

Move Analysis of the 'Discussion Section' of English Specialization Ph.D. Theses

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Abstract

The present research aimed to conduct a move analysis on theses of English specialization students at Ph.D. level in Myanmar and to find significant differences in structures of their 'Discussion sections' according to the basic moves and steps in the theses of applied linguistics and English literature domains. Moreover, it also aimed to explore the distribution of 'Obligatory', 'Conventional', and 'Optional' moves and steps. To this aim, 48 theses were selected to be analysed in this research. The Move analysis model proposed by (Yang & Allison, 2003) which was specifically used in applied linguistics and English literature domain was employed in this research. Moreover, each move was justified and classified in terms of the distribution of 'Obligatory', 'Conventional', and 'Optional' moves and steps. According to the findings, statistically significant differences were found in the distribution of moves and steps between applied linguistics and English literature domains. The distribution of 'Obligatory', 'Conventional', and 'Optional' moves and steps was also found varied. It was indicated in phase 1 that Move 2 (Reporting results) was the most frequent as EFL thesis writers tend to report their results in 'Discussion sections' significantly. However, Move 5 (Summarizing the study) was found least frequently in both domains. Moreover, the English literature writers indicated background information in the 'Discussion section' significantly. This shows that literature writers are more maintained to discuss the background information than writers of applied linguistics. This may be due to the writers' need to meet the cognitive claims of 'Discussion sections' and to have the accurate skills for academic writing styles. In phase 2, Move 2 (Reporting results) was classified as obligatory in both domains although the other six moves were less frequent and were conventional. It was noticed that authors used rhetoric to make claims about their findings which go beyond the data. These results can be used effectively in courses of EFL to increase students' awareness and avoid them from overstating or understating certain basic parts of the 'Discussion sections' in theses.

Keywords: move analysis, discussion section, English specialization, Ph.D. theses

Introduction

English specialization students at Ph.D. level in Myanmar learn how to write their thesis during their preliminary academic year. They get informed with the sections and sub-sections of thesis and are often provided with a template before preparing a draft of their thesis in advance to their defense. Yet, they are scarcely familiarized with the further basic moves and steps of each main section especially the 'Discussion section' of thesis which is expected to follow the main findings but lead to the definite



remarks which end the main content of a thesis. Besides the claims of scholars in the fields of English as a Foreign Language (EFL) and English as a Second language (ESL) such as (Swales & Feak, 2004), it is also commonly understood that the 'Discussion section' is difficult to write for non-native speakers of English (Basturkmen, 2012; Pojanapunya & Watson, 2011; Swales & Feak, 2004; Yang & Allison, 2003). Where the 'Discussion section' is placed in the text implicitly was claimed by (Swales & Feak, 2004). According to (Rasmeenin, 2006), while some writers begin the 'Discussion section' with summarizing results or even emphasizing the main findings, others prefer to answer the research questions. Hence, it is not unexpected that "this section is less uniformly structured than others" (Sereebenjapol, 2003, pp. 3). The problem (Docherty & Smith, 1999) noticed was that authors used "rhetoric" to make claims about their findings which "go beyond the data." As (Pojanapunya & Watson, 2011) stated, this may be due to writers' need to meet the cognitive claims of 'Discussion sections' and to have the accurate skills for writing in substantial argumentative styles. The reason for this variation may be caused by the exact place in the research report which belongs to the Discussion sub-genre.

Literature Review

In a corpus-based study, (Atai & Falah, 2005) investigated the use of evaluated articles and ascribed values in discussion section of applied linguistics articles using (Thetela, 1997) model. Chen & Kuo (2012) modified (Yang & Allison's, 2003) model and designed a new framework for the discussion and results chapters of M.A. theses in applied linguistics. In another appropriate study, Nguyen & Pramoolsook (2015) analysed the move structure of 'Results and Discussion sections' of TESOL Master theses written by Vietnamese students, based on (Chen & Kuo, 2012) framework and a discourse-based interview with writers and their supervisors. Their analysis indicated that only 'Reporting major findings' is obligatory and the first four moves, which demonstrate the rhetorical functions of summarizing, evaluating, and deducing from the reported study of the Ph.D. thesis 'Discussion sections', occurred more frequently. In a study like the present research, Nadoushan (2012) investigated the move structure of 'Discussion sections' of MA theses written in English by Iranian EFL students and compared its results with a study by (Rasmeenin, 2006) on the 'Discussion sections of theses written by non-Iranian EFL students. He also specified optional and obligatory moves and the frequency of each. According to his study, it was revealed that Move 2 (Reporting results) was the most frequent move and Move 5 (Summarizing the study) and Move 6 (Evaluating the study) were the least frequent moves. However, in (Yang & Allison's, 2003) study, Move 4 was the most frequently used and was considered an obligatory move. Among a body of research that employed (Yang & Allison's, 2003) move analysis model for investigation, Amnuai & Wannaruk (2013) studied the move structure of English in applied linguistics article 'Discussion sections' published in international journals and they found that there was no linear sequencing of the moves in any 'Discussion section' of the corpora. The most frequent move in both data was Move 4 (Commenting on results) followed by Move 2 (Reporting results). Move 4 was the obligatory move in two sets of the corpora and the other five moves were less frequent and were optional in the two corpora.



