Original Paper

A Comparative Study of Move Analysis in Chinese and International Research Article Abstracts

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Abstract

To raise the authors' awareness of using the moves and move models in abstract writing, this study compares the frequency, type, and significant difference of moves and move models in 100 abstracts written in English by Chinese scholars and 100 abstracts written by international scholars in 10 prestigious international journals in the field of linguistics. The adapted Hyland's five-move model was used as research framework, Corpus and statistic software SPSS were used as research instruments. The comparisons report that Chinese scholars tend to use introduction, result, and conclusion moves. International scholars are inclined to use purpose, method, result, and conclusion moves. The results also indicate that the four-move model is the most prevalent in the two groups. Chinese scholars used the two-move model more than the English authors whereas used the five-move model less than the international authors. The findings are intended to provide referential value for the writing and teaching of English for academic purposes.

Keywords

comparative study, academic papers, move, move model, abstract

1. Introduction

Research article abstracts are vital component to announce research findings (Tanko, 2017). The abstract influences whether the reader will have a further reading and refer to the literature. The credibility of the text not only depends on the rationality of the scientific findings but also lies in the persuasive power of the authors' expression in explaining the arguments (Jiang & Hyland, 2020). While writing the abstracts, researchers' discourse awareness can be strengthened by understanding the general norm of moves. Recent years have seen renewed interest in corpus-based move analysis in research article abstracts with the high-speed development of corpus technology. Firstly, the researchers

compared the moves of research articles in different disciplines (Mohd, 2016; Darabad, 2016). Secondly, the researchers conducted cross-language comparative studies in concert discipline (Li & Josta, 2011; Qian & Luo, 2014; Amnuai, 2019). Thirdly, researchers also compared the research article moves in different universities or authors in different learning stages (Behnam & Zamanian, 2013; Dina, 2018). On the one hand, the current studies show little scholarly attention in the abstracts of core linguistic journals in China and the international linguistic area. On the other hand, data gathered from different databases will result in distinct conclusions. Therefore, it deserves to have further research. Given the consensus that moves play positive roles in abstract writing, this paper analyzes the differences and shared characteristics of English abstracts in Chinese and international linguistic journals, which hopes to enrich the empirical studies in this research field.

2. Theoretical Framework

The most important and valuable information of a complete research is conveyed in the abstract part. It is an information reference for specialists to decide whether the article have the qualification to enter the intended journals. The five-move model is a significant analytical framework that Hyland (2004) introduced. It proves a comprehensive framework, which includes the introduction (I), purpose (P), method (M), result (Pr), and conclusion (C). This model was based on the results of a systematic analysis of 800 abstracts from eight disciplines in the natural and social sciences. Given its strong applicability, this paper considers using Hylands' five-move model as the analytical framework. In some academic papers, owing to the limitations of abstract writing rules established by some journals, moves can be embedded in a sentence containing two or more moves (Kaya, 2020). Therefore, embedded moves can be formed. This study merges the embedded move into Hyland's five-move model to construct the new analytic framework. The contents are as followed:

Table 1. The Adaption of Hyland's Five-move Model in Article Abstracts

Moves	Functions
Introduction	Establish the context of the paper and motivates the research or discussion.
Purpose	Indicates purpose, thesis, or hypothesis, and outlines the intention behind the paper.
Method	Provides information on design, procedures, assumptions, approach, data, etc.
Result	States main finding on or results, the argument, or what was accomplished.
Conclusion	Interprets or extends results beyond the scope, draws inferences, and points to applications or wider implications.
Embedded Move	Occurs when a single sentence contains a more than one move

3. Research Design

3.1 Research Questions

The present study aims to respond to the following four research questions via the analysis of the core journal abstracts in the field of Chinese and English linguistics:

(1) What is the frequency and percentage in the use of moves in English Abstracts of Chinese and international linguistic journals?

(2) Are there any significant differences in the use of moves in English abstracts of Chinese and international linguistic journals?

(3) What are the most frequently used moves model in English abstracts of Chinese and international linguistic journals?

(4) What's the popular move models' number in English abstracts of Chinese and international linguistic journals?

