A Genre Analysis of the Abstract Section of Psychology and Linguistics Research Articles

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ARTICLE INFO	ABSTRACT

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This study conducts a genre analysis of the abstract sections of Psychology and Linguistics research articles, focusing on differences in move structures and their implications at both macro and micro levels. The research employs a mixed-methods approach, incorporating both qualitative and quantitative analyses. Swales' (2004) CARS model is used for macro- level analysis. While Swales and Feak's (2009) model is applied at the micro-level. A corpus of 20 abstracts, 10 from each discipline, was analyzed using AntMover (1.10) software to identify structural patterns. The findings indicate that while both disciplines follow conventional move structures, Psychology abstracts exhibit a stronger presence of Move 3 (Occupying a Niche), particularly in announcing principal findings and evaluating research, whereas Linguistics abstracts demonstrate variability in the inclusion of Move 2 (Establishing a Niche). Additionally, micro-level analysis reveals discipline- specific differences in abstract length, tense usage, the presence of citations and first-person pronouns. The study provides valuable insights for novice researchers by highlighting disciplinary conventions in abstract writing. Furthermore, the findings have pedagogical implications for English for Academic Purposes (EAP), assisting students and scholars in structuring effective abstracts. Future research can expand thus analysis to other disciplines, incorporate larger corpora and explore additional genre models.

Introduction

Background of the study

Marefat and Mohammadzadeh (2013) stated that it was in the 1980s when the genre was first introduced in the area of English for Specific Purpose (ESP). Swales (1990) defined genre, "a genre comprises a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognized by the expert members of the parent discourse community, and thereby constitute the rationale for the genre. This rationale shapes the schematic structure of the discourse and influences and constrains choice of content and style" (p. 58). Flowerdew (2014) defined genre analysis as the study of situated linguistic behavior in institutionalized academic or professional settings.

According to Ding (2007), "move analysis is a helpful tool in genre studies since moves are semantic and functional units of texts, which can be identified because of their communicative purposes and linguistic boundaries" (p. 270). Koltay (2010) defined an abstract as a text that reflects the most important information of an existing (primary) text in a form shorter than the original. The importance of information is decided from a pre-defined viewpoint, which enables the abstract to serve informing (informational) goals. It is a fact that an abstract is not an integral part of any research paper or an article, but it is important to create a valuable research article or a research paper.

The current study dealt with the analysis of move structure of abstract sections of selected research articles of Psychology and Linguistics. The analysis conducted at macro level on the basis of Swales' (2004) CARS model, and at micro level on the basis of Swales and Feak's (2009) model. Besides, AntMover (1.10) software was also used to conduct the analysis.

Problem Statement

Several researchers have worked on the genre analysis of different sections of research articles including analysis of the introduction section, discussion section, and also abstract section. A less or no importance is given to the genre analysis of abstract section of Psychology and Linguistics research articles. No comparison has been done in writing an abstract section of Psychology and Linguistics research articles. Hence, to fill this gap, the present study has illustrated the comparison analysis of abstract section of Psychology and Linguistics research articles.

Significance of the study

This current study deals with genre analysis of abstracts of selected research articles of Psychology and Linguistics. Therefore, this study has pedagogical implications. It will help the readers as well writers to learn more about the structure of Abstract. It will provide them with a complete guideline regarding how to write or divide the abstract section of a research article, and the move structure of an abstract of one discipline can be compared with abstract of another.

Limitations of the study

The current study is limited to only the genre analysis of move structures of abstract sections in research articles of Psychology and Linguistics from national journals. Additionally, this study is limited by the number of research articles too.

Objectives of the study

1. To investigate the differences between the move structures of Research Articles' abstracts of national journal of Psychology and Linguistics.
2. To highlight effect of difference at macro and micro level on the structure of Research Articles' abstracts of national journal of Psychology and Linguistics.

Literature Review

Comparing abstract parts of research articles from various disciplines has been the subject of numerous studies. Marefat and Mohammadzadeh (2013) used the IMRD and Swales's CARS model (2004, 1990) to compare the abstracts of research publications written in Persian and English. They admitted that the researchers' writing styles were influenced by the conventions of the group. Additionally, Noorizadeh-Honami and Chalak (2018) recognised that the abstracts of the study publications differed in language and culture. They examined the Persian and English abstracts and used Swales' (1990) IMRD model in their study. Compared to English authors, Persian authors tended to include more details in their introduction and discussion sections. However, in their approach move, English authors included more details.

