



## A Move Analysis of the Methodology Sections of Pakistani Researchers' Articles in the Field of English Linguistics and Literature

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### ABSTRACT:

This research article delves into the methodological sections of research articles in the fields of English Linguistics and Literature authored by Pakistani researchers. It addresses the paucity of attention given to this critical section of research articles and aims to identify its move structure and the average length. The research design involves a qualitative analysis of ten Research articles from high-impact journals published between 2009 and 2021. The study employs Peacock's move-based model and assesses the frequency of specific moves within the methodology sections, revealing that Subjects, Procedure, Data Analysis, and Location are prominent moves. The study also reveals a lack of standardization and shorter methodology sections in Pakistani Research articles. These findings emphasise the need for greater emphasis on methodology writing, both in academia and pedagogy, to enhance research quality and reporting clarity in the Pakistani context. This research is anticipated to provide a valuable resource for scholars and educators looking to improve RA writing practices in Pakistan's research community.

**Key Words:** Move analysis, research articles, methodology section, Pakistani researchers, Peacock's model

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## 1. Introduction

Research article (RA), as a sub-division of academic writing, is considered to be a distinct genre, which has a specific function of communication within an academic discourse community (Aslam and Mahmood, 2014, p. 1). Articles are marked by standardized features which contribute to their 'general conventions' (Thomas & Hawes, 1994, p. 131). Alamri (2017, p. 33) points out the importance of Research articles by relating it to the essential skill associated with academic writing for the members of academic community including researchers, teachers, students, and the members of faculty in various professional disciplines. Many researchers, including Peacock (2011), Alamri (2017) and Morales (2016), have described the need for analysing the methodology section of research articles (RAs) for the paucity of research done on this section of research articles. Therefore, the present study aims at examining the underlying generic structure of the methodology sections written by Pakistani researchers.

It is crucial to write scholarly articles to be published in peer-reviewed journals as the researchers and scholars from different academic or research disciplines are going through tremendous pressure to gain knowledge and to propagate the results of their research through publication in prestigious academic journals (Khamkhien, 2015). In order to produce research articles, the writers must make use of genre knowledge at micro and macro level (Cook, 1990 & McCarthy, 1991). Macro knowledge of the genre implies the knowledge that begins with the organizational structure of the discourse units, before moving onto the lexico-grammatical features of the text (Khamkhien, 2015). On the other hand, the micro knowledge refers to the bottom-up approach, starting from relatively smaller units of discourse, such as, the lexical or grammatical items to the more general features, e.g., sentences, or other units of structural organization of discourse.

Move analysis is a genre-based method of recognizing the generic structure of research articles that has been developed into a popular area of research (Aslam & Mahmood, 2014, p. 1). They claimed it to be the study of language used to realize the form and function of a semantic unit in a specific discourse. Move analysis was started to be shaped by the time of genre analysis (Swales, 1990) and many things became clearer, though not defined clearly (Moreno and Swales, 2018, p. 41).

Kanoksilapatham (2012) has given a rationale of doing move analysis of the introduction section of the research articles taken from the field of Civil Engineering that, the study would be beneficial for the neophytes in the field of research in getting accepted as a member of the discourse community. Similarly, the intention of the present researcher is to facilitate the Pakistani researchers and novice academic writers in constructing the methodology section of their research articles.

Shehzad and Abbas (2016) suggest that the teaching genre study may be significant in solving the problems of academic writers of Pakistan. Moreover, there is a dearth of research done on methodology section previously (Peacock, 2011, p. 100). Peacock (2011) claims that there is no established move structure available for Methodology section of research articles and hence, developed a model comprising 7 moves which has been used by subsequent research (e.g., Alamri, 2017 and Morales, 2016).

## 2. Literature Review

Move analysis is a kind of text analysis and a sub-division of genre analysis that was developed by Swales in 1981. According to Holmes (1997, p. 325) a move is a piece of text that is designed and constrained by a particular communicative function whereas, a move cycle is a recurring pair or a set of (related) moves (Peacock, 2011, p. 100). Moves are described by Nwogu as schematic units and by Swales as rhetorical parts or constructs that are communicative in their function. (Swales, 2004, pp. 228-229).





