A COMPARATIVE GENRE-BASED INVESTIGATION INTO THE RESULTS SECTIONS OF QUANTITATIVE AND QUALITATIVE RESEARCH ARTICLES ON TOURISM

KWAN LEE KUN

UMS
UNIVERSITI MALAYSIA SABAH

CENTRE FOR THE PROMOTION OF KNOWLEDGE AND LANGUAGE LEARNING

UNIVERSITI MALAYSIA SABAH
2017

A COMPARATIVE GENRE-BASED INVESTIGATION INTO THE RESULTS SECTIONS OF QUANTITATIVE AND QUALITATIVE RESEARCH ARTICLES ON TOURISM

KWAN LEE KUN

UMS
UNIVERSITI MALAYSIA SABAH

THESIS SUBMITTED IN FULFILMENT OF THE MASTER OF ARTS IN ENGLISH LANGUAGE STUDIES

CENTRE FOR THE PROMOTION OF KNOWLEDGE AND LANGUAGE LEARNING

UNIVERSITI MALAYSIA SABAH
2017

UMS
UNIVERSITI MALAYSIA SABAH

DECLARATION

I hereby declare that the material in this thesis is my own except for quotations, excerpts, summaries and references, which have been duly acknowledged.

21st July 2016

Kwan Lee Kun
MU1321001T

UMS
UNIVERSITI MALAYSIA SABAH

CERTIFICATION

NAME : **KWAN LEE KUN**

MATRIC NO. : **MU1321001T**

TITLE : **A COMPARATIVE GENRE-BASED INVESTIGATION INTO THE QUANTITATIVE AND QUALITATIVE RESULTS SECTIONS OF RESEARCH ARTICLES ON TOURISM**

DEGREE : **MASTER OF ARTS (ENGLISH LANGUAGE STUDIES)**

VIVA DATE : **21st October 2016**

UMS
UNIVERSITI MALAYSIA SABAH

CERTIFIED BY

1. **SUPERVISOR**

   Assoc. Prof. Dr. Jason Lim Miin Hwa Signature

   _____

2. **CO-SUPERVISOR**

   Ms Priscilla Shak Yee Ping _____

ACKNOWLEDGEMENTS

First and foremost, I would like to express my gratitude and thanks to my Heavenly Father for His grace and strength to finish this project. The journey would have been tougher if it had not been blessed by Him whose grace is always sufficient for me. I would also like to take this opportunity to thank the people who have helped me throughout the whole journey of this project.

My deepest gratitude goes to my supervisor, Associate Professor Dr. Jason Lim Miin Hwa who has been my guiding light and inspiration. I really appreciate the years he spent on discussing different parts of my thesis and showing me how to present those parts more effectively. His patience in reading and editing my work over and over again and his guidance through the numerous repeated revisions have finally borne fruit in this completed thesis. Associate Professor Dr. Jason Lim has been insightful in his supervision, and his knowledge and vast experience has greatly benefitted me. I am forever grateful for his time and patience in sharing his knowledge and offering his expertise to help me complete this thesis.

Further gratitude goes to my mother for all her prayers and encouragement. For my sisters Evany and Erica, thanks for being there for me and for all the encouragement and support rendered. I am also blessed to have my brother, Arnold, sister-in-law, Judy and their children, Favorie and Adler who have given me much encouragement and joy. I am grateful to my brother-in-law, Eric for sharing some of his thoughts, and last but not least, little Caleb who has greatly cheered my heart with his positive vibes.

I would like to express my thanks to the Dean, Deputy Dean, other faculty members and administrative staff of the Centre of the Promotion of Knowledge and Language Learning, UMS for their invaluable advice, encouragement and input in my work. Further thanks are also extended to the administrative staff of the Centre of Postgraduate Studies, UMS for their assistance. Special thanks also go to the Chairperson of Intensive English Preparatory Programme (IEPP), Ms Loh Yoke Len, Mr Nicholas Haes, Madam Lim Mui Len, Carol, Dorothy, Bridget, Suk Clement and Jenica for being very supportive and understanding in my pursuit of knowledge and self-development.

My appreciation is also extended to my specialist informants who have shared their expert knowledge with me and given me an added impetus to completing my research. Last but not least, my gratitude goes to the staff of the libraries at UMS and UPM, who have played an important role in helping me obtain current, useful and essential information. Had it not been their assistance, I would not have been able to gather as much essential information for this thesis as I have.

