

## Rhetorical Structure of Method Section: A Comparative Study on Research Articles Written by Cambodian Authors Published in National and International Journals

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**Abstract.** *Method section of research articles defined as a crucial part among several sections. This study employed an analytical framework of method sections by adopting from Zhang and Wannaruk (2016) adjusting from Pho's (2008a). Three vital research questions were established to investigate this analysis comprising (1) to find out on moves structure in Method sections of RAs written by Cambodian authors published in national journal; (2) the same moves structure in Method section of RAs published in international journals; and (3) the differences of both move structure in Method sections of RAs in national and international journals. Three moves in method section were used in the study such as: Move1 on Describing Research Design; Move2 on Describing Data Collection procedures; and Move3 on Describing Data Analysis. The results stated that all these three moves were found as conventional There were only three optional steps found in International while there were five steps and three moves were found as optional steps and moves. This analysis suggested that Cambodian National Journal should provide clear distinction in writing method sections by introducing specific model of moves and steps to write a qualify method for a research.*

**Key words:** *english education, international journal, method section, national journal, rhetorical structure*

### A. INTRODUCTION

Academic writing is increasing demands in English education in Cambodian. Royal Government of Cambodia under the coordination of Ministry of Education, Youth and Sports put their hard efforts in developing academic writing competences through the implementation of various projects to promote quality of

education from primary to higher education. Writing a research articles requires experiences and academic writing competence through continuous practices related published works. (Dara, 2021) stated that Moeys approved to higher education institutions and their faculty members to authorize more than 800 of Khmer language textbooks funded by the Research, Creativity and Innovation Fund (RCI Fund).

Rappleye and Un (2018) reflected the reasons after implementing a project the Development and Innovation Grant (DIG) aiming to promote higher education and local research ability within five years from 2010 to 2015. Based on reasons above, it can be drawn that there is still limited qualification and ability in academic writing among Cambodian official staffs. Academic writing practices need to be done by more Cambodian authors regarding book writing and research articles to promote academic writing competence of English Education in Cambodian higher education. Another research from (Moore, 2011) it was frustrating that the limited scholarship in English education for Cambodian and published works in the form of peer review journal were done by foreigners rather than Cambodian authors.

Moreover, there is a limited number of reputable Cambodian national journals. Some research articles can be found in local publication journals under supervision of a research community and the university. Some research articles can be found there without any index. Thus, this research dissertation is proposed to analyze Method sections aiming to partly discovers answers for this gap.

### ***English Education in Cambodia***

English was brought into Cambodia by UNTAC during national election in 1993. It becomes more reputable after the ASEAN community accepted English as the official language for communication among Asian countries. Thus, Cambodian

people and students turned their interests from learning French to English for gaining job opportunities and involving in other economic activities.

English Education can be indicated periodically from different researchers with diverse focus in English Education features including teaching and learning skills, curriculum, language policy and other practices of English language education. According to (Vira, 2002) implemented a research on English language teaching in Cambodian secondary school by interviewing secondary school directors and principals. The results of the study showed that these paid less attention on the condition, needs, weaknesses, and strengths of Cambodian Teacher of English. In addition, Boramy (2010) used directive and facilitative feedback in his research to enhance writing of students in Higher Education conducting in Cambodia by illustrating the results that facilitative feedback might be more effective in particular essays revision improvement, and directive feedback with other writing improvement. These results may be useful for university instructors, teachers, teacher trainers, and senior high school teachers who wish to improve their students' writing.

### ***Academic Writing in Research Articles***

Writing is one among four macro skills in English playing significant role in students learning achievement. Writing ability helps students handle broadly in students' lives. Students can fulfill assignments by researching and writing. During the lecture time, students write necessary notes for their own learning style. However, these are writing in general demanding medium practices. Academic Writing plays more crucial roles in critical applied linguistics meaning that students are required more practical techniques and strategies in writing with academic way. According to Silvia (2015) wrote practical strategies for writing and publishing journal articles mentioned writing the method section should consist of the sample, design, procedures, and measures jointly afford ideas

testing advanced in the Introduction. To write this way, a Method should carry one of two points; the research was both tradition and innovation axis is an elementary dimension of a Method section. In addition, applying traditional or innovative is not a concern to designing method section if the designed traditional method keeps its goal to basically use the same as what everyone uses and goal of innovative method was implemented as new and clever method varying from the previous one.