According to Swales, the genre-conventions are based on the constraints put forward by the communicative goals of the rhetorical moves and do have their influence on rhetorical patterns set by the discourse community, but they are not fixed (1990). The rhetorical patterns are described as consisting of a series of functional units constituting the overall communicative goal of the genre; these structural sub units are called moves (Connor et al., 1995). Connor and Mauranen commenting upon the length of a move claimed that the length of a move may vary, but each move usually possesses one proposition at the least (1999). Kanoksilapatham (2012) categorized the moves as ‘conventional’ or ‘optional’, on the bases of their frequency. Those occurring more frequently were called conventional while others, being not very frequent, as optional.

The standard procedure for move analysis used by Peacock (2011) and suggested by Dudley-Evans (1994) and Holmes (1997, 2001) comprised four steps:

- i. Identify the moves and their boundaries by looking at the organizational patterns
- ii. Make use of the sentence-level analysis
- iii. Assign each sentence to a move
- iv. Verify the classification of moves using inter-rater reliability by comparing the findings of the two independent raters.

In addition, the steps are the micro-units combined to constitute moves, providing structural coherence to genre analysis; the primary function of a step is the same as the purpose of the relevant move (Biber et al., 2007, p. 24). Cotos et al. also mention Swales’ description of move analysis rooted in the pedagogical requirements of English for Academic Purposes EAP (2015, p. 3). For a better comprehension, the moves presented by Peacock (2011) and elaborated by Alamri in his study are mentioned in Table 1.

Table 1  
Alamri’s (2017, p. 84) Elaboration of Peacock’s (2011) Model for Analyzing Method Moves

Moves	Communicative Functions
<b>Move-1</b> *Overview	It provides a brief outline of the research method.
<b>Move-2</b> *Location	It describes the research site and/or the geographical location.
<b>Move-3</b> Research Aims/ Questions/Hypothesis	It describes the goals of the research and the questions to be answered, and the outlines of the hypotheses if any.
<b>Move-4</b> *Subjects/Materials	It describes subjects and Materials of the study.
<b>Move-5</b> *Procedure	It describes the data-collection actions taken by the researcher/s.
<b>Move-6</b> Limitations	It describes the ways in which the research was restricted/ limited.





Move-7	It describes how the data were analyzed, the analysis method.
*Data Analysis	

\*a required move in the field of language and Linguistics

Note. From "Connecting Genre-Based and Corpus-Driven Approaches in Research Articles: A Comparative Study of Moves and Lexical Bundles in Saudi and International Journals" UNM Digital Repository: PhD Diss. The University of New Mexico by B.M. Alamri, 2017, p. 84 ([https://digitalrepository.unm.edu/educ\\_llss\\_etds/81](https://digitalrepository.unm.edu/educ_llss_etds/81)) CC By

### Moves in the Methodology Section

The method section is not as simple as it appears to be after reading the discussion on the literature of genre analysis (Swales 2004) and this fact is more significant in case of non-native speakers (Paltridge, 1993; Wood, 2001). Peacock (2011) suggested that, in this situation, not only the non-native speakers will face much difficulty in publishing their research writings; it will not be an easy task for native speakers either. The crisis aggravates even if the non-native speakers are not aware of the conventions of genre they are dealing with (Vassileva, 1997). Peacock (2011) mentions another difficulty which is the variation of genre conventions across disciplines. For the frameworks available for the move analysis of RAMs, a table has been designed to incorporate previous research examining the methodology section of research articles from various disciplines (See Table 2).

**Table 2**

*Previous Research Using Move Analysis in Parts of Research Articles*

Researchers	Section of Research Articles
<i>Bhatia, 1993; Pho, 2008a; Salager-Meyer, 1992; Santos, 1996</i>	<i>Abstract</i>
<i>Samraj, 2002; Swales, 1990; Khamkhien, 2015; Hopkins &amp; Dudley-Evans, 1988; Ozturk, 2007</i>	<i>Introduction</i>
<i>Kwan, 2006; Kwan, Chan, &amp; Lam, 2012</i>	<i>Literature Review</i>
<i>Harwood, 2005; Lim, 2006; Kanoksilapatham, 2007; Bruce, 2008; Chang &amp; Kuo, 2011; Peacock, 2011; Zhang et al. 2011; Haung, 2014; Khamkhien, 2015; Cotos et al. 2015; Morales, 2016 Alamri, 2017</i>	<i>Methods</i>
<i>Brett, 1994; Nwogu, 1997; Williams, 1999; Yang and Allison, 2003 Swales &amp; Feak, 2004; Bruce, 2008; Lim, 2010;</i>	<i>Results</i>
<i>Dudley-Evans, 1994; Dudley-Evans, 1997; Holmes, 1997; Peacock, 2002; Yang &amp; Allison, 2003; Fallahi &amp; Erzi, 2003; Yang &amp; Allison, 2004; Parkinson, 2011;</i>	<i>Discussion/Conclusions</i>

For analysing 30 texts from the medical genre, Nwogu (1997) used Swales' (1990) IMRD (introduction, methodology, results, and discussion) sections move schema, with a reference to the schema theory model to find out the 11 moves with their discourse functions. Furthermore, from the field of biochemistry, Kanoksilapatham (2005) analysed 60 research articles to investigate their rhetorical structures and developed a four-scheme model for the analysis of research articles' methodology section.

