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**A Corpus-Based Analysis of Rhetorical Moves in Abstracts and
Conclusions of English Research Articles Published in Pakistani
HEC-Recognized Journals**



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Abstract

Academic research articles rely on well-structured abstracts and conclusions to communicate research objectives, methodology, findings, and scholarly contributions effectively. Despite the increasing research output from Pakistan, limited attention has been given to the rhetorical organization of these two important sections within English-language research articles. This study investigates the rhetorical move structure of abstracts and conclusions published in Pakistani HEC-recognized English-language journals using Hyland's (2000) five-move model. Employing a corpus-based mixed-methods design, the study compiled a corpus comprising 100 abstracts and 80 conclusion sections selected purposively from five HEC-recognized journals published between 2021 and 2024. AntConc (Version 3.5.9) was used to identify rhetorical moves and examine their distribution alongside selected lexicogrammatical features. The findings reveal that the Product (Findings) move is the most consistently employed rhetorical move in abstracts, indicating authors' preference for foregrounding research outcomes. In contrast, conclusion sections predominantly emphasize the Conclusion move, particularly the evaluation of research significance and recommendations. However, considerable variation exists in the realization of the Introduction and Method moves, while explicit statements of research limitations are comparatively rare. The findings suggest that Pakistani scholars generally follow internationally recognized rhetorical conventions but employ some moves inconsistently across journals. These results provide valuable insights into academic writing practices in Pakistan and have important pedagogical implications for English for Academic Purposes (EAP), genre-based writing instruction, and research publication training. The study also contributes to genre analysis by providing empirical evidence regarding rhetorical move realization within Pakistani academic discourse.

Keywords: Genre analysis; rhetorical moves; research article abstracts; research article conclusions; corpus linguistics; Hyland's model; academic discourse; Pakistani research journals

1. Introduction

Research articles constitute one of the principal means through which scholarly knowledge is generated, validated, and disseminated within academic communities.

Among the constituent sections of a research article, the abstract and conclusion perform particularly significant communicative functions. The abstract serves as the initial point of contact between researchers and potential readers by summarizing the purpose, methodology, principal findings, and overall contribution of the study. Likewise, the conclusion synthesizes the major findings, evaluates their significance, highlights theoretical or practical implications, and frequently proposes directions for future research. Together, these two sections influence readers' decisions to engage with the complete article and shape reviewers' and editors' perceptions of its scholarly value. Consequently, the effectiveness of abstracts and conclusions depends not only on linguistic accuracy but also on their rhetorical organization. This framing reflects the study's emphasis on the importance of academic discourse and the communicative role of research writing.

The increasing internationalization of research publishing has intensified the need for authors to conform to established disciplinary conventions. Research articles are no longer evaluated solely on the originality of their findings but also on the clarity and organization with which those findings are communicated. Academic discourse therefore represents a specialized form of communication governed by recognized rhetorical and linguistic conventions. Genre scholars argue that successful academic writing requires writers to understand how individual sections of a research article fulfill distinct communicative purposes within a discourse community. These communicative purposes are realized through rhetorical moves—functional units of text that collectively accomplish the objectives of a genre. The thesis grounds this understanding in genre analysis and academic discourse, particularly drawing on Hyland, Swales, and Bhatia.

Genre analysis has emerged as one of the most influential approaches for examining the structural organization of academic texts. Rather than focusing exclusively on grammatical correctness, genre analysis investigates how writers organize information to accomplish communicative goals. Swales (1990, 2004) conceptualized academic genres as sequences of rhetorical moves, while Hyland (2000) refined this perspective by proposing a five-move model for research article abstracts consisting of Introduction, Purpose, Method, Product, and Conclusion. Each move contributes to the communicative effectiveness of the abstract by guiding readers through the research process in a systematic manner. Because these moves reflect shared disciplinary expectations, they have become valuable analytical tools

for examining academic writing across disciplines, cultures, and languages. The uploaded thesis explicitly adopts Hyland's (2000) five-move model as its analytical framework.