Following Hyland's (2000) model, Niu (2013) conducted a cross-linguistic and cross-disciplinary analysis of research article abstracts, demonstrating that abstracts in English are more likely to contain canonical moves, whereas Chinese abstracts have more moves deleted (Niu, 2013). Majid and Omid (2017) conducted a comparative analysis of Persian and English research article abstracts, examining the rhetorical moves used in research papers. They found no significant differences between the two c

A comparison of research article abstracts from more and less prestigious publications was provided by El-Dakhs (2018). Using Hyland's (2000) move structure model and Hyland's (2005) taxonomy of metadiscourse, she calculated that the findings move in more prestigious journal abstracts had a longer structure than the introduction, purpose, and method move in less prestigious journal abstracts. She discovered in the metadiscourse analysis that more prestigious journal abstracts had contrast connectives in the findings, but less prestigious abstracts had a purpose and addition connectives in the approach and findings.

While reviewing the discussed works, it has been found out that les works have been done on analysis of abstracts of research articles from social sciences' disciplines at both macro and micro level. This current study has filled this gap.

Research Methodology

The current study is mix-methods research. It has utilized both qualitative and quantitative approach to analyze the abstract sections of Psychology and Linguistics research articles from national journals. The description of the research articles and their journals is given below

Table 1: Research Articles (National and International Journals)

Psychology		Linguistics	
Research Article	**Journal- Volume, Year**	**Research Article**	**Journal- Volume, Year**
Religious Symbol's Importance for Motivation, Emotions and Mental-well being of Pakistani Shia Adults	Pakistan Journal of Applied Psychology- Vol. 1(1), 2021	Use of English Motivational Strategies: A comparison between teachers' and students' perspectives in Pakistan	Hayatian Journal of Linguistics and Literature-4 (1), 2020
Childhood Traumatic Experiences, Early Maladaptive Schemas and Personality Dysfunctions in Shelter Home Residents	Pakistan Journal of Applied Psychology- Vol. 1(1), 2021	Corpus Driven Critical Discourse Analysis of 2020 Presidential Election Campaign Tweets of Donald Trump and Joe Biden	Hayatian Journal of Linguistics and Literature-5 (1), 2021
Self-Compassion, Frustration, Intolerance and OCD Symptoms among Spouse of OCD Patients	Pakistan Journal of Applied Psychology- Vol. 1(1), 2021	English across Borders: Exploring Register Variation in South Asian Newspaper Editorials	NUML Journal of Critical Inquiry- Vol. 19(2), 2021
Impact of Dark Triad Personality Traits on Attitude Towards Infidelity among Married Individuals in Punjab	Pakistan Journal of Applied Psychology- Vol. 1(1), 2021	Identity Construction of Malala Yousafzai in the Media: A Critical Discourse Analysis of Editorials in Two Pakistani English Newspapers	NUML Journal of Critical Inquiry- Vol. 18(1), 2020
Impact of Gratitude on Mental Health of Adults: Mediating Role of Prosocial	Pakistan Journal of Applied Psychology- Vol. 1(1), 2021	An Ecological Study of English Language Learning Anxiety: A Case Study of National Textile University	NUML Journal of Critical Inquiry- Vol. 18(1), 2020
Psychological factors of Non- suicidal Self-Injury among Adolescents and Young Adults	Pakistani Journal of Psychological Research- Vol. 35(4), 2020	The Use of Intensifiers in the Aftermath of COVID-19 Pakistani Tweets: An Analytical Comparison Between Pakistani Tweets and Contemporary English Speech (COCA)	CORPORUM: Journal of Corpus Linguistics- Vol. 4(2), 2021
Translation and Validation of Personal Growth Initiative Scale-II for Pakistani Adults	Pakistani Journal of Psychological Research- Vol. 35(4), 2020	The Portrayal of Violence against Women in Pakistani Electronic Media.	Elementary Education Online- Vol. 20(4), 2021
Interpersonal Communication, Teamwork Effectiveness, and Organizational Commitment in Pakistani Nurses	Pakistani Journal of Psychological Research- Vol. 35(4), 2020	An Analysis of Hate Speech Tweets Against Women from a Socio-cognitive Discourse Perspective	University of Chitral Journal of Linguistics and Literature- Vol. 5(1), 2021
Mental Toughness Scale for Pakistani University Students: A Validation Study	Pakistani Journal of Psychological Research- Vol. 35(4), 2020	Frame Markers as Metadiscoursal Features in Pakistani English Newspapers' Editorials: A Corpus- Based Study	Pakistan Social Sciences Review- Vol. 4(3), 2020
Happiness and Personality Traits as Predictors of Optimism in School and College Teachers	Pakistani Journal of Psychological Research- Vol. 35(4), 2020	Domestic Violence Against Women in Rural Areas of Pakistan: A Case Study of District Swabi	Pakistan Journal of Social Sciences- Vol. 17(1), 2020