UNIVERSITI MALAYSIA SABAH

ABSTRACT

Novice writers in universities often find it difficult to produce research reports in a way which is accepted by the academic discourse community that includes experienced examiners, editors and reviewers of established journals in the discipline concerned. One major area of difficulty is associated with the writing of the Results section, which constitutes the core section of a research report where new findings are revealed. In recent decades, a number of genre-based studies in specific fields (e.g., Brett, 1994; Kanoksilapatham, 2005; Lim 2009; Posteguillo, 1999; Thompson, 1993; Weissberg & Buker, 1990) have dismissed the assumption that writers of research reports do not normally include comments and methodological procedures in the reporting of findings. Nevertheless, such studies have not been carried out on Tourism research articles, and more importantly, attention has yet to be directed to the differences between the Results sections of research reports based on quantitative methods and those grounded on qualitative research paradigms. In this regard, this study has been carried out to fill this gap in literature. Using a move-step analytical framework proposed by Swales (1990, 2004), this study investigates the information elements and linguistic mechanisms employed by writers in the Results sections of 20 quantitative research articles and 20 qualitative research articles on Tourism. The textual analysis in this study is also supported by data gathered from interviews with four specialist informants. The results of this study shows that there are differences in the prevalence of rhetorical moves and steps of quantitative and qualitative Tourism Results sections. My findings suggest that over-generalizations need to be avoided when reporting the prominence of moves and steps in Tourism Results sections, and differentiation needs to be made between quantitative and qualitative Results sections. It has also been discovered that the linguistic resources employed to achieve the various communicative functions in quantitative Tourism Results sections differ from those employed in qualitative Tourism Results sections, especially with respect to the choices of specific clause structures, verb forms, noun phrases and phrasal combinations. This study has significant implications for the teaching and learning of English for academic purposes, particularly in the area of equipping novice writers and university students with skills needed to write research reports in the field of Tourism.

ABSTRAK

PENYELIDIKAN BERLANDASKAN ANALISIS GENRE MENGENAI BAHAGIAN HASIL KAJIAN DALAM ARTIKEL JURNAL BIDANG PELANCONGAN YANG MENURUT PENDEKATAN KUANTITATIF DAN KUALITATIF

Penulis-penulis novis di universiti sering mendapati bahawa penulisan laporan kajian yang baik memang amat sukar jika penulis bertujuan untuk mencapai satu tahap yang boleh diterima oleh pihak pemeriksa, penyunting dan penilai lain dalam disiplin berkenaan. Salah satu aspek kesukaran yang dihadapi adalah berkenaan dengan penulisan bahagian Hasil Kajian yang merupakan bahagian utama dalam laporan kajian kerana ia merupakan bahagian di mana penemuan baru dipaparkan. Laporan kajian yang telah dijalankan dalam beberapa bidang khusus (contohnya Brett, 1994; Kanoksilapatham, 2005; Lim 2009; Posteguillo, 1999; Thompson, 1993; Weissberg & Buker, 1990) telah menolak andaian bahawa penulis laporan kajian lazimnya tidak menyertakan ulasan dan unsur metodologi mereka semasa melaporkan hasil kajian. Namun demikian, kajian seumpama itu belum dijalankan ke atas laporan kajian dalam bidang Pelancongan, dan tumpuan tidak pernah diberi kepada perbezaan-perbezaan dalam laporan kajian yang mengemukakan penemuan dari segi paradigma kajian kuantitatif and kualitatif. Justeru kajian ini telah dilaksanakan untuk mengisi kekurangan ini dalam kajian lepas. Dengan menggunakan rangka analisis 'gerak' dan 'langkah' ('move-step' framework) oleh Swales (1990, 2004), kajian ini menyelidiki strategi komunikatif dan mekanisme linguistik yang digunakan oleh penulis kuantitatif dan kualitatif dalam bahagian Hasil Kajian yang terdapat dalam 40 artikel penyelidikan empirikal. Analisis teks yang dijalankan dalam kajian ini berdasarkan kepada data yang diperoleh dari sesi temu bual dengan empat orang informan pakar. Hasil kajian ini menunjukkan bahawa terdapat perbezaan dalam kekerapan 'gerak retorik' and 'langkah retorik' di bahagian Hasil Kajian dalam artikel bidang Pelancongan. Keputusan kajian saya juga menunjukkan bahawa generalisasi yang terlampau umum perlu dielakkan apabila kita melaporkan kelaziman 'gerak retorik' dan 'langkah retorik' mengenai bahagian Hasil Kajian dalam bidang Pelancongan, dan perbezaan antara bahagian Hasil Kajian yang berbentuk kuantitatif dan kualitatif perlu dinyatakan dengan jelas. Juga didapati bahawa mekanisme linguistik yang digunakan untuk mencapai pelbagai fungsi komunikasi dalam bahagian Hasil Kajian kuantitatif artikel Pelancongan berbeza daripada bahagian yang sama dalam artikel Pelancongan yang berlandaskan pendekatan kualitatif, khasnya dari segi pemilihan struktur klausa, kata kerja, frasa nama dan kombinasi frasa. Kajian ini juga mempunyai implikasi penting mengenai pengajaran dan pembelajaran Bahasa Inggeris untuk Tujuan Academik, khasnya dari segi usaha untuk meningkatkan kemahiran penulis novis dan pelajar universiti dalam penulisan laporan kajian dalam bidang Pelancongan.