Additionally, Huang (2014) defined Genre as a concept in rhetoric and linguistics fields classifying writing with similarities of form, style and contents. Genre also regards as communication means which separate individual from the community of discourse. In addition, genre analysis was used by researchers and other scholars to connect communities of discourse by permitting a sight of specific forms of communication utilized by specific groups.

In Academic Writing, article writing is receiving great attentions from various researchers and academic writers. Several researchers provided detail moves and steps for each section as analytical framework for new researchers to consider writing accurate format and sufficient information. Some researchers also conducted a research on two or more sections of the research articles to analyze moves and steps consisted in each section as stated in the research results from (Trinh, Tran, Nguyen, Nghiem, & Danh. 2020) conducted a comparative study on the analysis of Science Articles of both National and International journal articles for introduction, methods, results, and discussion structure by informing the findings that method section was the weakest point of research articles published in journals in Vietnam. This is can be considered as a reason behind the initiation of the study of the analysis in Cambodian research articles published in both National and International Journals.

### *Methods Sections of the Research Articles*

There are several sections of the research articles have been conducted in various study of rhetorical structure analysis even abstract, introduction, methods, results, discussion and conclusion section. Among these sections, method section is considered as one important section within other sections of the research article. However, moves and steps of method section in different fields of the study may apply diverse frameworks for the analysis.

According to Kallet (2004) explained that the methods section described the implementation of the research to answer the questions of the study, the methods or ways of doing research, justified the experimental design, and explained the analysis of research results. The scientific description is straightforward. Thus, the structure of the method section describes the materials used in the study, explains how the materials were organized for the study, explains the study protocol, and the measurement and calculations were made.

In educational research, Lim (2006) applied method sections of management research articles to investigate communicative functions of linguistic features in pedagogical applicability by suggesting that writing courses at the university should be tailored to the needs of students facing difficulty to combine linguistic features with the communication capabilities of academic textbooks. Follow the steps for each rhetorical train using an innovative and easy-to-understand approach. This researcher also provided related materials for teaching genre specifications of method sections of research articles in the fields of management. The results also indicated that there was no single appropriate model can be regarded as a useful model for learners in various academic disciplines. There is only reason behind using each step of using model with pedagogical meaningful for second language learners in specific discipline.

Other features of method section also discovered by (Morales, 2016) conducted a study on both high impact and non-high impact of research articles by discoursing features of method sections. The results discovered that high-impact academic writers were more lexical lengthy regarding the word frequency and paragraphs in method writing than their counterpart. Besides, the study also revealed that both sets of academic writers employed subject or materials in obligatory (Move 1), and only non-high impact journals employed procedure in Move 3, and Data Analysis in move 4 as their obligatory moves. Equally, the same moves appeared as optional for some high-impact academic writers based on the illustrated statistics. Rhetorical variability was the probable intention for frequency of moves cyclicity seek in the methods of RAs written by both sets of academic writers.

Various results of researches on method sections informed and suggested syllabus designers, materials developers, researchers, and relevant stakeholders the different frameworks for different fields of the research including, English education, Medical Education, Engineering, and other scientific research articles. Comparative studies of research articles between articles published in National and International journals generally suggest researchers or academic writers to improve the quality of writing method sections of the research articles based on the strict editing with experienced editors to meet international publishing standards. Writing a qualified method sections provides the study with good judgement of research validity.

## **B. RESEARCH METHOD**

### ***Research Design***

This research implemented the qualitative design to discover answers for the research questions. According to Zhang and Wannaruk (2016) qualitative method was the most commonly designed to employ the study. Method section of the research articles in the field of English Education were analyzed to indicate moves

written method section of the published national journal and international and the differences of moves in method sections of both national and international journals written by Cambodian authors.

### ***The Corpus of the Study***

The corpus of the study is selected for 15 research articles published in national or local journals and other 15 research articles published in international journals written by Cambodian. In addition, the selected articles must be written by Cambodian authors in English education field. These research articles are collected from various sources with purposive sample method. The framework of the analysis for employing in the study is adopted from (Zhang & Wannaruk, 2016) developed from (Pho, 2008) on Method section analysis by looking at specific moves and steps as stated in the research instrument section.