Although rhetorical move analysis has received considerable scholarly attention internationally, previous studies have demonstrated that rhetorical conventions vary across disciplines, languages, and academic cultures. Researchers have reported differences in move realization among English, Spanish, Persian, Arabic, Chinese, Turkish, and Indonesian research articles, suggesting that rhetorical practices are shaped by both disciplinary norms and local academic traditions. Such variations indicate that academic writing conventions cannot be regarded as universally homogeneous. Instead, they reflect the interaction between global publication standards and local scholarly practices. The thesis similarly reviews a broad body of international studies illustrating these cross-cultural and cross-disciplinary variations.

Within Pakistan, research productivity has increased substantially during the last decade, particularly following higher education reforms that encouraged publication in HEC-recognized journals. Despite this expansion, comparatively little research has examined how Pakistani scholars organize rhetorical information in their research articles. Existing studies have primarily focused on isolated sections of research articles, interactional metadiscourse, or individual genres such as student essays. Comprehensive investigations simultaneously examining both abstracts and conclusions within English-language research articles remain scarce. Furthermore, previous Pakistani studies have generally employed limited datasets or different analytical frameworks, making comparisons difficult. The thesis identifies this lack of integrated analysis as the principal research gap motivating the present study.

To address this gap, the present study investigates the rhetorical move structures employed in abstracts and conclusions of English-language research articles published in Pakistani HEC-recognized journals. The study further explores selected lexico-grammatical features associated with these rhetorical moves through a corpus-based analytical approach. A corpus comprising 100 abstracts and 80 conclusion sections was compiled from five HEC-recognized journals representing English language and linguistics research. AntConc software was employed to identify rhetorical patterns, while Hyland's (2000) framework guided the qualitative interpretation of move realization. These methodological choices are consistent with

the research design presented in the source thesis.

The study contributes to the growing field of genre analysis in several important ways. First, it provides empirical evidence regarding rhetorical organization in Pakistani English-language research articles, an area that remains underexplored. Second, by examining abstracts and conclusions together rather than independently, the study offers a more comprehensive understanding of rhetorical practices within research writing. Third, the findings provide practical guidance for postgraduate students, novice researchers, journal editors, and instructors involved in English for Academic Purposes (EAP) and research writing courses. Improved understanding of rhetorical move realization may facilitate more effective academic communication and enhance the publication success of emerging scholars in national and international journals.

Accordingly, the study addresses the following research objectives:

1. To identify and analyze the rhetorical moves employed in abstracts and conclusions of research articles published in Pakistani HEC-recognized English-language journals.
2. To examine the lexico-grammatical features associated with these rhetorical moves.

By integrating corpus linguistics with genre analysis, this study offers a systematic description of rhetorical practices in Pakistani academic discourse while contributing to ongoing discussions concerning disciplinary writing conventions and effective scholarly communication.

2. Literature Review

2.1 Genre Analysis and Academic Writing

Genre analysis has become one of the most influential approaches for examining academic writing because it explains how texts are organized to achieve specific communicative purposes. Rather than viewing writing as merely a collection of grammatical structures, genre theory considers academic texts as socially recognized forms of communication shaped by the expectations of particular discourse communities. Bhatia (1993, 2004) argues that genres represent conventionalized communicative events whose organization reflects the purposes of writers and the expectations of readers. Similarly, Swales (1990, 2004) conceptualizes genre as a class of communicative events characterized by shared purposes recognized by members of a discourse community.

Within academic settings, genre knowledge enables researchers to present their

studies in ways that meet disciplinary expectations. Academic discourse therefore extends beyond vocabulary and grammar to include rhetorical organization, communicative intent, and discipline-specific conventions. Hyland (2004, 2009) emphasizes that successful academic writing requires authors to negotiate knowledge claims through rhetorical strategies that both communicate research findings and persuade readers of their significance. The uploaded thesis similarly positions genre analysis as the most appropriate framework for understanding the communicative organization of research articles, particularly abstracts and conclusions.

