as these two moves were found in all Q2 journal articles. Moves 1, 3, 5, and 6 were categorized as conventional, while Move 7 and 8 are categorized as elective. The following extracts present the rhetorical pattern of the discussion section in research articles on ELT published in Q2 journals. The following extract shows the pattern of M2M4, which is commonly found in Q2 journals:

Extract 11

The findings indicate that smartphones have significant potential for enhancing EFL... (Move 2) **These results are closely aligned with** the study by Seraj et al. (2021). (Move 4) **This study identified** the beneficial impact of a positive learner attitude towards using ... (Move 2) **Similarly**, Azar and Nasiri (2014) observed a shift in attitudes among their experimental... (Move 4) (Q2_AREL_02)

Extract 11 above is taken from a research article published in a Q2 journal. From the data,

it can be seen that the writers used only Move 2 (presenting the result) and Move 4 (referring to previous research) in their discussion section. This highlights the requirement of presenting results and referencing previous studies in Q2 journals, as the authors' effort to contend that their research findings are acknowledged within the field. However, most of the data from Q2 journals also apply Moves 5 and 6 in their discussion sections since these two moves are found in a relatively high frequency of occurrences, indicating that these rhetorical moves play an important role in the organization of discussion sections in Q2 ELT research articles.

The result of the rhetorical pattern of Q3 and Q4 journals presents the same pattern, where the only move identified in all the data sets of Q3 and Q4 journals is Move 2. However, Move 4 occurs at a relatively high frequency, showing that this move is considered an essential move. The others moves, namely Move 1, 3, 5, and 6, are categorized as conventional, while Move 7 and 8 are only in the elective category in the discussion sections of Q3 and Q4 journals.

The following extract shows the rhetorical pattern of the discussion section of RAs published in Q3 journals:

Extract 12

The study showed how lecturers at tertiary education in Indonesia comprehend... (Move 2) **This fact confirms the findings of** previous studies (Duran & Sert, 2019; Hong & Basturkmen, 2020). (Move 4) (Q3_ILS_05)

The above extract is taken from the Issues in Language Studies Journal, which is a Q3 journal. In the extract, it is noted that the writer directly presents the research findings (Move 2) without providing background information (Move 1). After presenting the findings, the writers compare them to previous research (Move 4) on a similar topic. Most of the data in the discussion sections of Q3 journals present Move 2 followed by Move 4. This pattern shows the authors' attempts to assert that their current research findings are tenable and, therefore, acceptable within the relevant discourse community. In addition, Moves 5 and 6 also occur at a considerably high frequency. Thus, it can be assumed that Moves 4, 5 and 6 are considered as essential components in the discussion sections of research articles published in Q3 journals.

The following extract is an example of the rhetorical pattern of the discussion section in a Q4

journal:

Extract 13

The study has provided data on the perceptions of secondary school learners on ... (Move 2) ...**the presented results confirm the claims** made by Baran-Łucarz (2017) and Jarosz (2019)... (Move 4) (Q4_RiL_10)

The extract above is taken from a research article published in the *Research in Language Journal* (Q4). The extract above shows two common moves identified in the discussion section of the Q4 journal, namely: presenting the result (Move 2) and referring to previous studies (Move 4). It implies that the writers aim to convince readers of their findings by comparing them with previous research to support their claims. Moreover, this discussion section highlights the authors' arguments in persuading readers about the validity of their results. It can be said that articles published in Q4 journals tend to rely heavily on the strategic use of Move 4, indicating that supporting empirical findings through relevant citations is a key rhetorical practice in constructing the discussion section.

IV. DISCUSSION

The present study analyzed the discussion sections of ELT research articles published in internationally reputable journals across different quartiles. The first research question concerned the rhetorical moves used in the discussion sections according to the quartile values of the journals. The results reveal that among the eight moves proposed by Peacock (2002), only Move 2 (presenting the result) was found in all the datasets, or the occurrences reached 100%. Since discussion section aims to present the authors' interpretation of the result; Move 2 is a central part which cannot be omitted. This finding contrasts with previous studies that identified Move 1 (Ash'ari et al. (2023)) and Move 4 as obligatory moves in the discussion sections of research articles (Ash'ari et al. (2023); Arsyad (2020), Al-Shujairi (2021), and Suherdi et al. (2020)). This discrepancy may be attributed to differences in the data sources. Most previous studies (Ash'ari et al., 2023; Arsyad, 2020; Al-Shujairi, 2021; Suherdi et al., 2020) focused on the discussion sections of articles published in the highest level (Q1) of journals on applied linguistics, whereas the present study examines ELT discussion sections across four journal quartiles. These different disciplinary orientations may influence

how authors construct discussion sections and realize rhetorical moves. This claim has been confirmed by some research, which had proven that the different fields of study will influence the rhetorical style of writing research articles (Irawati, (2022); Warsidi et al (2023).