TABLE OF CONTENTS

		Page
TITLE		i
DECLARATION		ii
CERTIFICATION		iii
ACKNOWLEDGEMENTS		iv
ABSTRACT		v
ABSTRAK		vi
TABLE OF CONTENTS		vii
LIST OF TABLES		x
LIST OF FIGURES		xiv
LIST OF ABBREVIATIONS		xv
LIST OF APPENDICES		xvi
CHAPTER 1: INTRODUCTION TO THE STUDY		
1.1	Introduction	1
1.2	Rationale for Conducting the Study	5
1.3	Statement of the Problem	10
1.4	Objectives	12
	1.4.1 Main Objective	12
	1.4.2 Specific Objectives	12
1.5	Research Questions	12
1.6	Scope of the Study	13
1.7	The Significance of the Study	14
1.8	Conclusion	15
CHAPTER 2: THEORETICAL FRAMEWORK AND REVIEW OF PAST RESEARCH ON GENRE-BASED STUDIES		
2.1	Introduction	16

UMS
UNIVERSITI MALAYSIA SABAH

2.2 Discourse Analysis 16
2.3 The Concept of Genre and the Development of Genre Analysis 23
2.4 Approaches to Genre Analysis and Their Pedagogical Implications 25
2.4.1 The New Rhetoric Approach to Genre Analysis 25
2.4.2 The Systemic Functional Linguistics Approach to Genre Analysis 27
2.4.3 The ESP Approach to Genre Analysis 29
2.5 Research Articles as a Genre 32
2.6 Past Genre-Based Studies on the Macrostructures of Research Articles 34
2.7 Past Genre-Based Studies on the Moves and Steps in Research Articles 38
2.8 Previous Studies on the Results Sections of Research Articles 45
2.9 Conclusion 59

CHAPTER 3: RESEARCH METHODS

3.1 Introduction 61
3.2 Research Design 62
3.3 Data Collection Procedure 63
3.4 Data Analysis Procedure 69
3.5 Face-to-face Interviews with Specialist Informants 73
3.6 Validity and Reliability of the Study 76
3.7 Conclusion 79

CHAPTER 4: RESULTS AND DISCUSSION

4.1 Introduction 80
4.2 Overview of the Results Section 80
4.3 Move 1: Paving the Way for Research Results 84
4.3.1 Move 1-Step 1: Indicating Section Structure 84
4.3.2 Move 1-Step 2: Providing Background Information 85
4.3.3 Move 1-Step 3: Restating a Research Objective/ Hypothesis 91
4.3.4 Move 1-Step 4: Describing Data Collection Procedure 93
4.3.5 Move 1-Step 5: Describing Data Analysis Procedure 104
4.3.6 Move 1-Step 6: Indicating Location of the Data 112
4.3.7 Move 1-Step 7: Providing a Preview of the Results 114

UMS
UNIVERSITI MALAYSIA SABAH

4.4	Move 2: Presenting Results		115
	4.4.1	Move 2-Step 1: Comparing Group(s) or Categories	115
	4.4.2	Move 2-Step 2: Indicating Relationship(s) between Variables	123
	4.4.3	Move 2-Step 3: Describing a Group or Category	127
	4.4.4	Move 2-Step 4: Describing Time-related Change(s)	131
4.5	Move 3: Commenting on the finding(s)		134
	4.5.1	Move 3-Step 1: Explaining the Finding(s)	134
	4.5.2	Move 3-Step 2: Accounting for the Absence of Data	146
	4.5.3	Move 3-Step 3: Comparing Present and Past Research Findings	147
	4.5.4	Move 3-Step 4: Comparing Findings with Theory	150
	4.5.5	Move 3-Step 5: Comparing Findings with a Hypothesis	152
	4.5.6	Move 3-Step 6: Indicating Limitations of the Research	155
	4.5.7	Move 3-Step 7: Indicating Significance of the Research	156
	4.5.8	Move 3-Step 8: Recommending Further Research	157
	4.5.9	Move 3-Step 9: Recommending Practical Applications	158
4.6	Conclusion		160