Objectives

Considering the challenges mentioned above, there is a need of research on the nature of written text from a move analytic perspective. The current study tries to understand the certain move structure of Ph.D. theses 'Discussion sections' and provide academic implications for EFL students. This study also aims to learn, explain, and evaluate the 'Obligatory', 'Conventional', and 'Optional' moves in the Discussion sections of a set of Ph.D. theses written by Myanmar EFL learners.

Research Questions

In line with the aim of study as stated, the present research expects to address the following questions.

RQ 1: What is the move and step structure of the 'Discussion sections' of Ph.D. theses in applied linguistics?

RQ 2. What is the move and step structure of 'Discussion sections' of Ph.D. theses in English literature?

RQ 3: Are the move and step structure differences between 'Discussion sections' of Ph.D. theses in applied linguistics and English literature statistically found?

RQ 4: What are the 'Obligatory', 'Conventional', and 'Optional' moves in the Discussion sessions of a set of Ph.D. theses written by EFL learners?

RQ 5: Are the 'Obligatory', 'Conventional', and 'Optional' moves in the 'Discussion sections' of Ph.D. theses in applied linguistics and English literature domains different statistically?

Hypotheses

Accordingly, the following hypotheses can be presented in this study.

HO1: There is no statistically significant difference between move and step structure of the 'Discussion sections' of Ph.D. theses in applied linguistics and English literature. HO2: There is no statistically significant difference between 'Obligatory', 'Conventional', and 'Optional' moves in the 'Discussion sections' of Ph.D. theses in applied linguistics and English literature discussions.

Methodology

The researcher randomly selected 31 Ph.D. theses of applied linguistics and 17 in English literature. These theses were written and defended from 2007 to 2019 at the University of Mandalay.

Data Collection and Data Analysis

Data were collected from the 48 'Discussion sections' extracted from Ph.D. theses in applied linguistics and English literature domains written by Myanmar EFL students. The researcher asked students in person and their supervisors to send the PDF version of the theses through Gmail. The data were analysed qualitatively by the researcher. In phase 1 each 'Discussion section' of the theses was read and analysed by the researcher, using (Yang & Allison's, 2003) analytic model designed for the move analysis of research articles. This model includes some specific moves and steps defined in instrumentation. In phase 2, each 'Discussion section' was given a specific code (e.g., Dap1-Dap 31for applied linguistics theses and Delit 1-Delit 17 for English literature theses) after corpus collection. Then, the data were also analysed to find,



describe and evaluate the 'Obligatory', 'Conventional', and 'Optional' moves in the 'Discussion sections' of two set of theses. Accordingly, this research followed (Amnui & Wannaruk, 2013) criteria for justifying and classifying each move in genre analysis of articles or dissertations as 'Obligatory', 'Conventional', and 'Optional'. Therefore, the frequencies and percentages for each move in each 'Discussion section' was investigated and the results were used as the data. To find any significant difference in the move frequency of the 'Discussion sections' of Ph.D. theses written by Myanmar EFL students, the move and step frequencies in the current study were compared. SPSS version 20 was run to make the calculation possible.

Instrumentation

The instrument selected for phase 1 of this study was (Yang & Allison's, 2003) analytic model of the 'Discussion section' which consists of seven rhetorical moves including some steps:

Move 1: Background information.

Move 2: Reporting results.

Move 3: Summarizing results.

Move 4: Commenting on results.

Step 1: Interpreting results

Step 2: Comparing results with literature.

Step 3: Accounting for results

Step 4: Evaluating results.

Move 5: Summarizing the study.

Move 6: Evaluating the study.

Step 1: Indicating limitations

Step 2: Indicating significance/advantage

Step 3: Evaluating methodology

Move 7: Deductions from the research

Step 1: Making suggestions

Step 2: Recommending further research

Step 3: Drawing pedagogic implication

Accordingly, phase 2 of this research followed (Amnui & Wannaruk, 2013) criteria for justifying and classifying each move and step in genre analysis of articles or dissertations as 'Obligatory', 'Conventional', and 'Optional'. According to them, if the degree of occurrence of a move in each piece of research work is 100%, it is classified as 'Obligatory'. If a degree of occurrence of a move is below 60%, it is considered as 'Optional' and if it ranges from 60-99%, it can be regarded as 'Conventional'.

Results

In phase 1 of this study, Move 2 was classified as 'Obligatory' in both domains. Based on the results of this study it was revealed that Move 2 (100% in Reporting the results) was the most frequent Move in applied linguistics while Move 1 (100% in Background information) as well as Move 2 (100% in Reporting the results) in English literature theses. The least frequent Moves was Move 5 (64% in summarizing the study of applied linguistics theses and that of 63% in English literature theses). Results indicated that there is a difference between theses of applied linguistics writers

and English literature thesis counterparts regarding the frequency with which they use Moves 1, 3, 4, 5, 6 and 7. There was no difference between the two domains in Move 2 (Reporting results). According to the obtained data, it was revealed in phase 2 that Move 2 and 4 were 'Obligatory' in all articles written by authors. Moves 1, 3, 5, 6 and 7 were considered as conventional.