2.2 Rhetorical Move Analysis

One of the central concepts in genre analysis is the rhetorical move. Swales (2004) defines a move as a functional unit of discourse that performs a recognizable communicative purpose within a text. Each move contributes to accomplishing the overall objective of the genre and may consist of one or several rhetorical steps. Unlike grammatical units, rhetorical moves are identified by their communicative function rather than their linguistic form.

Move analysis has become an established method for investigating research articles because it reveals how scholars organize information to satisfy disciplinary conventions. Previous research demonstrates that although certain rhetorical moves occur consistently across disciplines, their frequency, sequence, and linguistic realization vary according to disciplinary practices, cultural contexts, and publication traditions. Consequently, move analysis provides valuable insights into similarities and variations in academic writing across different discourse communities. The thesis adopts this perspective by employing Hyland's model to identify functional patterns within Pakistani research writing.

2.3 Hyland's Five-Move Model

Among the various frameworks developed for move analysis, Hyland's (2000) five-move model remains one of the most widely applied in studies of research article abstracts. The model proposes that an effective abstract generally consists of five communicative moves:

- **Introduction**, which establishes the research context and significance;
- **Purpose**, which states the research objective;
- **Method**, which describes participants, instruments, procedures, or research design;
- **Product**, which presents the principal findings; and

- **Conclusion**, which discusses implications, recommendations, significance, or future directions.

Each move fulfills a distinct communicative function while collectively providing readers with a concise yet comprehensive overview of the study. Because of its flexibility and applicability across disciplines, Hyland's framework has been extensively employed in cross-disciplinary, cross-cultural, and corpus-based investigations. The present study adopts this model to examine both abstracts and conclusions, extending its application beyond the abstract section to provide a comprehensive analysis of rhetorical organization. This analytical framework is explicitly described in the uploaded thesis.

2.4 Previous Studies on Research Article Abstracts

Research on abstracts has expanded considerably during the last two decades. Martín-Martín (2003) demonstrated that although Spanish and English research article abstracts share many rhetorical characteristics, important differences exist in the realization of introductory moves. Ahmadi (2009) reported cross-cultural variation between English and Persian biology abstracts, particularly regarding the emphasis placed on methodology and results.

Li (2011) compared English and Chinese abstracts in chemistry and linguistics and found that rhetorical organization differed according to both language and discipline. Alhuqbani (2013), examining Arabic research article abstracts from multiple disciplines, observed that medical abstracts adhered more closely to internationally recognize rhetorical conventions than abstracts from humanities-related fields.

Similarly, Suntara and Usaha (2013) investigated linguistics and applied linguistics abstracts and concluded that the Purpose, Method, and Product moves occurred consistently, whereas the Introduction and Conclusion moves appeared less frequently. Darabad (2016) further demonstrated disciplinary differences in move patterns and linguistic realization across applied linguistics, mathematics, and chemistry. Subsequent studies by Belyakova (2017), Ghasempour and Farnia (2017), Ebadi, Salman, and Nguyen (2019), Kaya and Yağız (2020), Bonsu (2021), and Mohammadzadeh and Sukan (2022) similarly reported that although Hyland's five moves provide a useful analytical framework, writers often omit or modify particular moves depending on disciplinary conventions, linguistic background, and publication culture. These international studies reviewed in the thesis consistently indicate that the

Product move tends to be the most obligatory element of abstracts, whereas introductory and concluding moves show greater variation.

2.5 Studies on Research Article Conclusions

Compared with abstracts, research article conclusions have received relatively limited scholarly attention. Nevertheless, existing studies suggest that conclusions constitute an essential rhetorical component because they synthesize findings, interpret their significance, acknowledge limitations, and propose future research.