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS ON THE TEACHING OF ENGLISH FOR ACADEMIC PURPOSES TO STUDENTS MAJORING IN TOURISM-RELATED PROGRAMMES

5.1	Introduction	163
5.2	The Overall Generic Structure of Tourism Results Sections	164
5.3	The Prominence of Moves and Steps in Quantitative and Qualitative Tourism Results Sections	166
5.4	Linguistic Mechanisms of Quantitative and Qualitative Tourism Results Sections	168
5.5	Comparisons of the Generic Structure and Linguistic Mechanisms of Tourism Results Sections with Those Reported in Past Studies	188
5.6	Implications for the Teaching of English for Academic Purposes	194
5.7	Limitations of the Study	200
5.8	Recommendations for Further Research	200

BIBLIOGRAPHY 202

APPENDICES 214

UNIVERSITI MALAYSIA SABAH

LIST OF TABLES

		Page
Table 1.1:	Institutions Which Offer Tourism-related Courses in Malaysia	9
Table 2.1:	Swales' (1981) Create A Research Space (CARS) Model and Its Revised Version (1990)	39
Table 2.2:	Generic Structures of RA Introductions in Software Engineering (Anthony, 1999: 40-41) and Wildlife Behaviour and Conservation Biology (Samraj, 2002:6)	41
Table 2.3:	Swales' (1990) Revised Create A Research Space (CARS) Model and Its Latest Version (2004)	43
Table 2.4:	Generic Structures of RA Results Sections in Sociology (Brett, 1994: 52-54) and Computer Science (Posteguillo, 1999:145)	50
Table 2.5:	Generic Structures of RA Results Sections in Sociology (Brett, 1994: 52-54) and Biomedical (Williams, 1999:364)	51
Table 2.6:	Generic Structures of RA Results Sections in Biochemistry (Kanoksilapatham, 2005: 290-291) and Chemistry (Robinson & Stoller, 2013: 49)	58
Table 3.1:	Criteria in Differentiating Quantitative and Qualitative Tourism Studies	64
Table 3.2:	Impact Factors of the Journals Selected in This Study	66
Table 3.3:	The Macrostructures of Empirical Research Articles Collected in This Study	68
Table 3.4:	Numbers of Texts Analysed in Past Studies on Single Sections of RAs in Different Academic Disciplines	69
Table 3.5:	An Example of a Step Interrupted by Another Step	71
Table 3.6:	Categories of Rhetorical Steps Based on Their Frequencies of Occurrence (Wong & Lim, 2014)	73
Table 4.1:	Frequencies of Constituent Steps in Rhetorical Moves in Results Section	82
Table 4.2:	Frequencies of Constituent Steps in Rhetorical Moves in Quantitative and Qualitative Results Section	83

UMS
UNIVERSITI MALAYSIA SABAH

Table 4.3:	SPC Structure Used for Defining Terms and Concepts in the Provision of Background Information in Quantitative and Qualitative Results Sections	86
Table 4.4:	The Use of Citations of Past Research to Provide Background Information in Quantitative and Qualitative Results Sections	88
Table 4.5:	Linguistic Choices Used in Presenting a Research Objective or Hypothesis in Quantitative and Qualitative Results Sections	92
Table 4.6:	Indication of Sample Characteristics in Describing Data Collection Procedure	98
Table 4.7:	Linguistic Choices Employed to Indicate Data Collection Procedures	103
Table 4.8:	Linguistic Choices Employed to Indicate Data Analysis Procedures in Quantitative Results sections	105
Table 4.9:	The Use of *Purpose Adjuncts* in Quantitative Results Sections to Describe Data Analysis Procedure	109
Table 4.10:	Linguistic Choices Used in Quantitative and Qualitative Results Section to Indicate Location of Data	113
Table 4.11:	Headnouns Pre-modified by Ordinal Numerals in Comparing Groups or Categories	116
Table 4.12:	Types of Headnouns to Distinguish Groups of Subjects or Categories in Quantitative Results Sections	117
Table 4.13:	The Use of Comparative Adjectives to Compare Groups and Categories in Quantitative Results Sections	119
Table 4.14:	The Use of Superlative Adjectives to Compare Groups or Categories in Quantitative Results Sections	120
Table 4.15:	The Use of Comparative and Superlative Adjectives to Compare Groups or Categories in Qualitative Results Sections	121
Table 4.16:	The Use of Antithetic Conjuncts to Compare Groups or Categories	122
Table 4.17:	The Use of Concessive/Contrastive Conjunctions and Concessive Conjuncts to Compare Groups or Categories	123
Table 4.18:	The Linguistic Choices Used to Indicate Relationships between Variables in Qualitative Results Sections	124