Phase 1: Structures of 'Discussion Sections' according to the Basic Moves and Steps

There are three research questions in phase 1 in order to explore the structures of 'Discussion Sections' according to the basic moves and steps.

RQ 1: What is the move and step structure of the 'Discussion sections' of Ph.D. theses in applied linguistics?

The first question in this research investigated the genre of 'Discussion sections' in Myanmar EFL Ph.D. theses. There were 7 moves in the model, some followed by certain steps, the distribution of which is summarized in Table 1.

Table 1Distribution of 'Discussion' Moves and Steps of Ph.D. Theses in Applied Linguistics (N=31)

			Freque	20V (%)	Calcul	ation	-
Sr No	Move	Step	Not Found	Found	Mean	SD	Interpretation
1	Move1 (Background information)	-	21%	79%	1.79	0.41	Present
2	Move 2 (Reporting results)	-	0%	100%	2.00	0.00	Present
3	Move 3 (Summarizing results)	-	32%	68%	1.68	0.47	Present
		Step 4.1 (Interpreting results) Step 4.2 (Comparing results with literature)	0% 7%	100% 93%	2.00 1.93	0.00	Present Present
4	Move 4 (Commenting on results)	Step 4.3 (Accounting for results)	12%	88%	1.88	0.32	Present
		Step 4.4 (Evaluating results)	14%	86%	1.86	0.35	Present
	Mov	e 4 Average	12.29%	87.71%	1.88	0.33	Present
5	Move 5 (Summarizing the study)	-	36%	64%	1.64	0.48	Present
		Step 6.1 (Indicating limitations) Step 6.2	1%	99%	1.99	0.10	Present
6	Move 6 (Evaluating the study)	(Indicating significance/advantage)	7%	93%	1.93	0.26	Present
	sacy	Step 6.3 (Evaluating methodology)	37%	63%	1.63	0.48	Present
	Mov	e 6 Average	20.25%	79.75%	1.80	0.40	Present
	·	Step 7.1 (Making suggestions)	11%	89%	1.89	0.31	Present
7	Move 7 (Deductions from the research)	` turther recearch)		90%	1.90	0.30	Present
	nom me research)	Step 7.3 (Drawing pedagogic implication)	28%	72%	1.72	0.45	Present
	Mov	e 7 Average	16.33%	83.67%	1.84	0.37	Present
	Ave	rage	15.43%	84.57%	1.85	0.36	Present

Note:

1.00-1.50=Absent

1.51-2.00=Present

As it can be observed in the Table above, the most frequent Moves followed in the theses was Move 2 (Reporting the results) while the least frequent Move was Move 5 (Summarizing the study). The rest fall somewhere in between these minimum and maximum frequencies of range. Among all steps, the most frequent step was Step 4.1 (Interpreting results). The distribution of moves is also summarized in Figure 1 which helps to compare the occurrence of moves within the domain.

RQ 2: What is the move and step structure of 'Discussion sections' of Ph.D. theses in English literature?

The second research question in the present study explored the 'Discussion sections' of Ph.D. theses in English literature. Table 2 summarizes the distribution of moves and steps in the 'Discussion sections'.

Table 2 Distribution of Discussion Moves and Steps of the Ph.D. Theses in English Literature (N=17)

Sr			Freque	ncy (%)	Calcul	ation		
No	Move	Step	Absent	Present	Mean	SD	Interpretation	
1	Move1 (Background information)	-	0%	100%	2.00	0.00	Present	
2	Move 2 (Reporting results)	-	0%	100%	2.00	0.00	Present	
3	Move 3 (Summarizing results)	-	10%	90%	1.90	0.30	Present	
		Step 4.1 (Interpreting results)	19%	81%	1.81	0.39	Present	
	Move 4 (Commenting on	Step 4.2 (Comparing results with literature)	9%	91%	1.91	0.29	Present	
4	results)	Step 4.3 (Accounting for results)	,					
		Step 4.4 (Evaluating results)	34%	66%	1.66	0.47	Present	
	Mov	e 4 Average	15.00%	85.00%	1.85	0.36	Present	
5	Move 5 (Summarizing the study)	-	37%	63%	1.63	0.48	Present	
		Step 6.1 (Indicating limitations) Step 6.2	22%	78%	1.78	0.41	Present	
6	Move 6 (Evaluating the study)	(Indicating significance/advantage)	23%	77%	1.77	0.42	Present	
	•	Step 6.3 (Evaluating methodology)	42%	58%	1.58	0.49	Present	
	Mov	e 6 Average	31.00%	69.00%	1.69	0.46	Present	
		Step 7.1 (Making suggestions)	19%	81%	1.81	0.39	Present	
7	Move 7 (Deductions from the research)	Step 7.2 (Recommending further research)	17%	83%	1.83	0.38	Present	
	the research)	Step 7.3 (Drawing pedagogic implication)	32%	68%	1.68	0.47	Present	
	Mov	e 7 Average	22.67%	77.33%	1.77	0.42	Present	
	Aver	rage	21.21%	78.79%	1.79	0.41	Present	