Moreover, from the discipline of Biomedical Engineering, Kanoksilapatham (2012) analysed 53 articles using Swales' move model (2004). To identify the rhetorical moves present in the IMRD of research articles, Huang (2014) investigated the research articles from the medical genre. In addition to this, Alamri (2017) in his dissertation for the 'Doctor of Philosophy' investigated 30 research articles from applied linguistics by using genre-based and corpus-driven approaches to analyze the Introduction, Methods, Results, Discussion, and Conclusion sections (IMRDC structure).





### Approaches for move analysis

The two different approaches for move analysis mentioned by Alamri (2017, p. 89) are the bottom-up approach and the top-down approach. He suggested that a combination of both may also be used. The bottom-up approach used the linguistic features for determining the moves while the top-down approach employed the communicative functions for the identification of moves (Pho, 2008). Kanoksilapatham (2012) claimed that the Applied Linguists mostly used the top-down approach to move analysis and further categorized the move analysis into traditional top-down approach and corpus-based move analysis. She preferred corpus-based analysis for the scope of using electronic devices to calculate the frequencies and lengths of parts of a text but did not rule out the involvement of the subjective judgement of the move analysts. The function-based qualitative interpretation is also inevitable for corpus-driven analysis of a text (Biber et al., 1998, p. 4). Albeit the most common linguistic structure used for the realization of a move is the sentence.

### Move cycles

Holmes (1997, p. 325) defined a move as a piece of text that is designed and constrained by a particular communicative function whereas, a move cycle is a recurring pair or a set of (related) moves (Peacock, 2011, p. 100). Dudley-Evans (1994, p. 225) state a typical example of move cycle from the Discussion section:

“Statement of result- reference to previous research”

### Move frequency

As suggested by the previous genre based studies (Swales, 2004; Brett, 1994; and Kanoksilapatham, 2005), the occurrence of a move in parts of a text or the move frequency plays a vital role in establishing the status of that particular move. Inspired by Rasmeenin (2006), Salmani Nodoushan and Khakbaz (2011, p. 116) decided to label a move as obligatory only when it was observed in 100% of the texts. The moves with 66% to 99% were considered conventional while those present in less than 66% texts (articles) to be optional.

Alamri points out that the frequency of moves is calculated to find out if the specific move was considered to be optional or conventional (2017, p. 90). He, further, elaborates that the literature reflects that the terminal point of each move is decided by the researchers arbitrarily to help achieve the goal of the researchers. Nwogu (1997) set the criteria of 50% for a move to be considered as conventional. However, this criterion was raised to 60% by Kanoksilapatham (2005) and to 75% by Amnuai and Wannaruk (2013). Considering the aforementioned criteria, Alamri (2017) set his own standard to be 70% and above, for a move to be established as conventional. The move frequency of 70%-100% was believed to be the stability criteria for conventional moves. Any move falling short of the frequency range (70%-100%) was considered optional (Alamri, 2017, p. 90).

### Research Gap

There is a dearth of research on the rhetoric structure and move analysis in Pakistan (Aslam & Mahmood, 2014, p. 1); there is only one genre analysis done as yet in Pakistan (Rashid, et al. 2017, p. 2). Moreover, there is very little research done on the methods section of research articles especially in the field of linguistics and literature. Alamri (2017, p. 38) claimed that the methodology section of research articles being the most straightforward has received the minimum interest of the genre researchers. He mentions Khamkhien (2015) as one of the very few researchers that examined the Methodology section of the articles from the discipline of Applied Linguistics. Other studies investigating the Methods section across disciplines include Lim (2006) in the field of management; Peacock (2011) and Cotos et al. (2017)





across disciplines. Alamri (2017, p. 84) claimed his research along with Morales (2016) and Peacock's (2011) studies to be the only researches analyzing the Methodology section of research articles from the disciplines of 'Language, Linguistics and Applied Linguistics'

There has been a lack of research on the rhetoric structure and move analysis in Pakistan (Aslam & Mahmood, 2014, p. 1). Moreover, there is very little research done on the methods section of research articles especially in the field of linguistics and literature. Alamri (2017, p. 38) claimed that the methodology section of research articles being the most straightforward has received the minimum interest of the genre researchers. Therefore, in order to identify the move structures, two questions have been formulated to have a deeper analysis of methodology chapters of Pakistani researchers' articles.