### ***Research Instrument***

The process of coding based on this research instrument was both long and iterative or repetition. The selected texts of research articles were coded many times to revise the previous coding and avoiding errors. Each coding scheme was used to examine written text and coded accordingly. There are three moves in method sections of Research Articles including Move1: Describing research design, move2: describing data collection procedures, move3: describing data analysis procedure. There is no constituent step in move1 but there are six main steps of move3 such as: (step1) describing research context, (step2) describing sample and population, (step3) describing research instruments, (step4) elaborating data collection procedures, (step5) justifying data collection procedures, (step6) verifying compliance with ethical standards. In addition, there are three steps in move3 including (step1) relating or recounting data analysis procedures, (step2) justifying the data analysis procedures, (step3) establishing inter-coder reliability.

### ***The Data Collection Procedures***

There are some suggested procedures of collecting data as stated below:

- a. Identify field of the research articles to collect and compile
- b. Highlight main key terms of the study to identify research article
- c. Understand characteristics of the research articles published in national journals and international journals
- d. Identify framework for the analysis of method sections
- e. Highlight main section and subsection of the method sections
- f. Code key aspects of linguistic features written in method sections

### ***Data Analysis***

The classification of the method section for rhetorical move structure analysis by using (Zhang & Wannaruk, 2016) developed from (Pho, 2008) framework in Applied Linguistics. The important of using this framework is that this model provides detail steps and moves connected to features of languages. There are three moves describing in this model (M1) describing the research design, (M2) describing procedures of data collection; (M3) describing data analysis procedure(s). Linguistics features exists regarding any moves was recorded based the framework above.

According to the classification criterion from (Kanoksilapatham, 2005), moves occurrence are classified into three parts such as obligatory, conventional, and optional. Move that appear 100% in the method section is the obligatory, from 60% to 99% is conventional, and below 60% is considered as optional. Moves and steps in this model were identified by communicative purposes varying based on length of texts. distinction of communicative purposes was derived from chunk of text of at least one full sentence. According the definitions of moves and steps in the coding scheme, sentence, sentences, or length of texts are examined and classified into different categories.



***Inter-Rater-Reliability***

Inter Rater Reliability is employed to assess the quality of the analysis within different raters to make consistent estimates of the same situation. The analysis of inter-raters, two raters as English language lecturers from the Department of English at the National University of Battambang (NUBB) are selected. However, the understanding of the framework for the study is quite important for each rater; therefore, 3 hours training sessions are administering to help coders or raters enable themselves to code the sample text by using coding scheme from (Kanoksilapatham, 2005). Coders or raters are given 3 sets of Method sections to code independently on each move analysis. Cohen Kappa was selected to assess inter-rater reliability in method section of RAs. Agreement percentage among each coder are computed to generate means from the analysis. Cohen’s K suggested various interpretation of means including, less than .40 is poor; .40 -.59 is fair; .60 - .74 is good; and more than .75 is excellent.

**C. FINDINGS AND DISCUSSION**

There were (20%; f = 3) of total selected research articles for International Journal among total research articles (100%; f = 15) for inter-rater to analysis method section. In the same number, (20%; f = 3) of total selected research articles for National Journal (100%; f = 15) were selected for rater to do the analysis. To generate these percentages, researcher compared the results of co-raters and the results conducted by the researcher himself.

**Table1: Inter-coder Reliability of Method Section**

<i>Code</i>	<i>International Journal</i>				<i>National Journal</i>			
	<i>Rater</i>	<i>Author</i>	<i>f</i>	<i>%</i>	<i>Rater</i>	<i>Author</i>	<i>f</i>	<i>%</i>
<b>M1-RD</b>	<b>3/3</b>	<b>3/3</b>	<b>1</b>	<b>8%</b>	<b>3/3</b>	<b>3/3</b>	<b>1</b>	<b>8%</b>
<b>M2-DC</b>	<b>3/3</b>	<b>3/3</b>	<b>1</b>	<b>8%</b>	<b>2/3</b>	<b>2/3</b>	<b>1</b>	<b>8%</b>
DC1	3/3	3/3	1	8%	3/3	3/3	1	8%
DC2	2/3	3/3	0	0%	2/3	2/3	1	8%