Note:

1.00-1.50=Absent

1.51-2.00=Present

As it can be observed in the Table above, the most frequent moves followed in the English literature theses were Moves 1 and 2 (Background information and Reporting results) (100% respectively). Yet, the least frequent was Move 5 (Summarizing the study) with the lowest percentage (63%). Among all steps, the most frequent step was 4.2 (91%). This stood for 'Comparing results with literature'. The



least frequent step was 6.3 which represented 'Evaluating methodology'. The percentage of occurrence was 58%.

RQ 3: Are the move and step structure differences between 'Discussion sections' of Ph.D. theses in applied linguistics and English literature statistically found?

The first two research questions explored the move and step structures of 'Discussion sections' in applied linguistics and English literature Ph.D. theses written in English. A null hypothesis was presented for this which stated there is no statistically difference between the two sets of domains in terms of the moves and steps followed in 'Discussion section'. In order to know these differences, the results are compared as below. Certain differences emerged in Table 3.

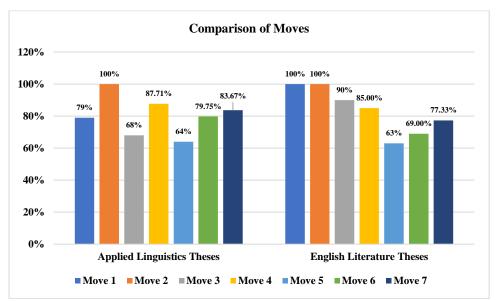
Table 3Comparison of the Moves in the Myanmar Ph.D. Theses of Applied Linguistics and English Literature (Total N=48)

Sr No	Move	Finding	Applied Linguistics Theses (n=31)	English Literature Theses (n=17)
) / 1	Absent	21.00%	0.00%
1	Move 1	Present	79.00%	100%
2.	Move 2	Absent	0.00%	0.00%
2	Move 2	Present	100%	100%
3	Move 3	Absent	32.00%	10.00%
	Move 3	Present	68.00%	90.00%
4	Move 4 Absent		12.29%	15.00%
4	Move 4	Present	87.71%	85.00%
5	Move 5	Absent	36.00%	37.00%
	Move 3	Present	64.00%	63.00%
6	Move 6	Absent	20.25%	31.00%
	Move 0	Present	79.75%	69.00%
7	Move 7	Absent	16.33%	22.67%
	Move /	Present	83.67%	77.33%

The points of divergence seem to lie in all Moves (except for Move 2) as most of them are statistically different. As for Move 1 (Background information), English literature theses seem to contain this move (100%) more than that of the applied linguistics theses (79%). Exactly the opposite case is true about Move 2 (Reporting results). As for Move 3 (Summarizing results), the two domains appear to the different degree (68% and 90%). In Move 4 (Commenting on results) and Move 5 (Summarizing the study), more or less the same degrees have been found. The two domains appear almost the same degree. Yet, the writers of applied linguistics seem to follow structures in Moves 6 (Evaluating the study) and 7 (Deductions from research) more than that of the literature writers. Therefore, statistically differences in terms of percentage between these two domains were found in the most of moves in this study. In other words, difference between the two domains is significant. Thus, the null hypothesis can be rejected.

Better comparison can be seen presented in Figure 3. Percentages can be cross compared.

Figure 3Comparison of the Moves in the Ph.D. Theses of Applied Linguistics and English Literature (Total N=48)



Note. Number of applied linguistics theses=31, Number of English literature theses=17, Total N=48

As it can be observed, Move 1 contains the sharpest difference between the two corpuses whereas Move 2 shows no difference.

Besides the Moves, the frequency of steps was also compared between the domains to find statistically differences. Table 4 shows the results of the basic steps of Move 4. These steps include: Interpreting results (4.1), Comparing results with literature (4.2), Accounting for results (4.3) and Evaluating results (4.4).

Table 4Results for the Steps of Move 4 in Two Different Domains (Total N=48)

Sr No	Move 4	Finding	Applied Linguistics Theses (N=31)	English Literature Theses (N=17)
1	Stop 1	Absent	0.00%	19.00%
1	Step 1	Present	100.0%	81.00%
2	Stop 2	Absent	7.00%	9.00%
	Step 2	Present	93.00%	91.00%
3	Stan 2	Absent	12.00%	33.00%
	Step 3	Present	88.00%	67.00%
4	Stop 1	Absent	14.00%	34.00%
4	Step 4	Present	86.00%	66.00%

As it can be observed in the Table above, there are statistically differences between the two in Steps 1, 3 and 4 of Move 4.

