RESEARCH ARTICLE

Contrastive Analysis on Move Structure of Abstracts between ESP Journal and Taiwan International ESP Journal

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ABSTRACT

There are many previous studies on abstracts (e.g., Salager-Meyer, 1990; Santos, 1996; Samraj, 2002, 2005; Sarah, 2007) and it shows the variation in research article abstracts can be distinguished in both within or without the same disciplines. This study aimed to explore the abstracts from two related journals which are English for Specific Purpose Journal and Taiwan International ESP Journals and analyze the move structure on abstracts based on Hyland's (2000) model of five rhetorical moves. The results show that even though the numbers of moves from ESP Journal is more than Taiwan International ESP Journal, the numbers are not big enough to indicate the differences between two journals on the move structure of the abstracts. The results also show the variations of the types of the moves from Taiwan International ESP Journal are more than ESP Journal. The finding shows the pedagogical implications for novice writers who are going to work on their abstracts for academic purposes and for those want to submit their papers to these two ESP journals.

Keyword: Journal abstracts; Move structure; ESP Journal; Taiwan International ESP Journal.

Introduction

An abstract is always presented at the beginning of a journal article because it is a summary description of the report and it is one of the most important sections of any research articles. Bhatia (1993) referred to the definition of the abstract defined by The American National Standards Institute (ANSI), "An abstract is an abbreviated, accurate representation of the contents of a document, preferably prepared by its author(s) for publication with it" (P78). Base on this definition, Bhatia indicated that an abstract contains the four aspects which are "What the author did, How the author did it, What the author found, and What the author concluded" (P78). Bhatia provided a typical example of an abstract and showed the answers to the questions above. The four moves that Bhatia presented are 'introducing purposes', 'describing methodology', 'summarizing results', and 'presenting conclusions'. The moves indicated the processes that authors had done during their studies and provided a quick guide for the readers to skim through the information they wanted to find. Salager-Meyer (1990) had investigated 77 abstracts which were published between 1987 and 1989 to find

out the actual internal structuring of medical English abstracts. The results show that 48% of the abstracts were poorly structured. This study indicated that the idea of a typical move structure of an abstract was not clearly represented yet. Salager-Meyer (1991) had also investigated the medical English abstracts because they had been criticized for being misleading and lacking of the internal structure. She wanted to find out the actual discourse structure is and she specifically wrote her abstract in four moves (statement of the problem, purpose, methods, and results.) The results indicated that only 52% of the abstracts are well structured and other abstracts were having problems such as missing a fundamental move, lacking in necessary moves, and illogical order of the moves. She has presented the lacks of medical English abstracts and also introduced the needs of constructing a well abstract.

Santos (1996) investigated the actual discourse organization of 94 abstracts in three leading journals in the field of applied linguistics and conducted a five-move pattern. The first move is to set the general topic and state the weakness of previous studies. The second move is to introduce the research by presenting the purpose. The third move is describing the design of the study and the fourth is to indicate the finding. The last move is to give a conclusion or provide recommendations. He thinks that the pattern he had presented may serve as a pedagogic tool to help researchers when they construct their abstracts. Another structure was used in many studies is Swales' move structure (1990). The model was used to analyze the structure of the introduction, and it includes three rhetorical moves: (1) Establishes a territory, (2) Creating a niche and (3) Occupying the niche, which is realized in terms of a number of obligatory and optional steps. In Samraj (2005), the study used Swales' model to analyze research article abstracts and introductions in two disciplines. The results indicated that disciplinary variation in academic writing is not just showed in the structure, but also in the relationship among them. Martin (2003) had investigated the rhetorical variation between the 160 research articles abstracts which were written in English for International journals and those written and published in Spanish. He constructed the move structure by following models from Dudley-Evans (1986), Salager-Meyer (1991), Santos (1996) and Swales (1981, 1990). The results indicated that most of the Spanish abstracts followed the International conventions and they were presented in the four basic structural units which are introduction, methods, results, and conclusion. Graves et al (2014) investigated the rhetorical structure of 30 research articles' introductory sections in mathematics by using Swales' (1990) and CARS models. The results indicated that the move on establishing presumptions about abstract mathematical objects had become a building block for them to set up the arguments on knowledge claims in mathematics.