UNIVERSITI MALAYSIA SABAH

Table 4.19:	Linguistic Choices Used to Indicate Relationships between Variables in Quantitative Results Sections	126
Table 4.20:	The Use of the SPO Structure to Describe a Group's Behaviours in Qualitative Results Sections	128
Table 4.21:	The Use of the SPOA Structure in 'Describing a Group or Category' in Qualitative Results Sections	129
Table 4.22:	Syntactic Choices Used in Describing a Group or Category in Qualitative Results Sections	130
Table 4.23:	Examples of Results Sections Containing Tentativeness in 'Explaining the Findings'	135
Table 4.24:	Examples of Results Sections Containing Adverbials or Subordinating Conjunctions in the Interpretation of Findings	137
Table 4.25:	The Use of the SPO Structure in Interpreting Findings	138
Table 4.26:	Syntactic Choices Used in Interpreting Findings	139
Table 4.27:	Embedded Segments of 'Comparing Present and Past Research' in the Interpretations of Findings	140
Table 4.28:	Examples of Results Sections Containing Providing Reasons for the Findings	141
Table 4.29:	The Use of *That*-clause in Providing Reasons for the Findings in Quantitative and Qualitative Results Sections	143
Table 4.30:	Examples of Quantitative Results Sections Containing 'Comparing Present and Past Research Findings'	148
Table 4.31:	Examples of Qualitative Results Section Containing Comparing Present and Past Research Findings	149
Table 4.32:	Examples of 'Comparing Findings with Theory' in Quantitative and Qualitative Results Sections	151
Table 4.33:	Examples of 'Recommending Further Research' in Quantitative and Qualitative Results Sections	157
Table 4.34:	Examples of Results Section Containing Recommending Practical Applications	159
Table 5.1:	Overall Generic Structure of Tourism Results Sections	164

UNIVERSITI MALAYSIA SABAH

Table 5.2:	Percentages of Quantitative and Qualitative Tourism Results Sections Containing the Rhetorical Steps	167
Table 5.3:	Linguistic Resources Utilised in Move 1 of Quantitative and Qualitative Tourism Results Sections	169
Table 5.4:	Linguistic Resources Employed in Move 2 of the Quantitative and Qualitative Tourism Results Sections	172
Table 5.5:	Linguistic Resources used in Move 3 of Quantitative and Qualitative Tourism Results Sections	175

UMS
UNIVERSITI MALAYSIA SABAH

LIST OF FIGURES

		Page
Figure 4.1:	Rhetorical shifts from 'interpreting findings' to 'exemplifying findings'	144
Figure 4.2:	Rhetorical shifts from 'providing reasons for findings' to 'exemplifying findings' in qualitative RSs	145
Figure 4.3:	Rhetorical shifts from 'indicating relationship(s) between variables' to 'comparing findings with a hypothesis' in quantitative RSs	153