### Research Questions

- a. What is the move structure of the methodology section of Pakistani researchers' articles in the fields of English Linguistics and Literature?
- b. What is the mean length of the methodology section of Pakistani researchers' articles in the fields of English Linguistics and Literature?

### 3. Research Design

For this present study, a qualitative analysis of move structures, a data set of 10 research articles were selected from the field of Linguistics and Literature by following Sinclair's (2005, p. 4) second principle, the 'Criteria':

- Methodology section » (mode of text)
- High impact journal (X/W-category) articles » (text type)
- Recently published (2009-2021) » (date of text)
- Field of Linguistics, Literature, ELT/ Applied Linguistics » (domain)
- Authored by different researchers of Pakistan » (location)
- English » (language)

The research articles of this data set have been codified as *RA 1-10*. Peacock's (2011) model, being the one proposing function-based method moves for the genre analysis of research articles, has been used as a framework for this study, based on the rationale provided by Alamri (2017) that the peacock's model investigated a large corpus of 288 articles from 8 different disciplines including Linguistics and Literature. Out of the seven moves proposed by Peacock (2011, p. 109), mentioned in table 1, only four were found to be common among research articles of Linguistics and Literature, which are as follows:

- Subjects 94%
- Location 58%
- Procedure 100%
- Data analysis 67%

The Methods section of research articles of Linguistics and Literature is considerably long (approximately 25% of the length of an article) albeit it seems to be shorter and simpler as compared to research articles of other disciplines (Peacock, 2011, pp. 105-106).

For move analysis, the standard procedure, used by Peacock (2011) comprises four steps, which have also been employed for the present research:

- Identify the moves and their boundaries by looking for the organisational pattern
- Make use of the sentence-level analysis





- Assign each sentence to a move
- Verify the classification of moves using inter-rater reliability by comparing the findings of the two independent raters.

First, the researchers explored the data set to find the present and missing moves in each RA. Then this data was arranged and examined critically to find the move structure of the articles. . The frequencies of all seven moves were calculated, averaged and tabulated to compare them with the findings of Peacock, Morales and Alamri. Then the common move cycles along with the opening and closing moves of the research articles' methodology sections were extracted. The move cycles or the recurring patterns of moves were tabulated in the form of tables to be compared with the move cycles present in the similar studies (Peacock, 2011 and Alamri, 2017).

To answer the second research question, the present researcher calculated the number of words of the methodology section of all the research articles. Then the total number of words for each RA was counted to get the percentile ratio of the length of the methodology section to that of the whole article:

$$\frac{\text{No. of words of the Methodology section} \times 100}{\text{Total No. of words of the RA}}$$

The average value of the mean length for each dataset was calculated using the plain-simple method to calculate the mean value:

$$\frac{L1+L2+L3...+L10}{10} = \text{Mean Length of the methodology section of RAL 1-10}$$

#### 4. Data Analysis

Before describing the move analysis of articles included in the data for present research, it is important to understand the concept of move used by the researchers. Usually, each move in corpus-based analysis corresponds to a single sentence but the communicative functional approach described by Kanoksilapatham (2012) and used by Peacock (2011) allows for any length of the text. Alamri (2017) also suggested varying length of a single textual construct while doing move analysis.

First RA in the data set RA 1-10, RA-1 begins with *Move 1- Overview*. It is a brief overview of the study followed by a short paragraph to describe *Move 4-Subjects/Materials*. There is a single line incorporated in this paragraph, mentioning the *Move 2-Location*. Then there is an elaborate account of *Move 5-Procedure* followed by a brief description of *Move 7 - Data Analysis*. Two moves, *Move 3- Research Aims/Questions/Hypothesis* and *Move 6 – Limitations*, are missing here. In this way, the move cycle of RA-1 comes out to be (M.1-M.4-M.2-M.4-M.5-M.7).