3.2 Data Analysis and Research Procedures

This paper collected the English abstracts of Chinese and International core linguistics journals as the research data. Two small corpora were built, namely, Chinese English Abstract Corpus (CEAC) and English Abstract Corpus (EAC, English Abstract Corpus). The Chinese data derives from CNKI (China Knowledge Infrastructure), which are the linguistics abstracts in the realm of foreign languages and literature. The English data emanates from the core collection of the WOS (Web of Science). Two kinds of data are both from prestigious journals in the field of linguistics. The genre of research articles is empirical study. Regarding the method of data selection, 10 journals were chosen from each database and 10 abstracts were taken from each journal. Eventually, 200 abstracts were collected which includes 100 abstracts from international journals and 100 abstracts from Chinese journals. To eliminate the influence of publication time, all abstracts were selected from July 2021 to July 2022. Table 2 displays the source journals. To enhance the accuracy, the English abstracts in Chinese were written by Chinese authors, and international journals were written by native speakers.

Table 2. Sources of Chinese and International Journals

Chinese Journal	International Journal
Foreign Language World	Applied Linguistics
Journal of Foreign Languages	Language Learning
Foreign Language Education	Language Teaching
Foreign Languages in China	Brain and Language
Foreign Language Research	Journal of Pragmatics
Modern Foreign Languages	Modern Language Journal
Technology Enhanced Foreign Language Education	Studies in Second Language Acquisition

Foreign Language Teaching and Research	Corpus Linguistics and Linguistic Theory
Foreign Languages and Their Teaching	Bilingualism-Language and Cognition
Journal of PLA University of Foreign Languages	Computer-Assisted Language Learning

The data was processed by manually analyzing and annotating. The content of the annotation includes two aspects, each move of Hyland's five-move model and the embedded moves (i.e., "MP"). Since the analysis of abstracts moves will be affected by contextual factors, it is therefore that the annotation was conducted manually and retrieved through the AntConc software. The first researcher annotated the moves in Chinese core journals. The second researcher annotated the moves in international journals. The third researcher checked the moves of both language journals based on the annotation results. Finally, the three researchers agreed on the results. We performed chi-square test to examine the significant differences in the frequencies and percentages of each move by using the data analysis software SPSS Statistic 26.

4. Results and Discussion

4.1 Frequency Distribution of Moves in Chinese and International Abstracts

In the process of move annotation, a sentence or a group of sentences that express the same communicative purpose is identified as a move. The moves are mainly presented in sentence units. When a single sentence has a concatenation of move is called an embedded move. For example, the phenomenon can be seen when the research method is embedded into the research purpose. Embedded moves occur when a single sentence contains more than one move, such as when the method move is embedded in the purpose move. When the main moves cannot be identified, it is considered that there are two moves. The frequency and percentage of each move in the two corpora are tallied and the findings are displayed in Table 3.

Table 3. Frequency and Percentage of Research Article Moves

Moves	CEAC		EAC	
	Freq	Pct(%)	Freq	Pct(%)
Introduction	53	53%	48	48%
Purpose	33	33%	77	77%
Method	21	21%	64	64%
Result	89	89%	97	97%
Conclusion	66	66%	55	55%
Embedded Move	60	60%	14	14%

The results demonstrate that it exists 8% five-move model in the English abstracts of Chinese journals. Conversely, the percentage of the five-move model is 17% in international journals. It shows that the five-move model is employed more frequently in the abstract writing of international scholars. Table 3 presents the frequency distribution of each concrete move. It can be certified that Chinese authors are attentive to the use of the introduction, result, and conclusion moves. The international scholars emphasized the purpose, method, result, and conclusion moves. The shared traits of the two groups are to present the research results, which remains the prominent task of abstracts. This finding indicates that the research results are attractive to researchers. It allows the reader to quickly judge if the research can meet the readers' academic needs and thus proceed to have a further reading. It is worthwhile to mention that the regular and optional moves can be identified through the analysis of moves frequency (Suntara & Siriluck, 2013). When the frequency of a move is more than 60%, it is considered a regular move. On the contrary, it is regarded as optional move when the percentage is less than 60% (Kanoksilapatham, 2005). Via investigation, the regular moves in Chinese journals are result, purpose, and embedded moves and in international journals are purpose, method, and result moves.

Given the restricted length of the research article, researchers often shorten their abstracts by two means. The authors merge and remove some moves to maximize the finite space. The one is to eliminate the background information or the introduction part. The other is to merge the single move to form embedded moves. A variety of move models are generated in this process. As shown in table 3, Chinese authors prefer to use embedded moves to account for the research method and the research purpose which have been attributed to the differences in language expressions and requirements of different languages. "MP" is used to indicate the combination of research method and the research purpose. The percentage of MP in Chinese core linguistics journals reach 60%. The use of embedded moves causes a low percentage of the purpose and method moves in Chinese journals. By examining the embedded move, we observe that method moves in both Chinese and international journals frequently embed into the purpose move. The main clause falls on the purpose move and regards the purpose of the study as the center of the sentence, it can be seen in the following example:

> *Through conversation analysis, we explore how open dialogue practitioners in a Danish mental health hospital articulate their own experiences as indicative of a client's inner states, an interactional practice defined here broadly as empathic "my side tellings" [MP].*

Taken together, the research article moves in the abstracts of Chinese and foreign academic journals are dominated by the purpose, method, and conclusion moves. The comparison of the two groups is consistent with the findings of Pho's study (2008) in the abstracts of applied linguistics and educational technology. That is to introduce the purpose, describe the method, and state the results are necessary moves in an English abstract. Moreover, the results of this study lend support to the research findings of Sidek, MatSaad, and Idris (2016) on conference proceedings abstracts in linguistics and applied linguistics, which demonstrates that purpose, method, and result move are the most popular. However,

what contract with sidek and his companies' study is on the construction of the move, which mainly embodies on the important influence of the embedded move. This inconsistency may be caused by the cross-cultural differences in language organization, the differences in writers' writing culture, and the context and requirements of different journals.

4.2 The Differences Analysis of Moves in Chinese and International Abstracts

The chi-square test, which is used to examine the significant difference in two groups of data, is a widely used hypothesis test method (Yu & He, 2003, pp. 311-351). In this paper, we used the chi-square test to examine whether there has a significant difference in the frequencies of the annotation results. The chi-square test in SPSS software is employed to analyze whether there are any statistically significant differences between CEAC and EAC.
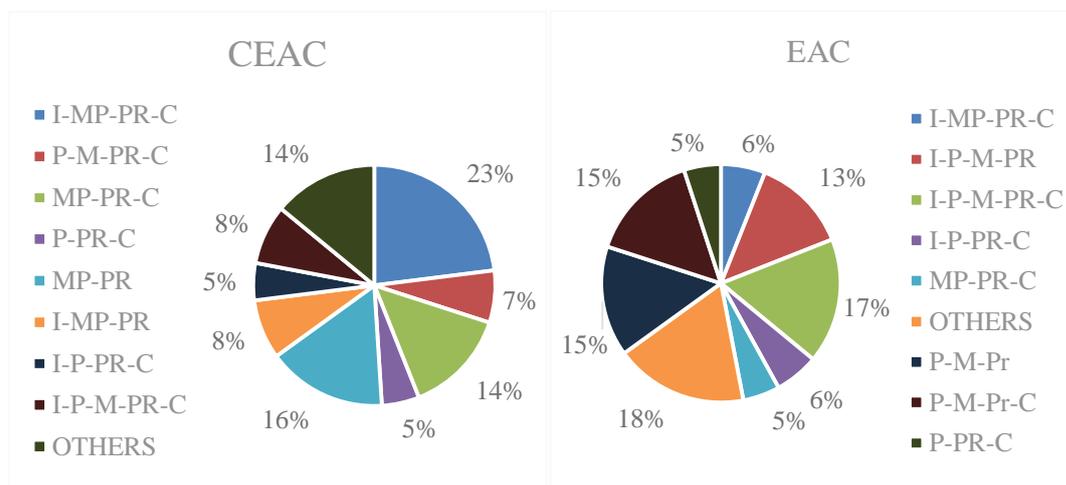
Table 4. The Results of the Chi-square Test

Moves	X^2	Df	Sig
Introduction	0.898	1	0.343
Purpose	0.427	1	0.514
Method	0.327	1	0.568
Result	0.004	1	0.952
Conclusion	0.016	1	0.898
Embedded Move	0.233	1	0.630

Table 4 contains the supporting data in statistical results. Notwithstanding the frequency of moves is obviously different, what is surprising is that the chi-square test findings indicate that the P value of each move in is over 0.05, which indicates that there is no significant relationship between the moves in the Chinese and international abstracts. In statistics, there is now broad consensus that there is a significant difference when P>0.05 and that there is no significant relationship between the two groups of data when P<0.05. Despite the study's findings showed a considerable difference in each move's frequency, there is no statistically significant correlation. It shows that the groups are are incline to comply the prevalent general standards while writing their academic abstracts and adhered to the standard guidelines in the writing process.