UMS
UNIVERSITI MALAYSIA SABAH

LIST OF ABBREVIATIONS

A-IMR[DC]	- Abstract-Introduction-Method-Results-Discussion and Conclusion
A-IM[RDC]	- Abstract-Introduction-Method-Results and Discussion and Conclusion
AMEP	- Adult Migrant English Programme
ASP	- Adverbial-Subject-Predicator
ASPA	- Adverbial-Subject-Predicator-Adverbial
ASPO	- Adverbial-Subject-Predicator-Object
CARS	- Create a Research Space
EAP	- English for Academic Purposes
EBT	- English for Business and Technology
EFL	- English as Foreign Language
ERA	- Education Research Article
ESL	- English as Second Language
ESP	- English for Specific Purposes
ILM[RD]C	- Introduction–Literature Review–Method–Results and Discussion–Conclusion
IMRD	- Introduction-Method-Results-Discussion
IMRDC	- Introduction-Method-Results-Discussion-Conclusion
IM[RD]C	- Introduction-Method-Results and Discussion-Conclusion
ILMRDC	- Introduction-Literature Review-Method-Results-Discussion-Conclusion
ILMRD	- Introduction-Literature Review-Method-Results-Discussion
ISI	- Institute for Scientific Information
JCR	- Journal Citation Report
L1	- First Language
L2	- Second Language
LERN	- Literacy and Education Research Network
MUET	- Malaysian University English Test
NR	- New Rhetoric
NSW AMES	- New South Wales Adult Migrant English Service
SEM	- Structural Equation Modeling
SFL	- Systemic Functional Linguistics
SIA	- Specialist Informant A
SIB	- Specialist Informant B
SIC	- Specialist Informant C
SID	- Specialist Informant D
SLA	- Second Language Acquisition
SLW	- Second Language Writing
SPA	- Subject-Predicator-Adverbial
SPC	- Subject-Predicator-Complement
SPO	- Subject-Predicator-Object
SPOA	- Subject-Predicator-Object-Adverbial
RA	- Research Articles
RD	- Results-Discussion
RS	- Results Section
UMS	- University Malaysia Sabah

UMS
UNIVERSITI MALAYSIA SABAH

LIST OF APPENDICES

		Page
APPENDIX A:	Journal articles used in obtaining the sample of Tourism RAs	214
APPENDIX B:	Frequencies of Constituent Steps in Move 1 of Quantitative and Qualitative Results Sections	218
APPENDIX C:	Frequencies of Constituent Steps in Move 2 of Quantitative and Qualitative Results Sections	219
APPENDIX D:	Frequencies of Constituent Steps in Move 3 of Quantitative and Qualitative Results Sections	220
APPENDIX E:	List of Specialist Informants	221
APPENDIX F:	Questions Posed to Specialist Informants	222
APPENDIX G:	Recording of Interviews with Specialist Informants	225

UMS
UNIVERSITI MALAYSIA SABAH

CHAPTER 1

INTRODUCTION TO THE STUDY

1.1 Introduction

In our increasingly competitive knowledge-based society today, success, for an individual or an organisation, is defined in terms of possession of knowledge (Cheng, Ho, and Lau, 2009). In this regard, the university, as a representation of the academic world, plays an important role as the centre of knowledge generation and development. It is through research that writers can subsequently report their research results and make them known to others in the academia and society at large. Nicol (2008: 207) brings the point home strongly when she comments that "knowledge generation and transfer is what, we, as academics, do" while Hahn et al. (2009: 2) added that "dissemination of knowledge is as important to the university mission as its production." Dissemination of knowledge at tertiary level is often done through various avenues of spoken and written discourse such as presentations in forums, workshops, seminars and conferences. At the same time, knowledge is disseminated through publication of journal articles, monographs, conference abstracts, books, newsletters, magazines, theses and dissertations.

UMS
UNIVERSITI MALAYSIA SABAH

Among the aforementioned forms of publications, the research article (RA), has been reported to be ranking high as a means of disseminating knowledge, both in terms of the number of works published, and the perceived importance attached to it by the researchers (Research Information Network, 2009). It is a general consensus among researchers that research articles (RAs) published in scientific or scholarly journals have a pre-eminent status as a trusted and effective means of sharing or transferring knowledge, especially when it has gone through a pre-publication process of review and refereeing, which is generally rigorous and occasionally painstaking (Swales, 1990; Thyer, 2008). This has elevated the RA to a status of being "central to the legitimation of a discipline" (Hyland, 1996: 252), which in turn has led to a proliferation of academic research articles in the

academic world (Swales, 1990: 95). In fact, it is one of the main media for disseminating and advancing scientific knowledge among the academic community throughout the world, thus making it imperative for students and scholars alike, to master the ability to read, analyse and/or write RAs in English in order to achieve academic and professional success (Kanoksilapatham, 2005). According to Johns and Swales (2002: 13), texts like RAs "are already valorised and ratified by the very fact of being published; they have typically undergone an arduous and laborious review process, and they are easily available", thus making them an invaluable genre for academic discourse investigations.