In Table 5 below, the two domains are compared in terms of all steps of Move 6. These steps include 'Indicating limitations' (6.1), 'Indicating advantage/significance' (6.2), 'Evaluating methodology' (6.3).

Table 5Results for the Steps of Move 6 in Two Different Domains (Total N=48)

Sr No	Move 6	Finding	Applied Linguistics Theses (N=31)	English Literature Theses (N=17)
1	Cton 1	Absent	1%	22%
1	Step 1	Present	99%	78%
	Ston 2	Absent	7%	23%
2	Step 2	Present	93%	77%
3	Ston 2	Absent	37%	42%
3	Step 3	Present	63%	58%

Except for Step 6.3 (Evaluating methodology), the other steps make statistically differences between the two domains.

Similarly, Table 6 below shows the steps of Move 7. These steps include: 'Making suggestions' (7.1), 'Recommending further research' (7.2), 'Drawing pedagogic implications' (7.3).

Table 6Results for the Steps of Move 7 in Two Different Domains (Total N=48)

Sr No	Move 7	Finding	Applied Linguistics Theses (N=31)	English Literature Theses (N=17)
1	Stop 1 -	Absent	11%	19%
1	Step 1	Present	89%	81%
2	Ston 2 -	Absent	10%	17%
	Step 2	Present	90%	83%
3	Stan 2	Absent	28%	32%
3	Step 3	Present	72%	68%

As it can be seen in the Table above, the differences between the two domains are not statistically different in any step of Move 7.

Phase 2: Distribution of 'Obligatory', 'Conventional', and 'Optional' Moves and Steps in the Theses

There are two research questions in phase 2 to explore the distribution of 'Obligatory', 'Conventional', and 'Optional' moves and steps in the theses.

RQ 4: What are the 'Obligatory', 'Conventional', and 'Optional' moves in the Discussion sessions of a set of Ph.D. theses written by EFL learners?

The fourth research question in the present study explored which moves in the 'Discussion sessions' of a set of Ph.D. theses written by Myanmar ELT learners were 'Obligatory', which were 'Conventional', and which were 'Optional'. This categorization was proposed by (Amnui & Wannaruk, 2013) according to whom, 'Obligatory' occurs when the move is observed in 100% of the Discussions, 'Conventional' occurs when the move is observed in 60%-99% of the Discussions and 'Optional' occurs when it is in less than 60% of the Discussions.

Table 7 indicates the relevant results with this respect in the Ph.D. theses of applied linguistics 'Discussion sections'.

Table 7Distribution of 'Obligatory', 'Conventional', and 'Optional' Moves in the Ph.D. Theses in 'Discussion sections' of Applied Linguistics (N=31)

Sr No	Move	%	Obligatory Move	%	Conventional Move	%	Optional Move
1	Move 1	-	-	79.00%	1	-	-
2	Move 2	100%	J	-	-	-	-
3	Move 3	-	-	68.00%	J	-	-
4	Move 4	-	-	87.71%	J	-	-
5	Move 5	-	-	64.00%	J	-	-
6	Move 6	-	-	79.75%	1	-	-
7	Move 7	-	-	83.67%	J	-	-

Note:

Below 60% =Optional From 60-99% =Conventional 100% =Obligatory

The information summarized in the Table above shows that in the applied linguistics, the highest frequency is that of the 'Conventional' moves. 'Obligatory' moves were observed to be only in Move 2. 'Conventional' moves were mostly observable those in moves 1,3, 4, 5, 6 and 7.

A similar analysis could be done for the steps of the target moves in the Ph.D. theses of applied linguistics and English literature 'Discussion sections'. Therefore, the categories of steps for all moves are reported as below.

Table 8Distribution of 'Obligatory', 'Conventional', and 'Optional' Moves in the Ph.D. Theses in English Literature 'Discussion Sections' (N=17)

Sr No	Move	%	Obligatory Move	%	Conventional Move	%	Optional Move
1	Move 1	100%	J	-	-	-	-
2	Move 2	100%	J	-	-	-	-
3	Move 3	-	-	90.00%	J	-	-
4	Move 4	-	-	85.00%	J	-	-
5	Move 5	-	-	63.00%	J	-	-
6	Move 6	-	-	69.00%	J	-	-
7	Move 7	-	-	77.33%	J	-	-

Note:

Below 60% =Optional From 60-99% =Conventional 100% =Obligatory

As indicated in Table 8, Move 1 (Background information) and Move 2 (Reporting results) were found in the whole corpus. As their occurrences were 100% each, they were categorized as 'Obligatory'. As for Move 3 to Move 7, they could be categorized as 'Conventional' as they occurred in 60%-99% of the corpus.

The distribution of 'Obligatory', 'Conventional', and 'Optional' moves can be better compared in the following table.