In Hyland's book, *Disciplinary Discourses*, he indicated that an abstract is used to persuade readers to think that the article is worth reading. Hyland (2004) wrote, "The importance of abstracts in influencing the reader's decisions about whether the accompanying article is worth reading has been demonstrated in a number of studies" (P64). He thinks that an abstract is not for readers to find the exact information they want, but it represents the whole study to the readers. In Hyland's study, he offered a qualitative analysis which comprised 800 abstracts from ten journals in eight disciplines. The purpose of the study is to carry out a move analysis of the abstracts and also look for the features that can help writers when they are working on their abstracts for academic purposes. Suntara et al (2013) chose to use Hyland's model of five rhetorical moves to investigated 200 abstracts which were published between 2009 to 2012 and they aimed to find the rhetorical moves of abstracts in the field of applied linguistics and linguistics. The results indicated that there were three moves in abstracts in linguistics and four in abstracts in applied linguistics. Many researchers have constructed studies on the move structures of the abstracts; however, new topics and journals come out often every year. There are many different kinds of journals in the same filed. For example, there are some journals in the field of English for specific purposes such as ESP Journal, Asian ESP Journal, Taiwan International ESP Journal, and so on. This study investigates the move structures between two ESP journals.

Research Question

1.   What moves do the abstracts from both journals share?

2.   How are the move structures of the abstracts similar or different between these two journals?

Methodology

Background

Two journals which are English for Specific Purposes Journal (ESPJ) and Taiwan International ESP Journal (TESPJ) were chosen to be analyzed in this study. Taiwan ESP association was established by Professor Yinghuei Chen on 7 November 2008 and it aimed to integrate ESP teaching materials and to assist public and private institutions for their English teaching plans. Another aim of this association is to provide a learning platform for students who are taking ESP classes, it helps them to pass ESP proficiency tests and also promote the activities for ESP. The process of peer review of TESPJ is that editors will screen and also at least two anonymous reviewers will review all the submissions.

As for the ESP journal, it is an International peer-reviewed research journal and it was established in 1986. It welcomes submissions from across the world. People who submit their articles that relate to topics on second language acquisition in specialized contexts, curriculum development, needs assessment, discourse analysis and so on are encouraged. It also welcomes the articles or discussions that identify the aspects which ESP needs to develop and help it to expand the practices of ESP.

Procedures

A total of 50 journal articles were randomly chosen from ESP and TESP Journal and they were equally divided into 25 each. Since this study only focused on the abstracts, the other parts of the papers such as introduction, methodology, discussion, and conclusion were not analyzed. Hyland's move structure of abstract was used to analyze the abstracts. The reason for choosing Hyland's move structure is that he had analyzed a large number of abstracts and across 8 disciplines. The validity is stronger because of the size of the study. In Hyland's model, he specifically distinguished the section of purpose from the introduction because he indicated that it provides a justificatory context for the research and also perform a different role in comparing with a typical purpose in the introduction. Table 1. shows the model of Hyland's move structure (2004).

Table 1. A classification of rhetorical moves in article abstracts (Hyland, 2004, p.67)

Move	Function
Introduction	Establishes the context of the paper and motivates the research or discussion
Purpose	Indicate purpose, thesis or hypothesis, outlines the intention behind the paper.
Method	Provides information on design, procedures, assumptions, approach.
Product	States main findings or results, the argument, or what was accomplished.
Conclusion	Interprets or extends results beyond scope of the paper, draws inferences, points to applications of wider implications.

Each move performs its function and specifically provides the information that readers need. This study applied the model to analyze the abstracts and to find the moves they share and also the similarities and differences they have. The results are showed and discussed by tables and examples.

Results

Table 2 shows the first move, 'Introduction', is not so different between the two journals and the percentages of the introduction appearance are high in two journals. Eighty percent of the articles started their abstract with an introduction. Other moves such as 'Purposes, Methods, and Conclusion' are not so different between the two journals. However, the numbers of moves in TESP Journal had decreased according to the data in Table 2. The journals from the TESP Journal focused much more on introduction and purposes than the other three moves. In contrasting with ESP Journal, the numbers of moves are more equally developed in each article.