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DC3	3/3	3/3	1	8%	3/3	3/3	1	8%
DC4	3/3	3/3	1	8%	3/3	3/3	1	8%
DC5	0/3	1/3	0	0%	0/3	1/3	0	0%
DC6	0/3	0/3	1	8%	0/3	0/3	1	8%
<b>M3-DA</b>	<b>1/3</b>	<b>1/3</b>	<b>1</b>	<b>8%</b>	<b>2/3</b>	<b>2/3</b>	<b>1</b>	<b>8%</b>
DA1	1/3	1/3	1	8%	1/3	1/3	1	8%
DA2	0/3	0/3	0	0%	1/3	1/3	1	8%
DA3	2/3	2/3	1	8%	1/3	1/3	1	8%
Total			10/12	83%	Total		11/12	92%
Average of International Journal and National Journal							87.5%	

(RA1-IJ, RA4-IJ, and RA7-IJ) were selected from the analysis of International Journal while (RA2-NJ, RA5-NJ and RA9-NJ) were selected for co-raters to analysis then compared with the results from the study. Total of Moves and Steps are 12. If the raters find the same coding results to 12, it means Cohen's K reaches 100% of reliability. Percentages were generated total numbers of the same coding results comparing to results from raters and this study. As stated in the table, Average of the coding results was 87.5% meaning that the Cohen's K suggested the interpretation on reliability of co-rating as excellent.

#### ***Method Section of Research Articles Published in International Journal***

Table 4.1 presents the findings of the study on rhetorical move structure of the methods section of International Journal written by Cambodian authors. There are three moves in method section specifically examined on articles in the field of English Education including Move1; Describing research design (M1-RD), Move2; Describing Data Collection (M2-DC), and Move3; Describing data analysis procedures (M3-DA). Among these moves, M1-RD has no sub-categories or steps. However, Move2 and Move3 have sub-categories and steps to indicate meaning described in written method sections of the research articles.

Table2: Rhetorical structure of the methods section in International Journal

<i>Code</i>	<i>Moves and Steps</i>	<i>f</i>	<i>%</i>	<i>Status</i>
<b>M1-RD</b>	<b>Move 1: Describing Research Design</b>	11	73	Conventional
<b>M2-DC</b>	<b>Move 2: Describing Data Collection Procedure</b>	12	80	Conventional
DC1	Step 1: Describing Research Context	13	87	Conventional
DC2	Step 2: Describing the Sample	15	100	Obligatory
DC3	Step 3: Describing Research Instruments	14	93	Conventional
DC4	Step 4: Elaborating on data collection procedures	13	87	Conventional
DC5	Step 5: Justifying data collection procedures	6	40	Optional
DC6	Step 6: Verifying Compliance with Ethical Standards	0	0	Optional
<b>M3-DA</b>	<b>Move 3: Describing Data Analysis Procedures</b>	12	80	Conventional
DA1	Step 1: Relating (or recounting) data analysis procedure/s	12	80	Conventional
DA2	Step 2: Justifying the data analysis procedure/s	3	20	Optional
DA3	Step 3: Establishing inter-coder reliability	8	53	Optional

**Note:** *f* = frequency of a move/step among all RAs; % = percentage of a move/step among all RAs; RA1-IJ = Research Article 1 of International Journal

Describing Research Design (Move1): was a conventional move (73%;  $f = 11$ ). Move1 presents some significant aspects regarding research design, types of research design, related variables or/and hypotheses. This move was found as connecting to other two moves of the written method section. Among fifteen research articles, there were five research articles employed qualitative research design while three research articles employed quantitative research design. Interestingly, there was only one article designed action research for the study two research articles left retained mixed method design.

Describing Data Collection Procedures (Move2): was presented as conventional move (80%; f = 12). This move was always the first in method section when there was an absence of Describing Research Design (M1-RD). There are six constituent steps under this move comprising Describing Research Context (DC1), Describing the sample (DC2), Describing the research instrument (DC3), Elaborating on data collection procedures (DC4), Justifying data collection procedures (DC5), and Verifying compliance with ethical standards (DC6). This move provided detail information on the crucial aspects of data collection. There are twelve research articles found as written in research article. Each example states aspects of data collection procedures. Researchers classified data collection procedures into different phases. Each phase was developed based on the research design.