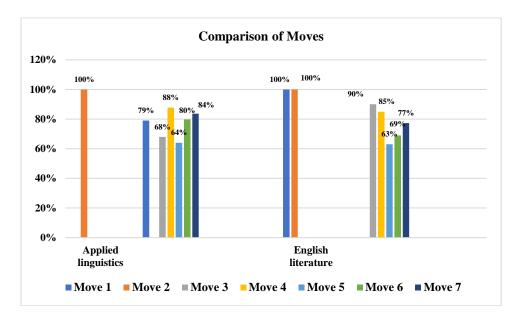
Table 9Comparison of 'Obligatory', 'Conventional', and 'Optional' Moves in the Ph.D. Theses in Applied Linguistics and English Literature 'Discussion Sections' (Total N=48)

Sr			A	Applied lingui	stics (N=31)					English litera	ture (N=17)		
No	Move	%	Obligatory Move	%	Convention al Move	%	Optional Move	%	Obligatory Move	%	Convention al Move	%	Optional Move
1	Move 1			79.00%	J			100%	J				
2	Move 2	100%	J					100%	J				
3	Move 3			68.00%	J					90.00%	J		
4	Move 4			87.71%	J					85.00%	J		
5	Move 5			64.00%	J					63.00%	J		
6	Move 6			79.75%	J					69.00%	J		
7	Move 7			83.67%	J					77.33%	J		

Note:

Below 60% =Optional From 60-99% =Conventional 100% =Obligatory

Figure 4Comparison of 'Obligatory', 'Conventional', and 'Optional' Moves in the Ph.D. Theses in 'Discussion sections' of Applied Linguistics and English Literature (Total N=48)



Among the comparison of 'Obligatory', 'Conventional', and 'Optional' moves in the Ph.D. theses in applied linguistics and English literature 'Discussion sections', Move 1 and 2 were found to be obligatory as it existed in all 'Discussion sections' of both domains. The rest all moves were found to be conventional.

Table 10Distribution of 'Obligatory', 'Conventional', and 'Optional' Steps in the in the Ph.D. Theses of Applied Linguistics Discussion Sections (N=31)

Sr No	Move	%	Obligatory Move	%	Conventional Move	%	Optional Move
1	Step 4.1	100%	$\sqrt{}$	-	-	-	-
2	Step 4.2	-	-	93%	$\sqrt{}$	-	-
3	Step 4.3	-	-	88%	$\sqrt{}$	-	-
4	Step 4.4	-	-	86%	$\sqrt{}$	-	-
5	Step 6.1	-	-	99%	$\sqrt{}$	-	-
6	Step 6.2	-	-	93%	$\sqrt{}$	-	-
7	Step 6.3	-	-	63%	$\sqrt{}$	-	-
8	Step 7.1	-	-	89%	$\sqrt{}$	-	-
9	Step 7.2	-	-	90%		-	-
10	Step 7.3	-	-	72%	$\sqrt{}$	-	-

Note:

Below 60% =Optional From 60-99% =Conventional 100% =Obligatory

As for steps and their categorization as 'Obligatory', 'Conventional', and 'Optional', the results in applied linguistics Discussion sections were mentioned in Table 10.

Steps and their categorization as 'Obligatory', 'Conventional', and 'Optional', the results in English literature 'Discussion sections' were also investigated and mentioned in Table 11.

Table 11 Distribution of 'Obligatory', 'Conventional', and 'Optional' Steps in the Ph.D. Theses of English Literature Discussion Sections(N=17)

Sr No	Move	%	Obligatory Move	%	Conventional Move	%	Optional Move
1	Step 4.1	-	-	81%	√	-	-
2	Step 4.2	-	-	83%	\checkmark	-	-
3	Step 4.3	-	-	68%	\checkmark	-	-
4	Step 4.4	-	-	81%	\checkmark	-	-
5	Step 6.1	-	-	99%	\checkmark	-	-
6	Step 6.2	-	-	93%	\checkmark	-	-
7	Step 6.3	-	-	63%	$\sqrt{}$	-	-
8	Step 7.1	-	-	81%	$\sqrt{}$	-	-
9	Step 7.2	-	-	83%		-	-
10	Step 7.3	-	-	68%	V	-	-

Note:

Below 60% =Optional From 60-99% =Conventional 100% =Obligatory

For steps and their categorization in both domains as 'Obligatory', 'Conventional', and 'Optional', all the results on English literature 'Discussion sections' were found as 'Conventional' in Table 11.

Thus, categorization as 'Obligatory', 'Conventional', and 'Optional', were compared in Table 12.