Adel and Moghadam (2015) examined conclusion sections across applied linguistics, psychology, and Persian literature and found disciplinary differences in move realization. Ghazanfar, Mohtasham, and Amishdibani (2016) compared ELT and nursing research articles and reported considerable similarity in rhetorical organization despite disciplinary differences. Zamani and Ebadi (2016) likewise demonstrated that conclusion sections generally follow recognizable rhetorical patterns while varying in the prominence of individual moves.

Studies conducted in other contexts have reached comparable conclusions. Soler-Monreal (2016) investigated doctoral thesis conclusions in computer science and identified recurring rhetorical structures, while Alkamillah, Azwandi, and Maisarah (2022) reported that Indonesian applied linguistics articles generally conformed to established move patterns. Collectively, these studies indicate that although conclusion sections exhibit greater flexibility than abstracts, they continue to follow recognizable rhetorical conventions that contribute to effective scholarly communication. The thesis synthesizes these findings to justify analyzing conclusion sections alongside abstracts.

2.6 Research on Rhetorical Moves in Pakistan

Research on genre analysis within Pakistan remains comparatively limited. Existing investigations have examined individual components of research articles rather than offering comprehensive analyses of rhetorical organization. Imtiaz and Mahmood (2014) analyzed rhetorical moves in Pakistani students' essays and reported that students generally followed conventional organizational patterns. Aslam and Mehmood (2014) investigated conclusion sections of Pakistani research articles and demonstrated disciplinary variation in rhetorical structure. Ahmed, Memon, and Soomro (2017) explored interactional metadiscourse in civil engineering research articles, showing differences between Pakistani and British academic writing.

More recently, Annie, Tahira, and Yakoob (2021) examined rhetorical moves in

Pakistani research article abstracts and found that many abstracts did not consistently realize internationally recognized move structures. However, these studies typically focused on isolated genres or single sections of research articles. Few investigations have simultaneously analyzed both abstracts and conclusions within English-language journals, and even fewer have employed a corpus-based methodology supported by corpus analysis software such as AntConc. The thesis therefore identifies a significant gap in Pakistani scholarship concerning the integrated analysis of rhetorical organization across these two crucial research article sections.

2.7 Research Gap

The review of international and Pakistani scholarship demonstrates that rhetorical move analysis has become a well-established area of genre studies. Nevertheless, three important gaps remain. First, relatively little research has examined Pakistani English-language journals despite the country's rapidly expanding research output. Second, previous Pakistani studies have generally investigated abstracts or conclusions independently rather than analyzing both sections within a single research design. Third, comparatively few studies have integrated corpus linguistics with genre analysis to examine rhetorical moves alongside lexico-grammatical features.

The present study addresses these gaps by compiling a corpus of 100 abstracts and 80 conclusion sections from five HEC-recognized English-language journals published between 2021 and 2024. Using Hyland's (2000) five-move framework and AntConc software, the study provides a systematic description of rhetorical organization in Pakistani research writing. By examining abstracts and conclusions together, it offers a more comprehensive understanding of rhetorical practices than previous investigations and contributes empirical evidence to the growing literature on genre analysis in South Asian academic discourse. The rationale for this integrated corpus-based investigation directly reflects the research gap articulated in the thesis.

3. Research Methodology

3.1 Research Design

This study employed a corpus-based mixed-methods research design to investigate the rhetorical organization of abstracts and conclusions in English-language research articles published in Pakistani HEC-recognized journals. The mixed-methods approach combined quantitative analysis of rhetorical move frequencies with qualitative interpretation of their communicative functions. This design was selected because quantitative analysis identifies recurring rhetorical patterns across a relatively

large corpus, whereas qualitative analysis provides a deeper understanding of how these moves function within individual texts. The source thesis explicitly adopts this mixed-methods corpus-based design to analyze rhetorical moves and associated lexico-grammatical features.