Describing Research Context (Move2, Step1): was a conventional step (87%; f = 13) describing background information for the study. Text length in Step1 of Move2 starting from one single sentence to paragraphs relying on contents or topic in the written texts. As mentioned in the thirteen samples from data analysis, researchers provided background information of the study including research site, status of educational institutions, types of schools, and educational programs.

Describing the Sample (Move2, Step2): was an obligatory step (100%; f = 15). Among 15 research articles written by Cambodian authors and published in International Journal, there were 15 articles found that the sample description was written in every single article. Different from step1 which provided information on the context of the study, step2 provided some information regarding sampling procedures, sample characteristics, selected participants, and general information of the sample. Examples from the analysis indicated the selected participants with

specific numbers, numbers of sample and the sites, level or degree of participants and background information of the participants.

Describing Research Instruments (Move2, Step3): was found as conventional step (93%; f = 14). Research wrote detail information on research instrument. This step presented some information regarding questionnaires, interviews, observation, and testing. Researchers wrote some instruments in step3 including survey questionnaires, self-evaluation survey, online survey, types of interviews, duration of interview, observation form and the use of the instrument for collecting data.

Elaborating on data collection procedures (DC4): data indicated this step as conventional (87%; f=13). Step4 on Elaborating on data collection procedures is a crucial step connecting from step3. This step presented the description on step-by-step instruments delivery to participants. Information of this step can be presented before or after step3. The following samples quoted from selected research articles were showed to address clearly on step4. As mentioned in above samples of selected research articles, researchers provided chronological procedures of delivering research instruments to participants consisting of how instruments were formulated and delivered to the selected samples, different instruments with various data collection stages, how the samples were grouped, and duration of applying the instruments for collecting data.

Justifying data collection procedures (Move2, Step5): was considered as optional step in move 2 because there were only 6 research articles (f = 40%) found among 15 research articles. This step was written to illustrate the appropriateness of the data collection procedures aiming to reduced doubtfulness of the readers related to validity and reliability of the study.

Describing Data Analysis Procedures (Move3): was a conventional move (80%; f = 12). this move presented the procedures of data collection with detail

information on data analysis for generating the results of the study. This move mainly analyzed by communicative purposes within three constituent steps comprised as recounting/relating data analysis procedures, justifying data analysis procedures, and establishing inter-coder reliability. Data analysis provided some key aspects on analytical perspectives, analytical tools, analytical framework, coding, transcribing, reports, Microsoft Excel, and process of data analysis.

Recounting/relating Data Analysis Procedures (Move3, Step1): was a conventional step of move3 (80%;  $f = 12$ ). Most authors stated this step in their writing of method section. The procedures of data analysis were recounted with data analytical treatment, analytical tools or instruments, and analytical software.

Justifying the data analysis procedure/s (Move3, Step2) was an optional step in Move 3 (27%;  $f = 4$ ). This step was written to illustrate an appropriateness and rigor of data analysis procedures. DA2 improved validity and reliability in data analysis for research results the same to step5 in move2. It was written to connect from recounting data analysis procedures. examples indicated the appropriateness in data analysis procedures by providing reasons in the analysis and activities linked from the analysis to interpretation and discussion. Moreover, researchers stated that using scores factor as criterion to evaluate variables in data analysis in order to be more precise or appropriate. The statement of careful attention in data analysis also address as a critical analytical perception and close attention were employed to carry out a rigor analysis.

Establishing inter-coder reliability (Move3, Step3) was a conventional step of move3 (60%;  $f = 9$ ). This step was written by the authors to indicate their accuracy, reliability and trustworthiness of the results generating from data analysis. The following exemplifications were quoted to identify this step. examples from selected research articles provided clear evidences for the analysis

on Establishing inter-coder reliability. In research article<sup>2</sup>, authors ensured reliability of the study. In research article<sup>4</sup>, authors concerned accuracy of data analysis while research article<sup>7</sup> stated ensuring internal consistency and reliability of instruments for data collection and analysis.

***Method Section of Research Articles Published in National Journal***

Table<sup>3</sup> shows the results of the study on rhetorical move structure analysis of method sections written by Cambodian authors published in National Journal or local publications. The term National Journals or local publications refers to any research articles published under the platform of University, Journals created by local authors, and related research articles recognized officially by Cambodian readers and government as research articles in the field of English Education in Cambodian context.

