Move analysis of conference proceedings abstracts across disciplines among Thai researchers: A case of education and health sciences

Siwanon Ninpanit[1*]

Abstract

This small-scale study investigates the rhetorical structures of conference proceedings abstracts (CP abstracts henceforth) among Thai researchers based on Hyland's framework (2000). In order to find out what move sequences and move frequency are, CP abstracts across two disciplines, namely education (ED) (N=14) and health sciences (HS) (N=14) were randomly selected from the proceedings of a graduate research conference. The results indicated that purpose (P), methods (M), and product (P) moves were obligatory, and introduction (I) and conclusion (C) moves were missing in the CP abstracts in education. On the other hand, conclusion move was conventionally employed, and introduction move was optionally used in the CP abstracts in health sciences. Additionally, the most dominant sequence between these two disciplines was different. That is to say, P-M-P was most frequent in the former field, whereas P-M-P-C was most prevalent in the latter field. It is hoped that the findings would be useful for Thai researchers in the above-mentioned disciplines to understand the rhetorical organization of abstract writing and be able to write the successful CP abstracts in their selected conferences.

Keywords: move analysis, conference proceedings abstracts, Thai researchers, education, health sciences

[1] English for International Communication (International Program), Faculty of Humanities and Social Sciences, Valaya Alongkorn Rajabhat University under the Royal Patronage, Pathum Thani 13180, Thailand

* Corresponding author. E-mail: siwanonaofart@gmail.com

Introduction

To disseminate knowledge worldwide, researchers can opt to write their research articles in English, an international language. Thai researchers in various fields of interest can also choose to publish their research studies in English. However, due to a lack of English proficiency, many Thai researchers get their research published in Thai, but their abstracts are required to be written in both Thai and English.

Research article abstracts (RA abstracts henceforth) are of paramount importance for successful publication. They are also a consideration whether or not an article is to be accepted or rejected (Marefat and Mohammadzadeh, 2013). In addition, Huckin (2001) elucidates that RA abstracts have four distinctive uses. First, RA abstracts are read as a quick summary of a whole research article. Second, they are part of a decision-making process of the reader whether to read on or not. Third, RA abstracts are considered as a preview which guides the reader. Fourth, they are indexed in large database services useful for professional indexers. Furthermore, as Saeeaw and Tangkiengsirisin (2014) put it, submitting RA abstracts is the first gateway for the acceptance and publication of research articles (RA). Therefore, being able to write successful

RA abstracts to be accepted at an academic conference or in journals is a major goal of all researchers.

In order to successfully write RA abstracts, move analysis comes into play in helping researchers realize the common construct of abstracts in their respective disciplines. Considered as part of genre analysis developed by Swales (1981), move analysis is a way in which different parts of a text segment are analyzed in order to see what communicative function which each segment of a text performs and thus serves the purpose of a text as a whole (Swales, 1990). Moves can be divided into three types according to their frequency: obligatory ($\geq$90%), conventional ($\geq$60%), and optional ($\leq$60%) (Biber *et al.*, 2007)

To date, RA abstracts have been explored by a number of researchers across disciplines, such as applied mathematics and applied chemistry (Darabad, 2016), management and marketing (Li and Pramoolsook, 2015), and applied linguistics (Tseng, 2011), among many others. Darabad (2016) explored 31 abstracts from three disciplines, namely applied linguistics, applied mathematics, and applied chemistry. One major finding was that the purpose-methods-results-conclusion (P-M-R-C) pattern was the most frequent sequence in all the disciplines mentioned. Li and Pramoolsook

(2015) together investigated 64 abstracts in management and marketing based on Hyland's framework (2000). An important finding from both disciplines was that the most popular sequence employed was introduction, purpose, products (I-P-P). It was also discovered that introduction move and methods move were more frequent in marketing than in management, and that conclusion move was frequently included in management rather than marketing. Moreover, Tseng (2011) examined 90 RA abstracts in applied linguistics. Three moves, aim (purpose), methods, and result were deemed obligatory, conclusion move conventional, and introduction (background) move optional. As regards the sequence of move, aim-methods-results-conclusion-(A-M-R-C) instead of background-aim-methods-results-conclusion (B-A-M-R-C) was the preference among the authors. As exemplified, RA abstracts in journals in various disciplines have been thoroughly examined, if not all.

Nevertheless, to the best of the researcher's knowledge, studies on CP abstracts among Thai researchers, in particular, are rather scarce. For instance, Sidek *et al*. (2016) investigated 23 conference abstracts of empirical-based studies by employing Hyland's five-move model. The results indicated that a good number of abstracts in the study did not follow the conventional, rhetorical structures of abstract writing, that is, with one or two moves missing. Since studies on CP abstracts are limited, this study is, though preliminary, aimed to bridge this gap by further investigating the move sequences and the move frequency of CP abstracts among Thai researchers to see if they conform to the conventional structure of abstract writing or how they are constructed based on Hyland's model (2000).