Table 2. The number and the percentage of each move between two journals

Journals Moves	Taiwan International ESP		English for Specific Purpose	
Introduction	22	88%	21	84%
Purpose	19	76%	19	76%
Methods	16	64%	19	76%
Products	15	60%	24	96%
Conclusion	14	56%	18	72%

Another interesting result is that the numbers of the Product move between two journals are showing the difference. 96% of the articles from the ESP Journal contain the Product move and only 60% of them had conducted this move in TESP Journal. By looking at Table 2, it shows that both journals share the moves on 'Introduction' and 'Purposes' and they are different on the fourth move, 'Product'.

Since there are five moves in Hyland's model, the codes which are 'I' (Introduction), 'Pur' (Purpose), 'M' (Method), 'P' (Product), and 'C' (Conclusion) were designed to present the results in the tables. The data from Table 4 shows there are 8 types of moves in ESP Journal and 36% of the articles were constructed with the typical 5 move structure. 12% of the articles were constructed in the moves such as 'PurMPC', 'IPurPC', 'IPurMP', and 'IP'.

Table 3. Types of moves in ESP Journal

	Types of Moves	Number	Percentage
A.	IPurMPC	9	36%
B.	PurMPC	3	12%
C.	IPurPC	3	12%
D.	IPurMP	3	12%
E.	IP	3	12%
F.	IMPC	2	8%
G.	PurMC	1	4%
H.	IMP	1	4%

Table 4. Types of moves in Taiwan International ESP Journal

	Types of Moves	Number	Percentage
A.	IPurMPC	7	28%
B.	IPur	5	20%
C.	IMPC	2	8%
D.	PurMP	2	8%
E.	IMP	2	8%
F.	IPurC	2	8%
G.	IPurM	1	4%
H.	IMC	1	4%
I.	IP	1	4%
J.	PurMPC	1	4%
K.	IPurPC	1	4%

As shown in Table 3, there are 11 types of moves in the TESP Journal and Type A and B are the major types of the moves. 28% of the articles were constructed in the typical 5 move structure and 20% of them were constructed only with two moves which are the Introduction and Purposes.

By comparing the types of move structure between two journals, Table 5 shows that most of the articles from both journals were conducted in five move structure. Both journals share the six types of moves

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such as 'IPurMPC', 'IMPC', 'IMP', 'IP', 'PurMPC', and 'IPurPC'. Even though most of the abstracts from both journals were designed in 5 move structure, they still have some differences between them. As shown in Table 3 & 4, the varieties of the move structure in TESP Journal are more than ESP Journal. The reason for the varieties may due to the process of peer-reviewing. ESP Journal is a well-known journal in the field, so researcher may first search for the basic patterns for constructing an abstract for the journal. TESP Journal is also an International journal; however, researchers who submitted their articles to this journal might not be able to find a typical move structure that they could follow since this journal is still new in the field.

Table 5. The same types of moves between two journals

Journals Types of Moves	English for Specific Purpose	Taiwan International ESP
A. IPurMPC	9	7
B. IMPC	2	2
C. IPurPC	3	1
D. IP	3	1
E. PurMPC	3	1
F. IMP	1	2

Discussion

Move Patterns

A.   Introduction Move

According to Hyland (2004), the function of the Introduction move is to establish the context of the paper and motivate the research. In both ESP Journal and Taiwan International ESP Journal, a lot of abstracts begin their Introduction move by identifying the gap or the needs to be done and followed from previous works. The examples are given belong:

(Taiwan International ESP Journal)

(1)   The use of academic vocabulary is a crucial focus in the teaching…; *however, it often causes a great deal of difficulty for the language learner*. (Chen, P.C., Hu, C.K., & Ho, J.Y., 2009)

(2)   While much has been written on ESL materials development, discussion focusing on the issues involved in the development and use of materials in ESP contexts *has been less robust*. (Upton, T.A., 2012)

(3)   The perspectives of both students and teachers were examined in the project. This paper, *however*, reports mainly the results obtained from the students…(Chang, Y.Y., 2010)

(4)   Research on English for Specific Purposes (ESP) has been attracting a great deal of attention…*However*, most studies focus on ESP learners at the university or in the workplace, *while little attention has been paid* to secondary school learners. (Lo, Y. H.G., 2012)