Table<sup>3</sup>: Rhetorical structure of Methods section published in National Journal

<i>Code</i>	<i>Moves and Steps</i>	<i>f</i>	<i>%</i>	<i>Status</i>
<b>M1-RD</b>	<b>Move 1: Describing Research Design</b>	8	53	Optional
<b>M2-DC</b>	<b>Move 2: Describing Data Collection Procedure</b>	5	33	Optional
DC1	Step 1: Describing Research Context	9	60	Conventional
DC2	Step 2: Describing the Sample	9	60	Conventional
DC3	Step 3: Describing Research Instruments	10	67	Conventional
DC4	Step 4: Elaborating on data collection procedures	10	67	Conventional
DC5	Step 5: Justifying data collection procedures	4	27	Optional
DC6	Step 6: Verifying Compliance with Ethical Standards	1	7	Optional
<b>M3-DA</b>	<b>Move 3: Describing Data Analysis Procedures</b>	<b>8</b>	<b>53</b>	<b>Optional</b>
DA1	Step 1: Relating (or recounting) data analysis procedure/s	6	40	Optional

DA2	Step 2: Justifying the data analysis procedure/s	3	20	Optional
DA3	Step 3: Establishing inter-coder reliability	0	0	Optional

**Note:** *f = frequency of a move/step among all RAs; % = percentage of a move/step among all RAs; RA1-NJ = Research Article 1 of National Journal*

Describing Research Design (Move1): Optional and Conventional are two main results on status of method section analysis. It was an optional move based on the analysis (53%;  $f = 8$ ). Research design, objectives of research design, related hypothesis and variables were written in this move. Quantitative research design was found in article1. There were three research articles designed mixed method for their study while there was only one article employed action research. In addition, there were three research articles used qualitative design.

Describing Data Collection Procedure (Move2): was also found as an optional move (33%; 5). However, most of its steps were found as conventional. This move described data collection procedures by writing 6 steps comprising Describing Research Context (DC1), Describing the sample (DC2), Describing the research instrument (DC3), Elaborating on data collection procedures (DC4). Justifying data collection procedures (DC5), and Verifying compliance with ethical standards (DC6). There were four constituent steps found as conventional steps while two others found as optional steps.

Describing Research Context (Move2, Step1): was a conventional step in move2 (60%;  $f = 9$ ). This move provided background information of research sites, status of research location or programs of the research sites. Contexts were found including Researchers wrote research sites including Mean Chey University in Banteay Mean Chey province, Royal University of Phnom Penh. The detail information of faculty, and background information of the research sites were stated accordingly to provide clear context for the study.



Describing the Sample (Move2, Step2) was found as Conventional step in move2 (60%; f = 9). In writing this step, authors always address some information on numbers of the sample, reasons of sample selection, sampling methods, and level of participants. authors wrote level of research participants, educational program of the sample, specific numbers of the participants, different numbers based on the instruments and data collection methods, and gender specification of the sample.

Describing Research Instruments (Move2, Step3) generated the analysis as a conventional step of move2 with 10 research articles among 15 were found in this step (67%; f =10). The instruments of the study were written in this step including the description of questionnaires, interviews questions, observation checklist, and tests. Scale in the questionnaires was described specifically in this step. researchers provided some instruments regarding the research design in their study including scale in the survey questionnaires, classroom observation, interview, pre-test and post-test, documents analysis, and interview protocols.

Elaborating on data collection procedures (Move3, Step4) was found as a conventional step (67%; f = 10) the same numbers to step3 in move2. In this step, authors provided the description of how instruments of the study delivered to participants, stated steps of demonstrating questionnaires, provided the procedures of applying different data collection methods meaning that various instruments were delivered during the process, and described how each participant was arranged for data collection.

Justifying data collection procedures (Move2, Step5) was analyzed as an optional step (27%; f = 4). Step5 of move2 generally stated the establishment of an appropriateness of data collection procedures aiming to describe the reduction of the concerns from readers regarding reliability and validity of the study.

Especially, the reasons of data collection procedures were mentioned to claim the appropriateness.

Verifying Compliance with Ethical Standards (Move2, Step6) was found as optional step while there was only one research article written in this step (7%; f = 1). This step was written to state the ethical consideration during data collection.