Most RAs in high-impact or high-status international journals are written in English, which has become the "lingua franca of academic research and scholarship" (Tang, 2012: 3) and enjoys the status of the predominant language in the research world today (Flowerdew and Dudley-Evans, 2002; Kanoksilapatham, 2005; Swales 1990 and 2004), in which "a person is more likely to be in touch with the latest thinking and research in a subject by learning English than by learning any other language" (Crystal, 1997: 102). Owing to the predominance of English in the research world, there has been a concurrent rise in the awareness of the need to address the challenges faced by researchers, particularly non-native writers of English research papers. Such challenges are encountered by second language writers while reading and writing academic research reports using academic English. Acquiring knowledge about research writing is therefore essential if the writers aim to get their works published in English international refereed journals which are widely recognised (Flowerdew, 2000; Tang 2012; Ummul K. Ahmad, 1997). Furthermore, large numbers of English as Second Language (ESL) and English as Foreign Language (EFL) students in institutions of higher learning throughout the world are undertaking studies to obtain degrees which require them to comprehend and produce academic writings in academic or research English. As such, there is a great pedagogic need for training students to achieve this end, in a way that meets the expectations of the academic discourse community and the students' specific disciplines. This has led to the design of some English courses at tertiary level,

UNIVERSITI MALAYSIA SABAH

which are known as courses on English for Academic Purposes (EAP) and English for Specific Purposes (ESP) (Dudley-Evans and St. John, 1998; Jordan, 1997).

Swales (1990), in his seminal publication on genre analysis, emphasised the seriousness of the challenge of teaching academic English to students, including those whose first language is English, as a means of preparing them to fulfil academic writing tasks at the university. At the early stage of ESP development, the teaching of EAP, which constitutes a branch of ESP, was found to be more dominant, whereby English Language Units were set up at universities in English-speaking countries, with the aim to help international students "reach their full academic potential" by focusing on academic English and the related study skills (Dudley-Evans and St. John, 1998: 2, 36). EAP courses have been essentially designed to help students not only to acquire academic English proficiency, but also to develop their study skills in an attempt to meet their specific disciplinary requirements (Jordan, 1997). A couple of studies have also been done to testify to the effectiveness of EAP. It was found that graduate students who had attended an EAP course were able to cope better and feel more satisfied as they were able to fulfil the academic expectations of their institutions than those who had not (Storch and Tapper, 2009; Terraschke and Wahid, 2011). Understandably, the teaching of EAP and ESP has been gaining popularity throughout the world, including in institutions of higher learning in Malaysia (Khairi Izwan Abdullah, 2001).

Since the 1990s, EAP classroom practices have been significantly shaped by an approach to analysing discoursal texts, which is termed genre analysis or genre-based analysis. Applied linguists such as Hopkins and Dudley-Evans (1988) and Swales (1990) are among the most influential in utilising this approach for pedagogical intents. 'Genre', as defined by Swales (1990: 58), is "a class of communicative events, the members of which share some set of communicative purposes". These purposes are generally recognised by the expert members of a discourse community, which provides the rationale for the genre concerned. This rationale shapes the rhetorical structure of the discourse and further influences and restricts members' choice of content and style. In this context, communicative

UNIVERSITI MALAYSIA SABAH

purpose is a privileged criterion which operates to keep the scope of a genre. Aside from purpose, exemplars of a genre also exhibit different patterns of similarity with respect to structure, style, content and intended audience (Swales, 1990). Apart from Swales, Holmes (1997: 322) defined genre "as a class of texts characterised by a specific communicative function that tends to produce distinctive structural patterns." In other words, regular and recurrent patterns of texts can be considered as features that characterise a genre which performs a set of communicative functions.

At this juncture, another term which needs to be explained is 'discourse community'. Swales (1990) proposed six defining criteria of a discourse community: common goals, participatory mechanisms, information exchange, community specific genres, a highly specialised terminology and a high genre level of expertise. It follows, therefore, that genre analysis involves identifying the repetitive or distinctive communicative functions reflected in the organizational pattern or structure of the content of a genre (a specific class of texts belonging to a discourse community) and then studying the stages of this organizational pattern in light of their specific linguistic choices or features.

Swales (1990, 2004), with his ground-breaking Create a Research Space (CARS) model, paved the way for many other studies on different sections of the RA, as well as on other academic genres. According to his model, each section of the RA (Introduction/Methods/Results/Discussion) can be divided into subsections according to their distinctive rhetorical purposes, called 'moves' and these 'moves' or communicative categories are achieved linguistically through a number of 'steps' which can be obligatory or optional, depending on the field of research. This system of analysis has gained acceptance and interest among ESP practitioners as it provides a framework in which teachers and students can identify the distinctive elements of academic genres and the language knowledge and skills that need to be developed in order to communicate effectively in specific academic communities (Bazerman, 1999; Brett, 1994).