The first line of the methodology section of RA-2 has been labelled with three moves, *move 1- Overview*, *Move 2-Location*, and *Move 3-Research Aims/Questions/Hypothesis* (see Appendix C). The second paragraph begins with *Move 6 – Limitations*, describing *Move 4-Subjects/Materials* at the end. The last two paragraphs describe *move 7 - Data Analysis* and *Move 5-Procedure* respectively. Therefore, the move cycle extracted for RA-2 is (M.1, 2 & 3-M.6& 4-M.7-M.5). In this way, the researchers have tersely incorporated all the seven moves of Peacock's framework in a short statement of methodology.

RA-3 begins with *Move 2-Location* moving on to a brief description of *Move 1- Overview*. Next paragraph begins with *Move 4-Subjects/Materials* while ends up at *Move 6 – Limitations*. The last paragraph is an elaborate account of *Move 5-Procedure* with certain details about *Move 4-Subjects/Materials*. There





is no mention of two moves; *Move 3-Research Aims/Questions/Hypothesis* and *Move 7 - Data Analysis*. Hence, the move cycle for this article is (M.2-M.1-M.4-M.6-M.4 &5).

RA-4 relies only on three moves to present the methodology of research, starting with *Move 1- Overview* and ending up with *Move 5-Procedure*. There is only a single line in the middle of this paragraph mentioning *Move 4-Subjects/Materials*. There are four missing moves in this methodology section, *Move 2-Location*, *Move 3-Research Aims/Questions/Hypothesis*, *Move 6 – Limitations*, and *Move 7 - Data Analysis*. In this way the move cycle identified here is (M.1-M.5-M.4-M.5).

RA-5 is remarkable for brevity as it incorporates five moves in just 132 words. The starting line corresponds to *Move 1- Overview* and *Move 4-Subjects/Materials* collectively. The second line reflects *Move 3-Research Aims/Questions/Hypothesis*. At the end, a short paragraph describes *Move 5- Procedure* and *Move 7 - Data Analysis*. Two missing moves are *Move 2- Location* and *Move 6 – Limitations*. The move cycle here is (M.1 & 4-M.3-M.5 &7).

RA-6 opens with a single line *Move 1- Overview* of research followed by a paragraph describing *Move 4- Subjects/Materials*. Then the *Move 1- Overview* continues again. The ending para elucidates *Move 7 - Data Analysis*. The last line of the ending para gives a clue to *Move 3- Research Aims/Questions/Hypothesis*. Three moves, *Move 2-Location*, *Move 5-Procedure*, and *Move 6 – Limitations* are missing in this methodology section. Therefore, the move cycle in RA-6 is (M.1-M.4-M.1-M.7-M.3).

Article 7 has used only three moves to explain the research design with the help of 130 words only. The methodology begins with *Move 4-Subjects/Materials* and ends up with *Move 7 - Data Analysis*. There is a single line in the middle of the section that gives a clue to *Move 5- Procedure*. Here, we have four missing moves; *Move 1- Overview*, *Move 2-Location*, *Move 3- Research Aims/Questions/Hypothesis*, and *Move 6 – Limitations*. The move cycle seems to be the simplest (M.4-M.5-M.7).

RA-8 appears to be an account of the *Move 7 - Data Analysis* only, with a brief description of *Move 1- Overview* and *Move 4-Subjects/Materials* in a couple of lines only. The missing moves in this article are *Move 2-Location*, *Move 3-Research Aims/Questions/Hypothesis*, *Move 5-Procedure*, and *Move 6 – Limitations* while the move cycle is (M.1 & 4 -M.7).

RA-9 begins with a line describing *Move 3-Research Aims/Questions/Hypothesis* followed by a brief overview. Then, there is a detailed account of *Move 5-Procedure* and then, an amalgam of *Move 4- Subjects/Materials* and *Move 5-Procedure*. Last line mentions the software used for *Move 7 - Data Analysis*. Two missing moves are *Move 2-Location* and *Move 6 - Limitations* whereas; the move cycle is (M.3-M.1-M.5-M.4 & 5-M.7).

RA-10 has four missing moves, *Move 3-Research Aims/Questions/Hypothesis*, *Move 5- Procedure*, *Move 6 – Limitations*, and *Move 7 - Data Analysis*. In the beginning, there is an elaborate *Move 1- Overview* of the research followed by *Move 2-Location*. *Move 4- Subjects/Materials* explains the sample at the end. The move cycle here is also very simplified: (M.1-M.2-M.4).