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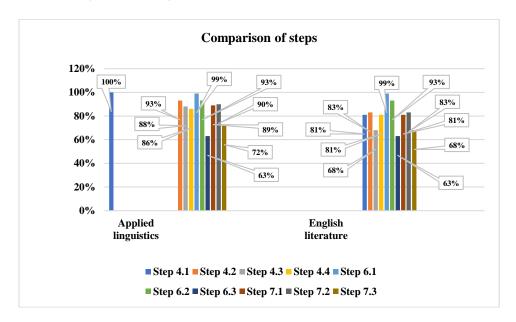
Table 12Comparison of the Steps in the Ph.D. Theses of Applied Linguistics and English Literature (Total N=48)

Sr				Applied	linguistics				En	glish li	terature		
No	Steps	%	Obligatory steps	%	Conventional steps	%	Optional steps	%	Obligatory steps	%	Conventional steps	%	Optional steps
1	Step 4.1	100%	J	-	-	-	-	81%	J	-	-	-	-
2	Step 4.2	-	-	93%	J	-	-	83%	J	-	-	-	-
3	Step 4.3	-	-	88%	J	-	-	68%	J	-	-	-	-
4	Step 4.4	-	-	86%	J	-	-	81%	J	-	-	-	-
5	Step 6.1	-	-	99%	J	-	-	99%	J	-	-	-	-
6	Step 6.2	-	-	93%	J	-	-	93%	J	-	-	-	-
7	Step 6.3	-	-	63%	J	-	-	63%	J	-	-	-	-
8	Step 7.1	-	-	89%	J	-	-	81%	J	-	-	-	-
9	Step 7.2	-	-	90%	J	-	-	83%	J	-	-	-	-
10	Step 7.3	-	-	72%	J	-	-	68%	J	-	-	-	-

Note

Below 60% =Optional From 60-99% =Conventional 100% =Obligatory

Figure 5Comparison of the Steps in the Ph.D. Theses of Applied Linguistics and English Literature (Total N=48)



Among the basic steps, only Step 4.1 (Interpreting results) in applied linguistics was found to be obligatory as it existed in all 'Discussion sections' of the applied linguistics. The rest all steps were found to be conventional.



RQ 5: Are the 'Obligatory', 'Conventional', and 'Optional' moves in the 'Discussion sections' of Ph.D. theses in applied linguistics and English literature domains different statistically?

The fifth question aimed to compare the two domains in terms of the distribution of 'Obligatory', 'Conventional', and 'Optional' moves. The second null hypothesis of the present study stated that there is no statistically difference between the two domains of selected theses. As the results showed, certain differences were observable. Yet, to know whether they were statistically different or not, the results are presented once for moves and once again for steps below. As it can be observed in Table 9 &12 and Figure 4 & 5 above, the two corpuses only diverge significantly in terms of moves and steps between the two domains. Thus, statistically differences were found between the two domains. The null hypothesis 2 could be, thus, rejected.

Discussion

What we found in the present study could be linked to the findings of several research. As an example, Posteguillo (1999) analysed 'Discussion and Conclusion sections' of computer science articles. He found the move 'Statement of Results' as a key obligatory element. Swales (1990) considered 'Statement of results' as a quasiobligatory Move and Posteguillo found it as an Obligatory Move. Similarly, here in this study, 'Reporting results' was found as an obligatory move. In the English literature theses, 'Commenting on results' was found as an obligatory move. Atai & Fallah (2005) compared the genre of 'Discussion sections' in academic articles written by English speaking researchers and Iranians. They found that 'Statement of Results' was the most frequent in both corpuses. In the current research Move 2 and 4, 'Reporting results' and 'Commenting on results' were found as 'Conventional'. This is not in line with the research of the Iranian corpus in which 'Reporting results' and 'Commenting on results' were found as the most frequent. Nadoushan (2012) also investigated the Move structure of the 'Discussion sections' of Ph.D. theses written in English by EFL students and compared its results with a study by (Rasmeenin, 2006) on the 'Discussion sections' of theses written by non-Iranian EFL students. He also indicated optional and obligatory moves and the frequency of each. Nguyen & Pramoolsook (2015) analyzed the Move structure of Results and Discussion in a sample of TESOL Master's theses written by Vietnamese students. Their analysis indicated that only 'Reporting major findings' is obligatory and the first four moves which showed the rhetorical functions of summarizing, evaluating, and deducing from the reported study of M.A. thesis 'Discussion section' occurred frequently. Contrary to the present research, this study lacked a comparative approach between corpuses. It only included a national corpus which we can now compare to the national corpus of ours (Myanmar corpus). The similar finding is that 'Reporting results' was found as an Obligatory Move. According to his study, it was shown that Move 2 (Reporting results) was the most frequent. Move 5 (Summarizing the study) and move 6 (Evaluating the study) were the least frequent. In the present study, in the applied linguistics theses, the most frequent Moves turned out to be 'Reporting results' and 'Summarizing results' while the least frequent was 'Summarizing the study'. These are very similar and show commonalities traced in the context. Zekrati (2015) also analysed the genre of 'Discussion sections' of Medical Articles. Based on the results of this study it was revealed that 'Reporting the results' was the most frequent move, and the least frequent move was 'Summarizing the study'.