Corpora Development and Data Collection

The corpora for this study were collected from the HEC recognized national journals of Psychology and Linguistics. The corpora were composed of abstract sections of 20 research articles 10 from each discipline including Psychology and Linguistics. These articles were written from the period of 2020 to 2021. Only the abstract sections were extracted from these selected research articles. These articles were selected randomly. In this the data was collected and the corpora were developed. Further, the corpora were analyzed on the basis of theoretical framework that is described in the next section.

Theoretical Framework

For the current research, two models were selected to study and compare the abstract sections of Psychology and Linguistics. CARS model of Swales (2004) was used for analysis of corpora at macro level, and Swales and Feak's (2009) model for analysis at micro level. This model will help in deep analysis of a text. These two models were used to fulfill the objectives of the current study. Swales' (2004) CARS model is considered as the diverse model to analyze the abstracts of research articles. This model includes the moves as well as sub-moves. This composition of model comprehensively explains the move structure of any research article. This model is explained in table 2.

Table 2: CARS model (Swales, 2004)

Moves	Steps
Move 1: Establishing a Territory	Step 1: Claiming Centrality
	Step 2: Making Topic Generalizations
	Step 3: Reviewing Previous Items of Research
Move 2: Establishing a Niche	Step 1 A: Counter- Claiming
	Step 1 B: Indicating a Gap
	Step 1 C: Question- raising
	Step 1 D: Continuing a Tradition
Move 3: Occupying a Niche	Step 1 A: Outlining Purposes
	Step 1 B: Announcing Present Research
	Step 2: Announcing Principal Findings
	Step 3: Evaluation of Research
	Step 4: Indicating the Structure of the Research Article

For micro analysis, the model of Swales and Feak's (2009) is given below

Table 3: Variables in Swales and Feak's (2009) model

Variables	
	Length of abstract
	Use of tense
	Presence of any citation
	Presence of 1st person pronoun
	Metadiscourse references
	Acronyms

Software Tool

AntMover (1.10) software version 1.10, developed by Lawrence (2004), as a tool for analysis of corpora was used. It is one of the useful text structure analysis program. It followed the CARS model of Swales (2004). It was used for macro analysis. After that, the model of Swales and Feak (2009) was used for micro analysis.

Data analysis and Interpretation

As it is discussed earlier, this study aimed to analyze the abstract sections of research articles of Psychology and linguistics. These research articles were taken from the known journals of Pakistan. These journals were HEC recognized. The corpora contained abstract sections of 20 research articles; 10 from each discipline including Psychology and Linguistics from the period of 2020 to 2021. Only the abstract sections were extracted from these selected research articles. Further, the corpora were analyzed on the basis of theoretical frameworks including Swales' (2004) CARS model and Sawles and Feak's (2009) model. Also, AntMover (1.10) software tool was used to make the analysis easy.

The whole study revolves around two main objectives including investigating the differences between the move structures of research articles' abstracts of national journal of Psychology and Linguistics, and highlighting effect of difference at macro and micro level on the structure of Research Articles' abstracts of national journal of Psychology and Linguistics. Both qualitative and quantitative analytic approaches were employed to fulfill the objectives of the current study.

For the data analysis, first the corpora were developed. In the first step of analysis, the corpora were analyzed on the basis of Swales' (2004) CARS model at macro level. The move structure and steps were identified from the extracted abstract sections of selected research articles. This step was followed by the application of AntMover (1.10) Software too.

At micro level, the corpora were analyzed on the basis of Swales and Feak's (2009) model. It helped in understanding and analyzing the structure of abstracts thoroughly. Through it, the use of tense, presence of first person pronoun and any citation, acronyms, metadiscourse references and the length of abstracts were analyzed.