Genre analysis served as the principal analytical framework because it enables systematic examination of communicative structures within academic writing. Following Hyland's (2000) model, the study examined how Pakistani scholars organize information in abstracts and conclusions to accomplish specific rhetorical purposes.

3.2 Corpus and Data Collection

The corpus comprised 100 abstracts and 80 conclusion sections selected from research articles published between 2021 and 2024 in five HEC-recognized Pakistani journals specializing in English language and linguistics:

- *Academy of Education and Social Sciences Review*
- *Sindh Journal of Linguistics*
- *Pakistan Journal of Language Studies*
- *Pakistan Journal of Society, Education and Language*
- *Pakistan Journal of Languages and Translation Studies*

These journals were selected through purposive sampling because they satisfied the study's inclusion criteria regarding disciplinary relevance, HEC recognition, accessibility, and publication quality. Only research articles authored by Pakistani scholars were included in the corpus to ensure consistency with the research objectives.

The corpus was compiled by downloading research articles from the official journal websites. Abstracts and conclusion sections were extracted from PDF files, converted into editable text format, and organized into separate electronic corpora according to journal and publication year. This standardized corpus preparation facilitated systematic analysis using corpus analysis software. The sampling strategy, journal selection, corpus size, and compilation procedures are described in the thesis methodology.

3.3 Analytical Framework

The study adopted Hyland's (2000) five-move model as the principal framework for identifying rhetorical organization. According to this model, effective research article abstracts comprise five communicative moves:

1. **Introduction** – establishing the research context and significance;
2. **Purpose** – stating the research objective;
3. **Method** – describing participants, instruments, procedures, or research design;
4. **Product** – presenting the principal findings; and
5. **Conclusion** – discussing implications, recommendations, limitations, or research significance.

Although originally developed for abstracts, this framework was also applied to conclusion sections because these sections similarly perform identifiable communicative functions. The analysis focused on determining the presence, distribution, and relative prominence of each rhetorical move across the corpus.

In addition to rhetorical move analysis, the study examined selected lexicogrammatical features, particularly verb tense usage and adverbials associated with individual moves. This secondary analysis enabled a more comprehensive understanding of the linguistic realization of rhetorical functions within Pakistani academic writing. The thesis specifies both Hyland's model and the analysis of verb tenses and adverbials as core components of the analytical framework.

3.4 Data Analysis

Corpus analysis was conducted using AntConc (Version 3.5.9) developed by Laurence Anthony. AntConc was selected because of its ability to generate concordance lines, keyword frequencies, and lexical patterns efficiently across large collections of electronic texts.

The analytical procedure consisted of four stages.

First, keywords associated with each rhetorical move were identified based on Hyland's framework. These keywords served as initial indicators for locating potential rhetorical moves within the corpus.

Second, AntConc generated concordance lines for each keyword. The surrounding linguistic context was then examined to determine whether the occurrence genuinely represented the intended rhetorical function.

Third, each occurrence was manually classified according to the corresponding rhetorical move. Manual verification ensured that rhetorical functions were identified on the basis of communicative purpose rather than simple keyword frequency.

Finally, frequencies of rhetorical moves were calculated and compared across journals. The qualitative analysis then interpreted how individual moves contributed to the communicative organization of abstracts and conclusions.

For the analysis of lexico-grammatical features, verb tenses and adverbials associated with each rhetorical move were identified and categorized. Their distribution across different moves was subsequently examined to determine how grammatical choices supported rhetorical functions within academic discourse. These procedures reflect the data analysis process outlined in the thesis.

3.5 Trustworthiness and Ethical Considerations

The credibility of the findings was enhanced through the systematic application of Hyland's (2000) analytical framework across the entire corpus. Construct validity was supported by aligning rhetorical move identification with established genre theory, while reliability was strengthened through the consistent use of AntConc for corpus retrieval and concordance analysis.