### Table 3

*Move frequencies of RA 1-10 and their averages*





RAs	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	RA-9	RA-10	Move Frequency	Average
M1---- <i>Overview</i>	1	1	1	1	1	1	0	1	1	1	9/10	90%
M2---- <i>Location</i>	1	1	1	0	0	0	0	0	0	1	4/10	40%
M3---- <i>Research Aims/Questions/Hypothesis</i>	0	1	0	0	1	1	0	0	1	0	4/10	40%
M4---- <i>Subjects/Materials</i>	1	1	1	1	1	1	1	1	1	1	10/10	100%
M5---- <i>Procedure</i>	1	1	1	1	1	0	1	0	1	0	7/10	70%
M6---- <i>Limitations</i>	0	1	1	0	0	0	0	0	0	0	2/10	20%
M7---- <i>Data Analysis</i>	1	1	0	0	1	1	1	1	1	0	7/10	70%

**Conventional/obligatory moves in RA 1-10**

- Move 1- Overview
- Move 4-Subjects/Materials
- Move 5-Procedure
- Move 7 - Data Analysis

**Optional moves in RA 1-10**

- Move 2-Location
- Move 3-Research Aims/Questions/Hypothesis
- Move 6- Limitations

**Length of the Methodology Section in RA 1-10**

After analysing the move structure of the methodology section of 10 articles from the data set, the number of words of each RA along with the number of words of the methodology section was counted by putting them in Microsoft Word. The mean length of every methodology section was calculated. For instance, the number of words of the first article in RA 1-10 is 6645 while the number of words of the methodology section of the same RA is 634. The results calculated for the dataset of local Pakistani researchers have been displayed by the Table no 4 is given below.

Table 4

*Percentage and Mean Length of the Methodology Section of RA 1-10*

RAs	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	RA-9	RA-10	Mean Length
<b>Word count of the Article</b>	6645	8065	9578	3844	5220	6023	6905	3598	5085	4015	5898





<b>Word count of Methodology Section</b>	634	405	471	160	132	331	130	292	396	429	338
<b>Percentage</b>	9.5%	5.02%	4.9%	4.2%	2.5%	5.5%	1.9%	8.1%	7.8%	10%	6.0%

Table 4 reflects that the six out of 10 articles included in RA 1-10 have mean length below the average mean length that came out to be 6.0%. Four of the research articles have a mean length more than the average value. The two articles included in the dataset (RA-1 & RA-10) seem to be close to the mean length of the Research articles from the dataset in the study of Peacock (2011), though much less than that (24%). This shows that there is no uniformity of trend regarding the mean length of the methodology

RAs	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	RA-9	RA-10
Opening Move	1	1	2	1	1	1	4	1	3	1
Closing Move	7	5	5	5	5 & 7	3	7	7	7	4

section of research articles in RA 1-10. This is also evident from table 4 that the methodology section of research articles written by local researchers of Pakistan gains scant attention by the authors. Not a single local researcher out of 10 considered for the study has written the methodology section exceeding a word-limit of 500. The average length is just 338 words out of the 5898 words of overall mean length of articles.

### Move Cyclicity

Move cyclicity refers to the recurrent patterns of moves in the research articles. They are either called move cycles or move patterns. Though there has not been found much consistency in the patterns of move sequences, certain trends have been identified and highlighted in table 5.

**Table 5**

*Move Cycles Present in RA 1-10*

RA 1-10	
RA-1	M.1-M.4-M.2-M.4-M.5-M.7
RA-2	M.1, 2 & 3-M.6& 4-M.7-M.5
RA-3	M.2-M.1-M.4-M.6-M.4 & 5
RA-4	M.1-M.4-M.5
RA-5	M.1 & 4-M.3-M.5 & 7
RA-6	M.1-M.4-M.1-M.7-M.3
RA-7	M.4-M.5-M.7
RA-8	M.1 & 4-M.7
RA-9	M.3-M.1-M.5-M.4& 5-M.7
RA-10	M.1-M.2-M.4

### Opening and Closing Moves

Opening and closing moves may also help novice researchers of Pakistan to get an idea how to begin and end up with, their methodology section of research articles. As the topic of present research was chosen by the researchers keeping in mind the lack of guidance available for the neophytes in the field of research especially in social sciences, this section will also prove to be pertinent here.