(5)   Argumentative writing is a fundamental writing style across various EAP and ESP writing tasks. *Despite* its importance, *no second language writing research* has examined how Taiwanese students compose this genre…(Cheng, F.W.& Chen, Y. M., 2009)

(6)   In the last forty years, various striking differences in male and female communicative behaviors and language use have been documented in many sociolinguistic studies. *However*, in the field of English for Academic Purposes (EAP), …*very few* studies have examined gender effects on academic spoken discourse. (Chang, Y.Y., 2012)

(ESP Journal)

(1)   Native English-speaking (NES) English teachers at universities in English as a foreign language (EFL) contexts are sometimes asked to edit English manuscripts…*However*, professional peers may differ from English teachers…(Willey, I., & Tanimoto, K., 2012)

(2) While academic writing, especially the research article (RA), has been widely studied for its generic structure, organizational patterns,… *relatively little attention* has been devoted to this genre in mathematics. (Graves, H., Moghaddasi, S. & Hashim, A., 2014)

(3) Email has revolutionized the way in which professionals work and companies operate, and yet has received surprisingly *little scholarly attention* in English for Specific Purposes and has an *unexpectedly muted* presence…(Evans, S., 2012)

(4) While communication difficulties for IENs are well documented…, *few previous studies* have investigated the discourse of IENs' interactions with patients. (Staples, S., 2015)

(5) Several previous studies have investigated the use of questions to facilitate interactions in academic lectures…However, the issue of how disciplinary cultures influence the patterns of questions in lectures *has received little attention*. (Chang, Y., 2012)

(6) Language-focused materials for teaching professional legal writing…At the same time, *little to no research has addressed* whether these recommendations actually reflect expert use…(Hartig, A.J.& Lu, X., 2014)

The examples from two journals above show the words such as 'however', 'despite', and 'although' were used to indicate the gap between their studies and previous works. Also, the words like 'less', 'little attention', 'no', 'very few', 'dated', and 'remain' are showed in Introduction move because they wanted to explore more in their studies since they are not satisfied with the data from previous studies.

B. Purpose Move

Hyland (2004) pointed out the function of Purpose move is to indicate purpose, thesis or hypothesis, and also outlines the intention behind the paper. Most of the articles from the two journals use the same kinds of words to indicate their purposes of conducting the studies.

(Taiwan International ESP Journal)

(1) *The main purpose of this paper* is to *discuss* the forms, structures, and functions of methodological nominal terms in the titles of research articles. (Rath, A., 2010)

(2) *The main purpose of the study* is to *explore* the frequency and use of Coxhead's (1998) academic word list…(Chen, P.C., Hu, C.K., & Ho, J.Y., 2009)

(3) *The purpose of this study* was to *investigate* ESP teachers' perceptions of Business English courses. (Chen, I.C.& Wu, H.C., 2013)

(4) *The purpose of this case* study was to *examine* the effectiveness of an ESP program on 33 VHS students of tourism. (Lo, Y. H.G., 2012)

(5) *In an attempt to* capture a holistic understanding of the teacher's beliefs…the researchers *investigated*…(Wu, G.C.H. & Hung, D.C.H., 2011)

(6) In this paper, *I will argue the opposite view*: that ESP practitioners do not need to be specialists. (Anthony, L., 2011)

(ESP Journal)

(1) This study *examined* (1) editing strategies used by NES English teachers at Japanese universities with different amounts of medical editing experience…(Willey, I., & Tanimoto, K., 2012)

(2) This paper *explores* the rhetorical structure of introductory sections of RAs in mathematics. (Graves, H., Moghaddasi, S. & Hashim, A., 2014)

(3) This survey *examined* views of East Asian international graduate students concerning required academic listening and speaking skill levels in their university courses…(Kim, S., 2006)

(4) This study *examined* the effectiveness of telephone calls from the International Medical Graduate (IMG) doctors…(Pryor, E. & Woodward-Kron, R, 2014)

(5) The *aim was to discover* the research methods most commonly used and the research paradigms underrepresented in the field. (Gollin-Kies, S., 2014)

(6) *The purpose* of the note is to *explore* an appropriate approach to teaching aviation English…(Aiguo, W., 2007)

The examples above show that most of the Purpose move in abstracts were constructed with the words 'examined', 'explore', 'investigate', 'discover', and 'discuss'. They used these words to discuss their findings and indicate the purposes of their studies. They also began the sentences like 'The main purpose of this study', 'In attempt to', and 'I will argue the opposite views'. Since the function of the Purpose move is to outline the intention, researchers tended to use these words and sentences to indicate the purposes of doing the studies.