Ethical considerations were observed throughout the study. All research articles were obtained from publicly accessible HEC-recognized journals and were used exclusively for academic research. No textual content was altered, manipulated, or reproduced beyond analytical purposes, and all sources were appropriately acknowledged in accordance with accepted academic practices. These measures correspond to the validity, reliability, and ethical procedures documented in the thesis.

4. Results and Discussion

4.1 Rhetorical Move Distribution in Research Article Abstracts

The corpus analysis demonstrates that Pakistani scholars generally organize research article abstracts according to Hyland's (2000) five-move model; however, the frequency of individual moves varies considerably. The analysis reveals that the **Product (Findings)** move is the most consistently employed rhetorical move across the corpus, whereas the Introduction and Conclusion moves exhibit greater variation. This overall pattern indicates that authors prioritize communicating research outcomes over providing extensive contextualization or evaluative commentary. The thesis reports comparable move distributions across the sampled journals, with the Product move occurring most consistently in abstracts.

Table 1: Overall Distribution of Rhetorical Moves in Abstracts

Move	Communicative Function	Overall Observation
Introduction	Establishes context and research gap	Least consistently realized
Purpose	States research objectives	Frequently employed
Method	Describes research procedures	Moderately represented

Product	Presents principal findings	Most	consistently employed
Conclusion	States implications and recommendations	Moderately	represented

The predominance of the Product move reflects the communicative purpose of research article abstracts. Authors appear to recognize that readers primarily consult abstracts to identify the principal contribution of a study before deciding whether to read the complete article. Consequently, research findings receive greater rhetorical emphasis than contextual background or methodological detail.

Conversely, Introduction moves display substantial variation. While many authors briefly establish the research topic, relatively few explicitly define research gaps or key concepts. Similarly, Method moves are often condensed, with writers frequently mentioning research design or participants without elaborating on procedures or analytical techniques. These findings suggest that authors attempt to maximize informational density within limited abstract length.

Purpose statements occur consistently across journals and usually employ lexical items such as *aims*, *examines*, *investigates*, *explores*, and *analyzes*. Such explicit statements facilitate reader comprehension by clearly identifying the objective of the investigation.

The Conclusion move occurs less consistently than the Product move. When present, it commonly highlights pedagogical implications or practical recommendations, whereas explicit discussion of research limitations is comparatively uncommon. This observation suggests that authors tend to emphasize the positive contribution of their work while giving relatively little attention to its constraints. Similar patterns are documented throughout the thesis's journal-specific analyses of abstract moves.

4.2 Rhetorical Move Distribution in Conclusion Sections

Analysis of conclusion sections reveals a somewhat different rhetorical pattern. Unlike abstracts, which primarily emphasize research findings, conclusions place greater emphasis on interpreting findings and discussing their broader significance.

The Conclusion move emerges as the dominant rhetorical component, followed by evaluative statements concerning the importance of the research and recommendations for future studies. Authors generally use conclusion sections to synthesize findings rather than merely repeat results presented earlier.

Table 2: Overall Distribution of Rhetorical Moves in Conclusions

Move	Primary Function	Relative Prominence
Restating purpose	Reconnects findings to objectives	Moderate
Synthesizing findings	Summarizes major outcomes	High
Evaluating significance	Explains contribution	High
Recommendations	Suggests applications or future research	High
Limitations	Acknowledges research constraints	Low

One notable finding concerns the infrequent discussion of research limitations. Although limitations constitute an important component of internationally recognized research reporting practices, many conclusion sections omit them entirely. Instead, writers prefer to conclude with optimistic evaluations of their contributions or recommendations for further investigation.

This tendency may reflect local publication practices that emphasize positive research outcomes rather than critical self-evaluation. Nevertheless, omission of research limitations may reduce transparency and weaken the overall persuasiveness of research reporting.

4.3 Lexico-Grammatical Characteristics

The corpus also reveals relatively consistent lexico-grammatical patterns associated with individual rhetorical moves.