This is also confirmed by the present research though the corpuses are different, one being research articles and the other being M.A. and Ph.D theses. The overall findings show that the distribution of moves and steps in the 'Discussion sections' varies between the domains. EFL Ph.D. thesis writers tend more to report the results and background information in the 'Discussion sections' than any other things. Moreover, English literature Ph.D. thesis writers tend most to provide background information and comment on the results in the 'Discussion sections' and pay the least attention to summarizing the results. They tend least to summarize the study. The distribution of 'Obligatory', 'Conventional', and 'Optional' moves and steps varies between applied linguistics and English literature theses. In applied linguistics Ph.D. theses, reporting the results is obligatory moves while in the English literature Discussions, the first two moves are obligatory. Applied linguistics Ph.D. thesis writers tend to indicate limitations in the 'Discussion section' significantly more than English literature writers. This shows English literature writers are more reserved to discuss limitations. The present findings show EFL students at Ph.D. level tend to evaluate the methodology to the minimum in their 'Discussion section' of thesis. They should be made aware of the significance of this Move. They are good at reporting the results, but not that proficient in summarizing the study, at least not as proficient as their English peers. They should be also encouraged to express the summary of their study more openly.

Recommendations

Move analysis has been predominant in research articles. Dissertations and theses have been less the target of move analysis, especially in the applied linguistics or English literature domain, and yet more specifically in the context of Myanmar. Moreover, different models of move analysis are adopted in different works of research with little adaptation or innovation. In large corpuses, sometimes, there might be a need to adapt the model or offer a new model if the research followed a grounded theory which is conspicuously absent in the body of related literature to genre analysis. The great variety of genres especially for writing research proposals, theses or dissertations across universities in Myanmar provides an interesting context for comparative studies of genre analysis too. The results can provide hints for research methodology and seminar courses at Myanmar universities.

References

- Amnuai, W., & Wannaruk, A. (2013). Investigating move structure of English applied linguistics research article discussions published in international and Thai journals. *English Language Teaching*, 6(2), 1-13.
- Atai, M. R., & Falah, S. (2005). A contrastive genre analysis of result and 'Discussion sections' of applied linguistic research articles written by native and non-native English speakers with respect to evaluated entities and ascribed values. http://www.paaljapan.org/resources/proceedings/ PAAL10/pdfs /atai. pdf (accessed 15/7/2019)
- Basturkmen, H. (2012). Languages for specific purposes curriculum creation and implementation in Australasia and Europe. *The Modern Language Journal*, 96, 59-70.
- Brett, P. (1994). A genre analysis of the results section of sociology articles. *English for Specific Purposes*, 13(1), 47-59.



ISSN 2822-1311 (Online)

- Chen, T.-Y., & Kuo, C.-H. (2012). A genre-based analysis of the information structure of master's theses in applied linguistics. *The Asian ESP Journal*, 8(1), 24-52.
- Docherty, M., & Smith, R. (1999). The case for structuring the discussion of scientific papers: Much the same as that for structuring abstracts. BMJ: British Medical Journal, 318(7193), 1224-1225.
- Dudley-Evans, T. (1994). Variations in the discourse patterns favoured by different disciplines and their pedagogical implications. Academic listening: Research perspectives, 146-158.
- Holmes, R. (1997). Genre Analysis, and the Social Sciences: An Investigation of the Structure of RA 'Discussion sections' in Three Disciplines. *English for Specific Purposes*, 16(4), 321-327
- Nadoushan, M. (2012, January). A structural move analysis of discussion sub-genre in applied linguistics. *Dacoromania*, 17(2), 199-212.
- Pojanapunya, P., & Watson, R. (2011). Relevance of findings in results to 'Discussion section's in applied linguistics research. *English for Specific Purposes*, 22(4), 365-385.
- Posteguillo, S. (1999). The schematic structure of computer science research articles. *English for Specific Purposes*, 18(2), 139-160.
- Rasmeenin, C. (2006). *A structural move analysis of MA thesis 'Discussion sections' in applied linguistics*, Unpublished MA thesis, Mahidol University, Thailand. http://mulinet11.li.mahidol.ac.th/thesis/2549/cd389/4536492.pdf (accessed 05/7/2019).
- Sereebenjapol, P. (2003). An analysis of the errors in English which graduate science students make in the 'Discussion section' of their thesis. Unpublished MA thesis. Mahidol University, Thailand.
- Swales, J. (1990). Discourse analysis in professional contexts. *Annual Review of Applied Linguistics*, 11, 103-114.
- Swales, J. M. (2004). *The manuscript version of chapter seven of research genres: Explorations and application*. Cambridge: Cambridge university press.
- Swales, J.M., & Feak, C.B. (2004). Academic writing for graduate students: Essential tasks and skills. Ann Arbor, MI, USA: University of Michigan press.
- Thetela, P. (1997). Evaluated entities and parameters of value in academic research articles. *English for Specific Purposes*, *16*(2), 101-118.
- Weissberg, R., & Buker, S. (1990). *Writing up research*. Englewood Cliffs, NJ: Prentice Hall. http://www.uefap.com/materials/history/wur.pdf (accessed 15/7/2019).
- Yang, R. Y., & Allison, D. (2003). Research articles in applied linguistics: Moving from results to conclusions. *English for Specific Purposes*, 22(4), 365-385.
- Zekrati, S. (2015). A Move analysis of 'discussion section' of medical articles. *Taiwan International ESP Journal*, 7(1), 38-50.



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