C.   Methods Move

The function of Method move is to provide information on design, procedures, assumptions, approach, data, etc. The following are the examples of Method move from two journals. They included information about the data they had used in their studies.

(Taiwan International ESP Journal)

(1) The *2,639 titles analyzed* in the study come from *99 SSCI journals* published in 2008 in the field of linguistics. (Rath, A., 2010)

(2) The study *collected 880 English abstracts* from the fields of business management (BM) and technology management (TM). All the selected abstracts *were analyzed* with the VocabProfile application of Complete Lexical Tutor…(Chen, P.C., Hu, C.K., & Ho, J.Y., 2009)

(3) *Thirty hours* of their classes *were observed* and five lecturers *were interviewed*. Then a *questionnaire was administered* to learn about students' perceptions of their needs and English proficiency. (Poorebrahim, F.& Mazlum F., 2013)

(4) The subjects in this study include *370 undergraduate students* and *six* professors from *six* departments in the three major colleges…*Research methods used to collect data* include pilot interviews with students, student questionnaire, and face-to-face interviews…(Chang, Y.Y., 2010)

(ESP Journal)

(1) Using Swales' (1990) and 2004 CARS (Create a Research Space) models as points of departure, the study *investigates* the move structure used in the introductory material in 30 RAs in mathematics. (Graves, H., Moghaddasi, S. & Hashim, A., 2014)

(2) This study uses interviews and questionnaires to *investigate* first and fourth-year business students' beliefs about effective language learning. (Trinder, R., 2013)

(3) The *participants* were *14* fluent (CEF B2/C1) English L2 speakers who held the same oral presentation twice, once in English and once in their Swedish. The temporal variables of mean length…*were calculated* for each language. (Hincks, R., 2010)

(4) *Fifty-two,* third-year French major college students taking the Professional English Course at a college in Taiwan *participated* in the study…*Research methods* included questionnaires, interviews, and oral assessments. (Chou, M. H., 2011)

In the Method move, most of the data were presented with numbers. The numbers of articles they had analyzed and the numbers of participants. The frequent words they used in Method move are 'investigating', 'calculating', 'observing', 'interviewing', and 'analyzing'. All of them were used to present the information on their methods and also indicate the major participants and tools in their studies.

D. Product Move

The function of Product move is to state the main findings or results, the argument, or what was accomplish. The following examples indicate the frequent words and sentence patterns that often appear in the abstracts.

(Taiwan International ESP Journal)

(1) *The major findings* of this study were that AWL vocabulary was frequently used…(Chen, P.C., Hu, C.K., & Ho, J.Y., 2009)

(2) *The results reveal* that overall, although the students in this study…(Chang, Y.Y., 2010)

(3) *Major findings* of this study were as follows…(Chen, I.C.& Wu, H.C., 2013)

(4) *The findings* of this study *indicate* that dynamic classroom interactions…(Wu, G.C.H. & Hung, D.C.H., 2011)

(5) *The results indicate* sub-disciplinary variations in the structure of this genre…(Atai, M.R& Habibie, P., 2012)

(ESP Journal)

(1) *Results reveal* that disciplinary knowledge and medical editing experience did not significantly impact editing strategies…(Willey, I., & Tanimoto, K., 2012)

(2) *The finding enabled* the researchers to *identify* the strengths and weaknesses of the updated model. (Tsou, W.& Chen, F., 2014)

(3) *Results show* that USNs used particular lexico-grammatical features more frequently…(Staples, S., 2015)

(4) These *results contrast* with earlier studies in the field of applied linguistics and ESOL…(Gollin-Kies, S., 2014)

(5) The *results demonstrate* that knowing the most frequent 5000-word families plus proper nouns…(Hsu, W., 2014)

The frequent words were used in the Product move are 'findings', 'indicate', 'show', 'demonstrate', 'reveal' and 'identify'. These words were used to report the results of their studies. They had stated their finding and also what the studies accomplished. Researchers tended to start their Product move with sentences, 'The results', 'The findings', and 'The major findings'. They directly indicate the part of the results of their studies because they wanted the readers to catch the main finding of the studies which are the important information that readers do not want to miss.