As written in table3, Describing Data Analysis Procedures (Move3) was shown as an optional move in research article published in national journal (53%; f = 8). This move normally provides important aspects of data analysis. Especially, the information of analytical tools for data analysis. This move was optional based on the analysis while its three constituent steps were also optional.

Relating (or recounting) data analysis procedure/s (Move3, Step1) was an optional step in move3 (40%; f = 6). This step was written to provide specific description of the analytical treatment of data. Delivering analytical tools and steps of applying tools were mentioned. Researchers also provided the analysis procedures with specific citation.

Justifying the data analysis procedure/s (Move3, Step2) was also an optional step (20%; f = 3). This step provided information regarding the appropriateness and rigor of the analytical procedures. It stated the reasons of data analysis procedures contributing to the validity and reliability to the findings of the study.

Establishing inter-coder reliability (DA3) was found as an optional step (0%; f = 0). This step normally states the information regarding how other coders or raters employed in data analysis for receiving more accuracy and reliability of the results.

***Differences of Methods Section in International and National Journal***

Table 4 showed the statistics of the results from the analysis of 15 selected research articles written by Cambodian authors and published in both International and National Journal.

Table 4: Method Section of RAs in National and International Journal

<i>Code</i>	<i>International Journal</i>			<i>National Journal</i>		
	<i>f</i>	<i>%</i>	<i>Status</i>	<i>f</i>	<i>%</i>	<i>Status</i>
M1-RD	11	73	Conventional	8	53	Optional
M2-DC	12	80	Conventional	5	33	Optional
DC1	13	87	Conventional	9	60	Conventional
DC2	15	100	Obligatory	9	60	Conventional
DC3	14	93	Conventional	10	67	Conventional
DC4	13	87	Conventional	10	67	Conventional
DC5	6	40	Optional	4	27	Optional
DC6	0	0	Optional	1	7	Optional
M3-DA	12	80	Conventional	8	53	Optional
DA1	12	80	Conventional	6	40	Optional
DA2	3	20	Optional	3	20	Optional
DA3	8	53	Optional	0	0	Optional

As mentioned in table 4, three moves in International Journal were found as conventional moves while all three moves in National Journal were found as optional moves. There were 6 steps found the same status of both conventional and optional. There was one mention as obligatory move or step in National Journal while there was one step found as an obligatory in International Journal. Move 1 on describing research design of method sections of RAs published in International Journal was conventional with (73%; f = 11) while Move 1 of method section RAs published in National Journal was an optional move with (53%; f = 8). Similarly, Move 2 on describing Data Collection procedures of method section of RAs published in International Journal was a conventional move (80%; f = 12) while National Journal one was considered as an optional move (33%; f = 5).

Additionally, there were 6 steps in Move2 compared to see differences of frequencies, percentages and status. Step1 on Describing Research Context of International Journal was a conventional step (87%; f = 13) the same to National Journal was also a conventional step (60%; f = 9). Step2 on describing the sample in International Journal was found as an obligatory step (100%; f = 15) while National Journal was a conventional step (60%; f = 9). Step3 on Describing Research Instruments was found as conventional step in International Journal (93%; f = 14) the same conventional step found in National Journal (67%; f = 10). The status on conventional step also found in step4 regarding Elaborating on data collection procedures, of both International Journal (87%; f = 13) and National Journal (67%; f = 10).

Interestingly, step5 Justifying data collection procedures was found as an optional step in both International (40%; f = 6) and National Journal (27%; f = 4). In addition, step 6 on Verifying Compliance with Ethical Standards was an optional step found in both International and National Journal. There was only one research article found step 6 in National Journal. Move 3 on Describing Data Analysis Procedures was found as a conventional move (80%; f = 12) while it was found as an optional move (53%; f = 8). Similar to move 3, step1 on Relating (or recounting) data analysis procedure/s was also a conventional step in International Journal (80%; f = 12) and an optional step was found in National Journal (40%; f = 6).

Moreover, status as optional step was found in both International Journal (20%; f = 3) and National Journal (20%; f = 3) in step2 on justifying the data analysis procedure/s. Establishing inter-coder reliability in step3 of move 3 was found as conventional step in International Journal (60%; f = 9) which was very different from National Journal. There was no mention on step3 in move 3 written in method section of RAs published in National Journal.