Table 6

Opening and Closing Moves in RA 1-10

Table 6 reflects that only three (RA-3, RA-7 & RA-9) out of ten research articles in RA 1-10 do not start with Move 1- Overview. Remaining seven out of the ten research articles begin their methodology section with Move 1- Overview. It means that 70% of the research articles in the dataset representing the methodology section of the research articles written by local Pakistani researchers contain Move 1- Overview as the starting move. The ending move in research articles of RA 1-10 is either Move 5-Procedure or Move 7 - Data Analysis, except in RA-6 and RA-10 that close their methodology sections with Move 3- Research Aims/Questions/Hypothesis and Move 4-Subjects/Materials respectively. RA-2 and RA-4 end up clearly with Move 5-Procedure while RA-1, RA-7, RA-8, and RA-9 close their methodologies with Move 7 - Data Analysis. One RA, however, ends up with a paragraph that is an amalgamation of Move 5- Procedure and Move 7 - Data Analysis. It is very difficult to identify the ending move in that RA. Therefore, the researchers decided to label the ending move as a combination of Move 5-Procedure and Move 7 - Data Analysis. Hence the most common ending move in the dataset RA 1-10 is Move 7 - Data Analysis.

Recurrent opening move in RA 1-10= Move 1- Overview

Recurrent closing move in RA 1-10= Move 7 - Data Analysis

5. Findings and Recommendations

This section provides an insight into the results and analysis of the move structure of the research articles written by Pakistani researchers. The discussion in this section proceeds on lines provided by the research questions, continues with the findings of previous literature related to move analysis of the methodology section and terminates with suggestions to improve the researching skills of Pakistani writers and some modifications in theoretical frameworks available.

To answer the first research question, the present researcher has explored the move structure of the methodology section of article included in the sample, in terms of move frequency and move cyclicity.

Move Frequency

The summary of the results in the concluding part of Data Analysis evidenced the importance of five moves of Peacock’s framework in the data set of present study, in terms of move frequency.

These five moves also include the four most common moves found by Peacock (2011, p. 109) in the data set of research articles from the field of Language and Linguistics: Subjects and Procedures are the most frequent moves not only in the data of present research but also of the previous research in the similar context (Peacock, 2011; Morales, 2016; and Alamri, 2017). This is the evidence that the researchers from the field of Literature, Linguistics, and related disciplines want the readers to be informed about and how the subjects of the study have been manipulated in answering the research questions (Morales, 2016).

Subjects	94%
Procedure	100%
Data analysis	67%
Location	58%





Alamri (2017) also found out that *Overview* is a conventional move in Saudi corpus in contrast to its international counterpart where it had been mentioned only by 4 out of 15 researchers. This shows that local Saudi writers and Pakistani researchers consider it important to brief the reader about the research purpose and procedure while discussing the research methodology.

*Location* is the least frequent (58%) of the four obligatory moves identified by Peacock (2011) in the corpus of research articles from Language and Linguistics. Pakistani researchers have also mentioned the *Location* in 40% of the Articles included in the sample of this study. This may be attributed to the fact that local researchers consider their readers to be aware of the fact that the research has been done in the Pakistani context with few exceptions where it is not mentioned purposefully. It means that this move is need based in Pakistani researchers' articles.

In the study of Morales (2016, p. 14), the three moves (*Subjects/Materials, Procedure, and Data Analysis*) are the most frequent with average occurrence of 100% in non-high impact Applied Linguistics journals, whereas in high impact journals, they are 100%, 93%, and 87% respectively.

All these three moves are also frequent in Alamri (2017) and the same move structure has been identified by the present research. *Overview* has also appeared in 40% of the research articles in non-high-impact journals whereas in 13% of the research articles in high impact journals. Again, it is one of the five most frequent moves identified by the present researcher. The move *Overview* is more common in non-high-impact journal articles in Morales's study. Though, the *Location* has not been mentioned by any researcher in Morales's study, it is used by 40% by Pakistani researchers. This shows variety in the rhetorical structure of the methodology section mentioned by the researchers like Swales and Feak (2004), and Peacock (2011).

With regards to the second research question, the Pakistani researchers have relatively short Methodology sections. The low percentages of the moves present in case of RA 1-10 may be attributed to the shorter length of the methodology section in research articles written by local Pakistani researchers. Moreover, the shorter length also indicates the lack of diligence on part of the local researchers while writing their methodology.

The present researcher has calculated the percentage of the length of methodology section of research articles included in the sample just like Peacock (2011, p. 115) presented the mean length of the methodology section of all the 8 disciplines separately. The mean length of the methodology section of research articles from Language and Linguistics in Peacock's study was 24% which is almost four times the mean length of the methodology section (6.0%) of Pakistani researchers' articles. This comparison explicitly reflects that the methodology section of research articles written by Pakistani researchers is not given due importance and space in the documentation of research.