E. Conclusion Move

The function of Conclusion move for constructing an abstract is to interpret or extend results beyond the scope of the paper, draw inferences, point to applications, or wider applications. The following are the examples of Conclusion move from two journals. They have shared some common words and functions.

(Taiwan International ESP Journal)

(1) *Implications* for nursing and English for Specific Purposes (ESP) education are presented and discussed. (Bosher, S., 2010)

(2) The study *concludes* with *both theoretical and pedagogical implications* for ESP education for VHS students. (Chen, I.C.& Wu, H.C., 2013)

(3) Based on the findings of this study, the *implications* for Business English teaching and learning and *suggestions* for future research were addressed. (Lo, Y. H.G., 2012)

(4) As the first Taiwan university to undertake such as large-scale project, we hope that our findings and experience *will help facilitate further understanding and implementation of ESP in higher education*. (Kanoksilapatham, B., 2012)

(5) The findings have *substantial pedagogical implications* for English language teaching…This study is also *beneficial in preparing scholars and engineering*…(Tsou, W., 2009)

(ESP Journal)

(1)   These results have _implications_ for using a genre-based approach in EAP classes of mathematics (Graves, H., Moghaddasi, S. & Hashim, A., 2014)

(2)   Several important issues and _specific pedagogical suggestions_ for EAP instructions…(Kim, S., 2006)

(3)   The study _recommends_ the adoption of a simulation-based approach in which e-mail communication is embedded…(Evans, S., 2012)

(4)   _Implications_ for teaching as European universities adopt English as a medium of instruction are discussed. (Hincks, R., 2010)

(5)   The present EEWL _may provide a window_ to the engineering register for matriculating engineering students and _may be helpful_ for English…(Hsu, W., 2014)

As the examples shown above, words such as 'implication', 'recommends', and 'suggestions' were used a lot for the conclusion in the abstracts. These words provide a view for future researchers. They suggest that researchers may conduct another study based on previous studies. Some of them also constructed with wider applications because they used the sentences such as 'may provide a window' or 'will help facilitate further understanding'. Some of the conclusions indicate that their studies may be helpful in the field they had researched. They suggest that both teachers and researchers can apply and develop their studies in their works.

Limitation

One limitation of this study is the size of the journals. In comparing with Hyland's study on abstracts, the size is too small and the number of articles is limited since the TESP Journal is a new journal in the field. TESP Journal published its first volume in 2009 and each volume contains three to four articles and one to two book reviews. In contrasting with ESP Journal, the numbers of the articles that can be chosen are limited. Besides the numbers of the articles, the variety of journals is another limitation. Since this study only comprised two journals, it is possible to include other ESP journals such as Asian ESP Journal, College ESP Journal and ESP Today Journal. By analyzing these ESP journals, researchers who want to submit their studies or work on their papers for academic purposes will understand the way of constructing a typical abstract for journals in the ESP field.

Conclusion

This study indicated the move structures on abstracts that ESP Journal and TESP Journal shared. Both journals shared six moves which are IPurMPC, IPurPC, IMPC, PurMPC, IP, and IMP in their abstracts. The most common one is the typical five-move structure. Most of the abstract were constructed in five-move. In contrasting two journals, the diversity of moves in TESP Journal is more than ESP Journal which may suggest that researchers who want to submit their studies to ESP Journal need to think about following the typical five-move structure since most of the articles followed the same structure. The study also indicates that most of the researchers who submitted their articles to both journals would start their abstracts with an introduction. Although sometimes it is difficult to separate the Introduction and Purpose moves since indicating the motivation of doing the study and indicating the purpose of it, there are still some differences between them. According to the results, most of the Introduction move shows the gap between the previous and present studies. The Purpose move indicates the parts and areas they are going to explore and discuss. Even though there are not many differences between the move structures of two journals, this study indicated the move pattern that researchers can follow if they want to construct their abstracts and submit their studies to either of the journals.

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