Findings and discussion

Findings at Macro level

The main concern of this study was the genre analysis of abstract sections of Psychology and Linguistics research articles. The purposes behind it were to investigate the differences between the move structures of research articles' abstracts of national journal of Psychology and Linguistics, and to highlight affect of difference at macro and micro level on the structure of research articles' abstracts of national journal of Psychology and Linguistics. After the analysis of corpora at macro level on the basis of Swales' (2004) CARS model, the findings were collected. These findings of analysis are mentioned in table 4.

Table 4: Distribution of moves, numbers, and percentages in abstracts.

Moves	Psychology Abstracts	Linguistics Abstracts
Move 1: **Establishing a Territory**		
Step 1: Claiming Centrality	Nil	Nil
Step 2: Making Topic Generalizations	8 (80%)	5 (50%)
Step 3: Reviewing Previous Items of Research	Nil	Nil
Move 2: **Establishing a Niche**		
Step 1 A: Counter- Claiming	Nil	Nil
Step 1 B: Indicating a Gap	1 (10%)	Nil
Step 1 C: Question- raising	Nil	Nil
Step 1 D: Continuing a Tradition	Nil	Nil
Move 3: **Occupying a Niche**		
Step 1 A: Outlining Purposes	Nil	Nil
Step 1 B: Announcing Present Research	6 (60%)	5 (50%)
Step 2: Announcing Principal Findings	10 (100%)	10 (100%)
Step 3: Evaluation of Research	10 (100%)	9 (90%)
Step 4: Indicating the Structure of the Research Article	Nil	Nil

At macro level, the findings revealed differences and similarities in move structure of abstract sections of research articles of Psychology and Linguistics. Through the findings in table 4, the abstract sections can easily be compared. The results explored that out of 10 abstracts of Psychology, all abstracts contained step 2 (Announcing Principal Findings) and step 3 (Evaluation of Research) of Move 3 (Occupying a Niche), only 8 abstracts out of 10 contained step 2 (Making Topic Generalizations) of Move 1 (Establishing a Territory), only 6 out of 10 abstracts had step 1 B (Announcing Present Research) of Move 3 (Occupying a Niche), and only 1 abstract had step 1 B (Indicating a Gap) of Move 2 (Establishing a Niche).

On the other hand, moving towards Linguistics, the results explored that out of 10 abstracts of Linguistics, all abstracts contained step 2 (Announcing Principal Findings) of Move 3 (Occupying a Niche), only 9 abstracts out of 10 contained step 3 (Evaluation of Research) of Move 3 (Occupying a Niche), and only 5 out of 10 abstracts had step 1 B (Announcing Present Research) of Move 3 (Occupying a Niche) and step 2 (Making Topic Generalizations) of Move 1 (Establishing a Territory) respectively. Move 2 (Establishing a Niche) was not present in Linguistics abstracts.

Findings at Micro level

Analysis of corpora was conducted on the basis of Swales and Feak's (2009) model. By the application of this model, move structure of abstracts was analyzed with more focused. The length of abstracts, use of tense, presence of any citation and first person pronoun, metadiscourse

references, and acronyms were analyzed. The findings, after the analysis, are expressed in the given table below:

Table 5: Variables in abstracts.

Variables	Psychology Abstracts	Linguistics Abstracts
Length of abstract	6 less than 200 words. 1 less than 200 words. 1 is equal to 200 words. 2 less than 250 words.	2 less than 200 words. 2 less than 150 words. 4 less than 250 words. 1 above 250 words 1 above 350 words.
Use of tense	10 Past Tense. 7 Present Tense.	10 Present Tense. 8 Past Tense. 3 Future Tense.
Presence of any citation	7	6
Presence of first-person pronoun	1	1
Metadiscourse references	199	244
Acronyms	8	4

Recommendations and Implications

Like present study, further research can be done on different disciplines. A comparative genre-based analysis can also be conducted by applying Hyland's (2000) Five Move Model. Further, the mix method approach can also be carried out through descriptive statistics, and AntMover (1.10) Software for genre analysis. Further research can be conducted by including large number of corpus. Besides, the findings of the study will make the writers to realize the textual variations in terms of moves, sequence of moves, and their functions in abstracts of research articles. Through this study, writers will be able to improve their opportunities to publish their research works in nationally as well as internationally recognized journals. This study also has the pedagogical implications for English for Specific Purpose (ESP) and English for Academic Purpose (EAP) as it will help the students to make them aware of the existing variations and generic norms of the abstract of research articles.