Methodology

CP abstracts among Thai researchers were gathered from the proceedings of the 41st National and 5th International Graduate Research Conference held at Valaya Alongkorn Rajabhat University under the Royal Patronage located in Pathum Thani province on 8-9 December 2016. The abstracts were written in Thai and then translated into English, presumably either by their researchers or by the translators. All of the abstracts were randomly selected from two different disciplines, namely education (ED) (N=14) and health sciences (HS) (N=14).

A move analysis model was then chosen based on Hyland's model (2000) after five randomly selected abstracts from the two disciplines had been piloted. Then, all the abstracts were manually coded and analyzed

twice with an interval of two weeks. Next, move identification was determined by using the bottom-up approach to identify move sequences. The move frequency was converted into percentage scores afterward. The framework employed in the present study was, as already mentioned, based on Hyland's five-move model, which includes providing the context and background of a study, introducing a purpose, describing methodology, summarizing results, and presenting

conclusions (I-P-M-P-C). The first move introduces the background of a study. The second move indicates researchers' hypotheses or objectives. The third move describes data and procedures; in other words, it is concerned with the design of a study. The fourth move summarizes major results. Finally, the fifth move presents conclusions which can be result interpretations, implications, or applications of the findings.

Table 1 Move frequency of the abstracts in the two disciplines.

moves	education (ED) (N = 14)	percentage (%)	health sciences (HS) (N = 14)	percentage (%)
introduction	0	0	3	21.43
purpose	14	100	14	100
methods	13	92.86	14	100
product (result)	14	100	14	100
conclusion	0	0	11	78.57

Results and discussion

As shown in (Table 1), CP abstracts in education comprised three moves whereby purpose, methods, and product were obligatory ($\geq$90%). Only one abstract in education consisted of two moves (purpose + product). However, it is possible that method move which seemed to be missing was embedded in purpose move. This phenomenon is consistent with Pasavoravate

and Wijitsopon (2011) in that methods move which can be participants is usually embedded within puspose move. The embedded part is shown in bold below.

1) *The research factors affecting reading of* **Prathomsuksa 6 Students** *in Phetchabun Primary Education Service Area Office 2 intends to study …*

On the other hand, the CP abstracts in health sciences were composed of five moves. That is, introduction move was optional ($\leq$60%), purpose move, methods move, and product move were obligatory ($\geq$90%), and conclusion move was conventional ($\geq$60%). When comparing the results of the two disciplines, it is found that the introduction move was the least frequent move congruent with Darabad (2016), who investigated RA abstracts from the three disciplines, namely applied linguistics, applied mathematics, and applied chemistry and found that, among the three disciplined examined, introduction move was the least frequent; purpose and product moves were the most frequent.

What is strikingly different between the CP abstracts in education and the CP abstracts in health sciences is conclusion move. Among the CP abstracts in education, this move was not included at all. In other words, conclusion move might have been less common. This, however, allows the reader to subsequently explore implications in a full-text article (Li and Pramoolsook, 2014). As for the CP abstracts in health sciences, conclusion move was not only conventional but also necessary because the reader can learn what contribution research in health sciences makes to improving health of different individuals or participants under investigation.

Table 2 Move sequences of the abstract in education.

move sequences (ED)	frequency (N=14)	percentage (%)
P-M-P	13	93.86
P-P	1	7.14

Of 14 CP abstracts in education, the most preferred sequence was P-M-P (93.86%) in which introduction move and conclusion move were missing (Table 2). A reason is probably that the background information is not always crucial for the reader to understand the gist of a CP abstract (Sidek et al., 2016).

Table 3 Move sequences of the abstracts in health sciences.

move sequences (HS)	frequency (N = 14)	percentage (%)
I-P-M-P-C	3	21.43
P-M-P-C	8	57.14
P-M-P	3	21.43

As for the CP abstract in health sciences (Table 3), P-M-P-C (57.14%) was identified as the most prevalent sequence, whereas I-P-M-P-C (21.43%) followed the traditional sequence of abstract writing according to Hyland (2000). In addition, the sequence P-M-P was not as frequent as that found among the CP abstracts in education.

Conclusion

This small-scale study aimed to investigate the move sequences and the move frequency of CP abstracts across two disciplines: education and health sciences. The results revealed that purpose, methods, and product moves were obligatory in the CP abstracts in education, and introduction and conclusion moves were missing. On the other hand, purpose, methods, and product were obligatory, conclusion move was conventional, and introduction move was optional in the CP abstracts in health sciences. The difference between these two disciplines lies in the fact that conclusion move was conventional and introduction move optional in the CP abstracts in health sciences, but these two moves were missing in the CP abstracts in education among certain Thai researchers. It is hoped that the findings might shed some light on the practice of abstract writing among non-native English speakers, Thai researchers in particular, and that amateur researchers can take into account the way in which successful CP abstracts are constructed.

Limitations and recommendations

Owing to a lack of inter-coder reliability analysis, future researchers can consider submitting all the selected abstracts to experts in discourse analysis or work in collaboration with other researchers having the same specialization so as to lower subjectivity in move identification.

Since the dataset used in this study is rather small, future research can be conducted by compiling more RA abstracts in their chosen

disciplines so as to increase generalizability. In addition, since moves can be further divided into steps, it can be interesting to examine how abstracts from different disciplines are constructed with regard to steps.

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