### *Discussion*

Regarding the result of Move1 on describing research design of method sections of RAs published in International Journal was conventional move but optional move in National Journal. Interestingly, (Zhang & Wannaruk, 2016) stated their results on the analysis of method section of RAs in the field of education that Move1 on describing research design was optional which is the same to Move1 in Cambodian National Journal. Similarly, Move2 on describing Data Collection procedures of method section of RAs published in International Journal was a conventional move and optional move in National Journal while (Zhang & Wannaruk, 2016) showed that Move2 was obligatory.

However, Lim (2006) used 'describing data collection procedure/s' as Move1 in method section of Management RAs. As stated in previous chapter, there were 6 steps in Move2. Step1 on Describing Research Context of International Journal was a conventional step which was the same to National Journal one but it was different from (Zhang & Wannaruk, 2016) mentioning that step1 in Move2 was optional. Step2 on describing the sample in International Journal was found as an obligatory while National Journal was a conventional step. Step2 was also found as a conventional step by (Zhang & Wannaruk, 2016) which was the same to Step2 of National Journal in this study. In addition, Step3 on Describing Research Instruments was found as conventional step in International Journal which was the same to National Journal as conventional step.

In contrast, (Zhang & Wannaruk, 2016) stated that step2 was optional in their study. The status on conventional step also found in step4 regarding Elaborating on data collection procedures, of both International Journal and National Journal while step4 studied by (Zhang & Wannaruk, 2016) was still optional. Interestingly, step5 on Justifying data collection procedures was found as an optional step in International and National Journal as well as step5 researched by

(Zhang & Wannaruk, 2016). In addition, step 6 on Verifying Compliance with Ethical Standards was an optional step found in International, National Journal, and above previous study. Moreover, Move3 on Describing Data Analysis Procedures was found as a conventional move while it was found as an optional move. (Zhang & Wannaruk, 2016) illustrated their results that Move3 was conventional which was the same to Move3 of International Journal.

Similar to move 3, step1 on Relating (or recounting) data analysis procedure/s was also a conventional step in International Journal and an optional step was found in National Journal. The previous study above stated that step1 of Move3 was found the same to Cambodian National Journal as optional step. Remarkably, status as optional step was found in both this study and previous study in step2 on justifying the data analysis procedure/s. Lastly, establishing inter-coder reliability in step3 of Move3 was found as conventional step in International Journal which was very different from National Journal and previous study as mentioned above.

This analysis showed as what were expected to see by the researcher because Cambodian National Journal has no standardized model for writing method section. We can review the whole contents of the research articles published in Cambodian National Journal. Some Cambodian National Journals consisted of Method Section but some others have no method sections. Some Cambodian National Journal provide option for authors to write either with method section or without method sections. Some national journals introduced a lot of information on describing research context just to advertise or promote their educational institutions.

#### **D. CONCLUSION AND SUGGESTION (Times New Roman 12pt, Bold)**

##### ***Conclusion***

Researcher of this study discovered rhetorical move structure of method section of research articles written by Cambodian authors and published in both National and International Journals. Then researcher compared the differences of moves and steps from both types of Journals. The research suggested Cambodian authors and relevant stakeholders in developing Cambodian National Journals to think wisely on setting standardized model for writing a method section of research articles in the field of English Education. As mentioned in this study, three moves were found as optional move in National Journal while three others found as conventional moves in International Journal. This means that model used to write method sections published in Cambodian National Journal needs to be modified to match with the model applied for writing method section of International Journal.

In conclusion, Cambodian Journal applied multiple discipline for each journal. Each Cambodian Journal seems affected by the principles of their own educational institution. Suggestion was delivered to Cambodian researchers to consider using mono principle on Method Section for article writing.

##### ***Suggestion***

This study analyzed both moves and steps in method sections in the field of English Education; however, there were no previous study about the rhetorical move structure analysis on method section in Cambodian context. As mentioned in problem statements, most Cambodian authors who published their articles in International Journal because of the requirements of their educational schools. Then they can revise and publish based on the manuscripts or article format in these journals. Thus, there are still limited in researching and publishing research articles. Future researchers should consider expand the study for qualitative and quantitative study or mixed methods as increasing the sample of the study.

However, future researchers can also select new different articles with various available journals for the study. Journal committees should provide one standardized model or one discipline for their journal.

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