Conclusion

This study analyzed the genre of abstract sections in research articles from Psychology and Linguistics by examining macro- and micro-level structure. The study found notable disciplinary differences in how abstract sections were written, using Swales' (2004) CARS model for macro-level analysis and Swales and Feak's (2009) for micro-structural analysis. In terms of findings, Psychology abstracts tended to include Move 3 (Occupying a Niche) with greater frequency, especially with respect to announcing principal findings and evaluating the research in that regard, while Linguistics abstracts tended to use Move 2 (Establishing a Niche) less frequently. Also, the analysis at the micro level revealed differences in abstract length, tense usage, and the use of citations and first-person pronouns, further corroborating the idea that disciplinary conventions shape abstract structure.

The findings have a number of implications. First, they serve as a guide for the younger researcher by creating an awareness of the expected abstract structure in given fields. Researchers adhering to those conventions can diffuse their abstracts better and enhance the probability of publication.

Second, the study somehow reflects an implication of pedagogical practices in ESP and EAP. If instructors understand the structural features of abstracts, this knowledge would enable them to tailor their academic writing courses to correspond with disciplinary expectations, equipping students to produce abstracts that best communicate their study contributions.

The research also allows for new avenues in investigation. Future studies may expand the study by analyzing abstracts from additional subject areas, use larger corpora, and implement alternative genre models, for example, Hyland's (2000) Five Move Model. A comparison of abstracts from both high-impact journals and less-known ones might facilitate thoughts on how journal prestige actually plays a role in influencing the structure of abstracts. Extending that line of inquiry will assist researchers in comprehending how academic genres progress across disciplines and forum.

References

1. Ding, H. (2007). Genre Analysis of Personal Statements: Analysis of Moves in Application Essays to Medical and Dental Schools. English for Specific Purposes, 26(3), 368-392. https://doi.org/10.1016/j.esp.2006.09.004
2. El-Dakhs, D. A. S. Comparative Genre Analysis of Research Article Abstracts in More and Less Prestigious Journals: Linguistics Journals in Focus. Research in Language, 16(1), 47-63. https://doi.org/10.2478/rela-2018-0002
3. Flowerdew, J. (2002). Academic Discourse (1st ed.). Routledge. http://doi.org./10.4324/9781315838069
4. Hyland, K. (2000). Disciplinary Discourses. Social Interaction in Academic Writing. London: Longman.
5. Hyland, K. (2005). Stance and Engagement: A Model of Interaction in Academic Discourse. Discourse Studies, 7, 173-192. http://dx.doi.org/10.1177/1461445605050365
6. Koltay, T. (2010). Abstracts and Abstracting: A Genre and Set of Skills for the Twenty-First Century. UK: Chandos.
7. Lawrence, A. (2004). AntMover (Version 1.10) [Computer Software]. Waseda University.
8. Majid, T. G., & Omid, T. (2017). A Structural Move Analysis of the Abstract Section of ISI Articles of Iranian and Native Scholars in the field of Agricultural Engineering. International Journal of Research Studies in Language Learning, 7(3), 109-122. http://doi.org/10.5861/ijrsll.2017.1864
9. Marefat, H., & Mohammadzadeh, S. (2013). Genre Analysis of Literature Research Article Abstracts: A Cross- Linguistic, Cross- Cultural Study. Applied Research on English Language, 2(2), 37-50. http://doi.org/10.22108/are.2013.15469
10. Niu, G. (2013). A Genre Analysis of Chinese and English Abstracts of Academic Journal Articles: A Parallel-Corpus-Based Study. In: Liu, P., & Su, Chinese Lexical Semantics. CLSW 2013. Lecture Notes in Computer Science, 8229. Germany: Springer. http://doi.org/10.1007/978-3-642-45185-0_63
11. Noorizadeh, L., & Chalk, A. (2018). Comparative Analysis of Architecture Research Article Abstracts Written by Native and Non- Native Authors: A Cross- Linguistic, Cross-Cultural Study. Theory and Practice in Language Studies, 8(3), 325-330. http://doi.org/10.17507/tpls.0803.08
12. Swales, J. (1990). Genre Analysis: English in Academic and Research Settings. UK: Cambridge University Press.
13. Swales, J. M. (2004). Research Genres: Exploration and Application. UK: Cambridge University Press.

14. Swales, J., & Feak, C. (2009). Abstracts and the Writing of Abstracts. USA: The University of Michigan Press.