UMS
UNIVERSITI MALAYSIA SABAH

In the development of an ESP approach to genre analysis, there have been two lines of enquiry, the first of which is the focus on grammatical features, such as tense, aspect and the passive (Burrough-Boenisch, 2003; Hinkel, 2004), hedges, boosters and attitude markers (Burrough-Boenisch, 2005; McGrath and Kuteeva, 2012; Vassileva, 2001), nouns (Flowerdew, 2003), adjectives (Soler, 2002) and first person forms (Sheldon, 2009). The second focus is on the schematic structures of academic texts, which also constitute the focus of this study and will be discussed at length in the later sections of this thesis. Findings of genre analysis can be applied to understand and resolve some of the general issues in language teaching, particularly in countries where English is learnt and used as a second language (Bhatia, 1993; Lim, 2006; Wong and Lim, 2014).

1.2 Rationale for Conducting the Study

As Swales (2004) has stated, the RA as a genre, is continually evolving and the rapid advancement in the field of information technology is also more widely regarded as one of the contributing factors affecting the changes involved. It is therefore imperative for ESP researchers, who are the gatekeepers of the development of new or changing knowledge in an academic field, to continue extensive studies into research reports in different academic disciplines. The RA is considered by many as of great importance not only in disseminating new knowledge, but also as exemplars of research reports, which can be utilised as useful teaching tools for EAP or ESP purposes (Lim, 2006; Robinson and Stoller, 2013; Williams, 1999).

For the past 20 years, numerous investigations have been done on academic texts, based on genre analysis using the 'move-step' analytical framework. Research articles, particularly those written in academic English, have received the most attention (Basturkmen 2012; del Saz Rubio, 2011; Holmes, 1997; Ozturk, 2007). Some studies have focused on the structural organisation of the entire RAs in some disciplines, such as Applied Linguistics (Yang and Allison, 2004), Medicine (Li and Ge, 2009; Nwogu, 1997), Computer Science (Posteguillo, 1999),

UNIVERSITI MALAYSIA SABAH

Biochemistry (Kanoksilapatham, 2005) and Chemistry (Li and Ge, 2009). Others have focused on specific sections of RAs. While one of the prominent studies was a study on RA introductions conducted by Swales (1990), other examples include studies on introductory sections of RAs related to Wildlife Behaviour and Conservation Biology (Samraj, 2002, 2005), Applied Linguistics (Hirano, 2009; Ozturk 2007; Sheldon, 2011), Agricultural Sciences (del Saz Rubio, 2011) and Islamic Studies (Mohamed Ismail Ahamad and Amira Mohd Yusof, 2012). Other than the Introduction, sections of the RA which have been researched include those on (i) the Abstract section in Wildlife Behaviour and Conservation Biology (Samraj, 2005), Experimental Social Sciences (Martin, 2003) and Linguistics (van Bonn and Swales, 2007), (ii) the Methods section in Management (Lim, 2006), and (iii) the Discussion section in Irrigation and Drainage (Hopkins and Dudley Evans, 1988), Natural Sciences and Social Sciences (Holmes, 1997; Peacock, 2002), Business Management (Lim, 2005b) and Dentistry (Basturkmen, 2012). Dahl (2009), in particular, examined how writers of Economics journals, in their attempt to present their knowledge claims in the Abstract, Introduction and Conclusion sections, manipulated certain linguistic devices such as verb tenses. Yang and Allison (2003) investigated the final sections (from Results to Discussion) of Applied Linguistics articles while Thompson (1993) looked into those in Biochemistry. Brett studied the Results section in Sociology (1994) whereas Williams (1999) studied the same section in Medicine. More recently, Bruce (2009) focused on the Results section in Sociology and Organic Chemistry while Lim (2010, 2011a) looked into the Results section in Education and Applied Linguistics.

Studies on the Results section by Brett (1994) and Williams (1999) have respectively revealed disciplinary variations in Sociology and Medicine, without any regard for methodological differences. Subsequent studies by Lim (2010, 2011a) were inter-disciplinary in nature, taking into account methodological variations; however, Lim (2010, 2011a) focused on a particular move in each study, opting to focus on 'commenting on results' and 'paving the way for research results'. Both his studies were done on RAs in two disciplines, namely Applied Linguistics and

UNIVERSITI MALAYSIA SABAH