Verb Tense

Present tense dominates the Introduction, Purpose, and Conclusion moves because these sections describe established knowledge, research objectives, and general implications. Past tense occurs most frequently within Method and Product moves because authors report completed research procedures and findings.

Reporting Verbs

Purpose statements frequently employ reporting verbs such as:

- investigate
- examine
- analyze
- explore

- identify
- evaluate

Product moves commonly include verbs such as:

- revealed
- showed
- demonstrated
- indicated
- suggested
- found

These reporting verbs contribute to concise and objective presentation of research findings.

Adverbials

Adverbials are frequently used to strengthen rhetorical functions.

Examples include:

- significantly
- consequently
- therefore
- moreover
- particularly
- generally
- finally

These lexical items improve textual cohesion while guiding readers through the progression of ideas.

Overall, the grammatical choices observed across the corpus correspond closely to the communicative functions performed by individual rhetorical moves.

5. Discussion

The findings indicate that Pakistani scholars generally conform to internationally recognize rhetorical conventions while simultaneously exhibiting several localized writing practices.

The predominance of the Product move supports Hyland's (2000) argument that research articles ultimately seek to communicate original knowledge. Similar observations have been reported in studies by Suntara and Usaha (2013), Kaya and Yağız (2020), Bonsu (2021), and Mohammadzadeh and Sukan (2022), all of whom found that research findings constitute the most obligatory element of research article

abstracts.

However, unlike many international studies, the present investigation demonstrates comparatively limited realization of Introduction and Limitation moves. Authors frequently omit explicit research gaps, definitions of key concepts, and acknowledgement of methodological limitations. This tendency resembles findings reported in earlier Pakistani studies, suggesting that these omissions may represent recurring characteristics of local academic writing rather than isolated individual preferences.

Another important observation concerns methodological reporting. Although most abstracts include some description of research design, methodological information is often brief. Participants, analytical procedures, or research instruments are occasionally omitted, presumably because authors attempt to satisfy journal word limits while maximizing emphasis on research findings.

The conclusion sections similarly reveal a preference for emphasizing practical implications rather than methodological reflection. Most authors conclude by highlighting educational applications, theoretical contributions, or recommendations for future research instead of critically discussing limitations. While such an approach reinforces the perceived value of the study, it may reduce opportunities for demonstrating methodological transparency.

Taken together, these findings suggest that Pakistani researchers possess considerable awareness of international research writing conventions but employ rhetorical moves selectively according to local publication practices. The overall organization of abstracts and conclusions reflects an appropriate understanding of academic genre conventions, yet greater attention to contextualization, methodological detail, and critical evaluation would further strengthen the international competitiveness of research articles published in Pakistani journals.

5.1 Pedagogical Implications

The findings have several implications for English for Academic Purposes (EAP) instruction and research writing pedagogy.

First, explicit instruction in rhetorical move analysis should become an integral component of postgraduate research methodology and academic writing courses. Rather than teaching abstracts and conclusions merely as summaries, instructors should emphasize their communicative purposes and internal rhetorical organization.

Second, supervisors should encourage postgraduate researchers to employ all five

rhetorical moves systematically, particularly Introduction and Limitation moves, which remain underrepresented.

Third, journal editors and reviewers may consider developing author guidelines that explicitly recommend internationally accepted rhetorical structures for abstracts and conclusions. Such guidance would improve consistency across publications while increasing the visibility of Pakistani research in international academic communities.

Finally, corpus-based instructional materials using authentic examples from Pakistani journals may help novice researchers better understand disciplinary writing conventions and produce research articles that meet global publication standards.

6. Conclusion

This study examined the rhetorical organization of abstracts and conclusion sections in English-language research articles published in Pakistani HEC-recognized journals through the lens of Hyland's (2000) five-move model. Drawing on a corpus of 100 abstracts and 80 conclusion sections, the study employed a corpus-based mixed-methods approach to identify rhetorical move patterns and associated lexico-grammatical features. The findings demonstrate that Pakistani scholars generally follow internationally recognized rhetorical conventions while exhibiting several localized writing practices.