Overall, the results suggested that the rhetorical moves used in the discussion sections of research articles may vary across different fields of study and journal quartiles. The more complete realization of rhetorical moves observed in higher-quartile journals suggests that their discussion sections are more systematically organized to accomplish their communicative purposes (Zhang & Wang (2025). According to Swales (1990, 2004), rhetorical moves provide the functional structure through which academic texts achieve their communicative goals. Similarly, Yang and Allison (2003) argue that each move contributes a distinct rhetorical function to the discussion section, while Hyland (2005) emphasizes that effective academic writing depends on coherent organization and persuasive argumentation. Therefore, the broader realization of rhetorical moves in Q1 journals may contribute to clearer, more coherent, and more persuasive discussion sections.

The other notable finding is the rhetorical patterns across different quartiles of journals. Among the four quartile levels, the data from Q1 journals show the most complete and comprehensive rhetorical patterns. This is reasonable because Q1 is the highest journal quartile and is assumed to publish high-quality articles. This result is in line with Wu (2007), who also found that higher-level essays commonly present more accomplished patterns. In addition, this result is partially corroborated by some previous studies which found that the authors of research articles on ELT generally present their research results (Move 2), which are directly followed by Move 4 or Move 5 (Irawati, 2022). After claiming the result, the writers frequently support their claim by comparing or contrasting it with previous research and providing further explanation to convince the readers. In another context, Arsyad et al. (2020) reported that Move 2 can be seen occurring before Moves 4 and 5 to elaborate and justify the findings of the research.

This implies that there are several key points of evidence in the discussion sections of research articles on ELT published in Q1 journals. The

authors frequently refer to previous research to contextualize their findings, clearly explain the results of their own studies, and concisely provide supporting illustrations and examples to help clarify and strengthen their arguments. These elements contribute to the overall quality and comprehensiveness of the discussion sections in high-ranking journals. As a result, the discussion sections of research articles published in Q1 journals tend to be more comprehensive and longer in words. On the other hand, the lower quartile journals typically simplify the pattern by only including M2M4 or only M2. These results imply that rhetorical patterns may guide authors to compose a clear, coherent, and argumentative discussion section.

V. CONCLUSIONS

The rhetorical structure of the discussion section in a research article plays an important role in helping authors compose well-structured and argumentative discussion sections. The use of rhetorical moves in discussion sections highlights the writer's effort to provide sufficient explanation and evidence to support their claims about the results. Journals at different quartile levels were found to use and apply rhetorical structures in their discussion sections differently. Higher-quartile journals employ a more comprehensive range of rhetorical moves in their discussion sections, whereas lower-quartile journals exhibit less complete move structures. In addition, the pattern of discussion sections across different journal quartiles also showed distinct common patterns. The discussion-section patterns in research articles published in Q1 journals tend to be more complete and comprehensive, while lower-quartile journals typically simplify the pattern by including only M2M4 or M2. Complete and comprehensive discussion-section patterns contribute to well-structured and highly argumentative discussion sections, which are commonly characteristic of high-ranking journals. Overall, it can be concluded that the authors publishing in higher-quartile journals typically apply more strategies when writing their discussion sections in order to convince the readers to accept their claims, while authors publishing in lower-quartile journals commonly demonstrate less comprehensive rhetorical development.

This study is limited in several ways,

particularly regarding its focus on a specific field of study and the different linguistic backgrounds of the authors (native and non-native English speakers). Considering these limitations, it is suggested that future research could expand the scope by comparing rhetorical moves and rhetorical patterns in discussion sections across different academic fields or authors' language backgrounds (e.g., native vs. non-native English speakers). Journal policies, disciplinary conventions, and editorial expectations could also be explored more extensively. Furthermore, interviews with authors about their rhetorical intentions could provide further insight into rhetorical strategies from the writers' perspective.

ETHICS STATEMENT

The authors have read and followed the ethical requirements for publication in **Jurnal Arbitrer** and confirm that the current work does not involve human subjects, animal experiments, or any data collected from social media platforms.

CREDIT AUTHOR STATEMENT

Mei Hardiah: Preparing the research instrument, conducting data collection processes, analyzing the raw data, analyzing the research data, preparing the initial outline of the article, drafting the initial article draft, editing the manuscript, and polishing the final draft version.

Safnil Arsyad: Analyzing the research data, evaluating the initial outline of the article, evaluating the initial article draft, editing the manuscript, and polishing the final draft version.

Wisma Yunita: Analyzing the research data, checking the layout of the article, editing the manuscript, and polishing the final draft version.

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DECLARATION OF COMPETING INTERESTS

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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