4.3 The Popular Move Models in Chinese and International Abstracts

Concerning the move model is another essential argument in present study. The results of applying the move model in both corpora are shown via the retrieval by AntConc. Another important aspect in the current paper is related to the prevalent move model. The retrieval and manual counting results in the use of the move model in two corpora are displayed in Figure 1:

Figure 1. The Frequency of Move Model in CEAE and EAC

As shown in Figure 1, the abstracts of Chinese and international linguistics core journals show varied move models. There are 15 and 12 kinds of move models in the Chinese and international journals respectively. The Chinese journal contains all the types of move models in the English journal. Variation rates of the generic structure were 15% and 12%. The most frequently used move model in English abstracts of Chinese journals are I-MP-Pr-C, MP-Pr, and MP-Pr-C. In the meanwhile, the highest frequency of move models in English linguistics abstracts are I-P-M-Pr-C, P-M-Pr-C, and P-M-Pr.

Subsequently, the move models with embedded moves in Chinese abstracts are far more than the international abstract. Because of the simplicity of language, the requirements of different journals, and the different expression habits of Chinese and native speakers, Chinese scholars tended to use embedded moves in move models to express the whole meaning by using the most concise vocabularies and sentences. They were inclined to embed the research method into the research purpose, combine the methods with the research question, or embed the method move into the result move. Foreign scholars show a tendency to write abstracts based on Hyland's five-move analytical framework, omit the introductory part of the background information, or draw broader conclusions over the research results.

It is worthwhile to point out that move analysis includes the phenomenon of moves' reversed ordering. Move inversion aims to reverse the conventional order of moves in academic writing (Cai & Han, 2015). The inverse order of moves is mostly expressed as the advance of method and purposes moves. For instance, the move model "P-I-M-Pr" put the purpose move ahead. This manifestation intends to stress and state the purpose of the study at the beginning of the abstract to attract the reader's attention. The inverse structure is to skip the introduction of background information and present the purpose of the study directly. The merit is to save the readers' time and energy, the drawback is that it seems to

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cause the absence of information in the presentation of abstracts. In addition, the repetition of moves is one of the main reasons to change the order of moves, which is manifested by the repetition of introduction, method, and result moves. This approach can demonstrate the variety of the research content or the systematic use of the research methods, but it also has the disadvantage to make the reader feel redundant. Hence, rationalizing the distribution of move is not a simple task.

4.4 The Analysis of Move Number in Chinese and International Journals

The examination of the moves in abstracts demonstrates that neither national nor international publications write abstracts merely using one move. Two, three, four, or five-move models are used frequently. The specific results are shown in Table 5:

Table 5. The Results of Move Number Model

Move Number	CEAC		EAC	
	Freq	Pct(%)	Freq	Pct(%)
Two-Move	19	18%	5	48%
Three-Move	34	34%	37	37%
Four-Move	39	39%	41	41%
Five-Move	8	8%	17	17%

The frequency of the two-move model in English abstracts of Chinese journals is much higher than in English journals. The main two-move model is "MP-PR", which is composed of two embedded moves. It merges the method with purpose moves and combines the purpose with the results. According to statistics, the two-move model emerges four times more frequently in Chinese journals than in English journals. The frequency of three and four-move in Chinese and international journals abstracts are balanced. Most of the three or four-move involves the embedded move or eliminate specific move in Hyland's five-move model. Put it briefly, three-move and four-move were most frequently used in the abstracts of academic publications in the fields of Chinese and English linguistics, and they take up the highest percentage. The two-move models were frequently used in Chinese journals, and the five-move can be found more frequently in the abstracts of international journals.

5. Conclusion

Abstracts can be regarded as an academic card to present the research content from the introduction to the conclusion by using the expression as concise as possible within the limited framework. This study collects the abstracts of academic papers in Chinese and foreign linguistics journals as linguistic data, uses adapted Hyland's five-move model as the analytic framework, and adopts corpus and statistical software SPSS Statistics 26 as the research tools. The quantitative method is used to present the frequency distribution of results and the qualitative method is employed to explain the reasons. The

findings show that there are shared traits and differences in the use of research article moves and the move models in the two groups. The shared characteristic is that two groups of scholars use the three or four-move model most frequently. The differences are mainly embodied in two aspects. One is the difference in the frequency of move use in Chinese and international journals, whereas it has no statistically significant relationship. The other is the difference in the popular move model, I-MP-Pr-C, MP-Pr, and MP-Pr-C prove the prominent move model of English abstracts in Chinese journals while the popular move models in abstracts of international journals are I-P-M-Pr-C, P-M-Pr-C and P-M-Pr. One possible implication of this study intends to provide a reference for researchers to read and write English abstracts quickly and effectively. This article also hopes to provide pedagogical insights. Admittedly, the limitation of this study is that the research data is finite and the types of research articles are empirical studies. Given these limitations, this study suggests collecting more extensive data and various genres of research articles in future studies.

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