Peacock's study found out that the methodology section of research articles from social sciences is more elaborative than those of the other sciences. However, the mean length of the methodology section in research articles of Pakistanis, in general, is even less than that of research articles from other sciences in Peacock's study. The shortest length of the methodology section in Peacock's study is in the research articles from the fields of Chemistry and Law, 18% and 19% respectively. In short, there is a trend of lack of attention to the methodologies while writing research articles, especially, by Pakistani researchers (6.0% only).

The results reflect a dire need to focus on the methodology section while writing research articles; it even has pedagogic implications. The lecturers and teachers of academic writing in Pakistan need to give due importance to the rhetorical structure of research articles especially that of the methodology section, while designing their course content.





### Significance of the Study

This research offers valuable insights into the structure and narrative techniques employed in the methodology sections of research articles within the field of Linguistics and Literature in Pakistan. Its results are particularly pertinent in the current Pakistani research scenario, where there is a growing emphasis on developing robust, transparent, and replicable research methodologies.

The findings highlight the dominance of certain 'moves' such as Subjects, Procedure, and Data Analysis in the methodology sections, reflecting a focus on these aspects within the research community. However, the less frequent inclusion of research Aims/Questions/Hypothesis and Limitations suggests areas where further emphasis might be beneficial. This could guide future training and resources to strengthen these aspects, thereby enhancing the comprehensiveness and clarity of methodological reporting.

The variability in the structure and length of methodology sections across the research articles underscores the diversity of methodological approaches within the field. This could be seen as a strength, reflecting the adaptability of researchers to the specific demands of their studies. However, it also highlights a lack of standardization, which could potentially lead to inconsistencies or gaps in methodological reporting.

This research thus serves as a crucial reference point for understanding and improving methodological writing practices in Pakistani research contexts, contributing to the broader goal of enhancing the quality and impact of research outputs.

## 6. Conclusion

The results of the study reflect that the four moves have been found to be obligatory in the articles written by local researchers of Pakistan. The opening move in the articles of local researchers is mostly the Overview. Limitations and research Aim/ Question/ Hypothesis are not only missing in the data set of the present study but also from the methodology section of research articles used as sample in the research of Morales (2016) and Alamri (2017). These two moves along with the Overview were also not frequent in Peacock's sample from the field of Language and Linguistics.

The average length of the methodology section of local researchers of Pakistan is only 6.0% of the whole of the research articles which is nearly one quarter of the mean length of the methodology section of research articles from similar discipline in the corpus of Peacock (2011). These results also provide proof of the lack of attention on part of local Pakistani researchers in writing the methodologies of their research. These results have answered the second research question according to the expectations of the present researcher.

Apart from the expected contribution of the present research in the field of genre studies with pedagogic implications, the limitations of the study have been attributed to the single discipline under discussion albeit, the researchers from various disciplines need to explore the methodology section of research articles in the Pakistani research milieu. Moreover, the sample size may be increased to conduct similar research for further validation as the time constraint did not allow the researchers to expand the sample size. The analysis of the present research is manual that would have been further validated by using software like Ant Moves. Another procedure used for the validation of move analysis could also have been applied; Alamri (2017) analysed his pilot data after a gap of time himself for validation.

Comparing the results with previous literature, gives evidence of the validity of the results as the results are in close proximity with the similar research conducted in different contexts. The common move cycles identified in RA 1-10 by the present researchers are:

*Overview- Subjects/ Materials and Procedure – Data Analysis*





This move cycle is quite like the common move cycles identified by Alamri (2017) and Peacock (2011) after analysing the corpus of research articles from the field of Language and Linguistics.

Subjects ➔ Location ➔ Procedure ➔ Data Analysis

The three conventional/ obligatory moves extracted from the sample by Morales (2016) are also Subjects/ Materials, Procedure and Data Analysis. In this way, the results of the present study not only prove to be reliable but also serve to validate further the previous research done to analyze the methodology section of research articles from the related disciplines.

Having explored the methodology section of Pakistani researchers' articles, the present study may provide a preliminary guideline for the novice researchers in writing their methodology section. The present study will provide a brief account of what to include in the methodologies and how to open or close this section of their articles. Moreover, after explaining the importance of genre studies in academic settings especially the pedagogic implications of move analysis, the researchers suggest that the genre studies should be included in academic writing courses if not offered as an independent subject at least at MPhil level in Pakistani universities. The researchers hope to contribute to creating an interest in genre studies among neophytes in Pakistani research milieu.

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