The analysis revealed that the Product (Findings) move is the most consistently realized rhetorical component in research article abstracts. Authors predominantly prioritize reporting research outcomes, reflecting the primary communicative purpose of abstracts as concise summaries of scholarly contributions. The Purpose and Method moves also occur frequently, although methodological descriptions are often brief and selective. By contrast, the Introduction and Conclusion moves display greater variability, with many abstracts providing limited contextualization and relatively few discussing research implications or limitations.

The rhetorical organization of conclusion sections differs from that of abstracts. Rather than simply reiterating findings, conclusions primarily synthesize results, evaluate their significance, and propose practical or theoretical implications. Recommendations for future research are common, whereas explicit acknowledgment of methodological limitations remains comparatively rare. This pattern suggests that Pakistani researchers generally prefer to emphasize the value and applicability of their work instead of critically reflecting on its constraints.

The corpus also revealed consistent lexico-grammatical patterns. Present tense

predominates in introductory, purposive, and evaluative statements, whereas past tense is commonly employed to report research procedures and findings. Reporting verbs such as *investigate*, *analyze*, *demonstrate*, *indicate*, and *reveal* occur frequently, reflecting conventional academic discourse practices. Likewise, transitional adverbials contribute to cohesion and enhance the rhetorical flow of abstracts and conclusions.

Collectively, these findings indicate that Pakistani academic writing has become increasingly aligned with international research publication conventions. Nevertheless, certain rhetorical moves—particularly contextualization, methodological elaboration, and discussion of limitations—remain underdeveloped. Strengthening these components would enhance the clarity, transparency, and international competitiveness of research articles produced in Pakistan.

Beyond its empirical contribution, the study demonstrates the usefulness of integrating genre analysis with corpus linguistics for investigating academic discourse. The findings contribute to the growing body of research on rhetorical move analysis while providing practical insights for English for Academic Purposes (EAP), genre-based writing pedagogy, and academic publishing.

Limitations of the Study

Several limitations should be acknowledged.

First, the corpus was restricted to five HEC-recognized English-language journals published in Pakistan. Although these journals represent important national publication outlets, the findings cannot be generalized to all academic disciplines or international journals.

Second, the study focused exclusively on abstracts and conclusion sections. Other rhetorical components of research articles—including introductions, literature reviews, methods, and discussion sections—were beyond the scope of the investigation.

Third, the analysis concentrated primarily on rhetorical moves and selected lexicogrammatical features. Other discourse features, such as metadiscourse markers, stance expressions, hedging devices, citation practices, and interactional resources, were not examined.

Finally, although corpus analysis provides systematic evidence of linguistic patterns, rhetorical move identification inevitably involves some degree of interpretive judgment despite adherence to an established analytical framework.

Recommendations for Future Research

Future investigations may extend this study in several directions.

Researchers may compare rhetorical move structures across different academic disciplines, including engineering, medicine, natural sciences, and social sciences, to determine disciplinary variation within Pakistani academic writing. Cross-cultural comparative studies involving Pakistani and international journals would provide valuable insights into similarities and differences in rhetorical conventions across academic communities.

Future research may also investigate additional sections of research articles, particularly introductions, literature reviews, discussion sections, and methodology chapters, to provide a comprehensive description of academic genre organization.

Another promising direction involves integrating rhetorical move analysis with metadiscourse analysis, appraisal theory, corpus stylistics, or artificial intelligence-assisted corpus annotation techniques. Such interdisciplinary approaches would contribute to a more nuanced understanding of academic writing practices.

Finally, longitudinal studies examining changes in rhetorical organization over time may reveal how Pakistani academic discourse evolves in response to increasing internationalization of research publication.

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