A Genre Analysis of Research Article Abstracts Written by Native and Non-Native Speakers of English

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Abstract

Research abstract has gained significant attention from the academic community as an important part-genre in the research article. A well- organized abstract would attract more readers and improve the opportunities of indexing and citation. This study aims at analyzing twenty abstracts written by native and non-native speakers of English in the Applied Linguistics field. The abstracts were selected from well-known journals interested in the field of Applied Linguistics. To achieve the purpose of this study, Hyland's (2000) model of genre analysis was employed to explore the differences between native and non-native writers in rhetorical structure of research abstracts. The results of the present study revealed that both native and non-native writers followed the rhetorical structure of three moves (Purpose, Method, and Conclusion), while there was a significant difference between those writers in the introduction and conclusion moves. Native writers were more eager to employ these two moves compared to their non-native counterparts. The findings of this study can help students and novice writers, especially those from non-English backgrounds to facilitate their successful acculturation into their disciplinary community.

Keywords: genre analysis, research article, abstracts, rhetorical moves, applied linguistics

INTRODUCTION

The English language is one of the most important languages used around the globe. It has been viewed as a lingua franca since the late 19th and the early 20th century. At the beginning of the 21st century, the role of English as internationally recognized mean of communication has rapidly risen. English language is now "the dominant or official language of over 60 countries" (Alcaraz Ariza & Navarro, 2006, p.752). In addition, it is the major element in most of linguistic varieties and the major foreign language in several countries including Saudi Arabia. The wide usage of English language as the key means global communication has led to pay extensive attention to academic writing in English language. The extensive attention is paid to The Research Articles (RA) published in internationally-accredited journals to present new ideas in that particular field of study (Abarghooeinezhad & Simin, 2015). Similarly, academic writing is extremely important in all fields including applied linguistic domain as it is the main

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gate in presenting and communicating ideas and thoughts among members in the applied linguistics community (Flowerdew & Dudley-Evans, 2002). Academic authorities worldwide attempt to compete in contributing to the development of various disciplines and measure the productivity of their authors and university professors by the number of research works published in well-known national and international journals (Martin, 2003). Hence, Publication is the major channel for research community to share and present their ideas and contributions to that particular field. Swales (1990) argues that a scientific paper is not designed to be read. It is designed to be published". He adds that "publication can be seen as documentary evidence that the writer qualifies for membership in the target discourse Community".

Research Article (RA) is one of the most important genres that received considerable attention in genre analysis. A number of previous studies have focused on analyzing the organizational patterns of RA sections in terms of moves such as analyzing the introduction section, methods section, and the discussion section. Some of these studies have analyzed the stylistics and grammatical features accompanied to sentence level such as modality, hedging, citations, and personal pronouns (Abarghooeinezhad & Simin, 2015). Swales and Feak (2009) defined genre as "a type of text or discourse designed to achieve a set of communicative purposes" (p.1). According to them, the other components of RA is called part-genres such as the RA abstracts. The abstract part has also received extensive attention in recent years as it is the brief summary of RA. Lores (2004) defines research abstract as "an abbreviated, accurate representation of the contents of a document, preferably prepared by its author(s) for publication with it" (p.281).

Research abstracts have gained extreme importance due to the huge academic information in the world. Abstracts are seen as the readers' doorway to view an article, journals' selection for contributions, and for conferences to accept or reject articles (Lores, 2004). Therefore, recent research articles are more likely to be accompanied by more and more informative abstracts that would enable them to get acceptance to internationally-recognized journals. Taylor & Chen (1991) emphasize the importance of move analysis in Contrastive Rhetoric (CR) as it studies the cultural variations in discourse structure. They also added that "the cultural background of the author might lead to variation of the rhetorical structures of texts, and that such variation should be considered in ESL teaching programs" (p. 319). Therefore, authors of research articles need to be aware of the cultural differences in respect with text structure to succeed in international community. The concept of internalization has been growing in the academic community, meaning that more and more non-native speakers of English want to acquire awareness and mastery of the writing conventions of the Anglo-American academic community to get international recognition. Consequently, the vast majority RA linguistic analyses have always been compared between native speakers of English and their non-native counterparts (Li, 2011).

The prior studies in this field have studied RA abstracts from various disciplines, such as Medicine, Engineering, and Psychology. However, there is a need for more

comparative studies that compare RA abstracts in the field of Applied Linguistics written by native and non-native speakers of English (Nasseri & Nematollah, 2014). In addition, the lack of structural knowledge often makes English non-native linguists utilize self-strategies in their writing of research articles. These linguists attempt to read abstracts written by other researchers in order to get ideas and information about the research abstract structure and the way of writing it. This could lead to lack of creativity, critical thinking, subjectivity, and innovations (Abarghooeinezhad & Simin, 2015). Therefore, a considerable number of English non-native articles are rejected by reputable journals due to the authors' rhetorical deviations (Mirsharifi, Aminian, & Jafarian, 2008). The lack of information of the rhetorical features could lead to difficulty in producing informative and structured abstracts. The well-known abstracts would attract more readers and enhance the opportunity of these abstracts to be indexed and cited in internationally-recognized journals (Marefat & Mohammadzadeh, 2013).

Previous studies on genre analysis have used a framework of RA abstracts contains Introduction, Methods, Results, and Discussion (IMRD) to track the RA abstracts. The present study employs a more detailed model proposed by Hyland (2000). This model encompasses five moves: Introduction, Purpose, Method, Product, and Conclusion (IPMPC). The present model distinguishes the purpose of the abstract from the introduction as it has a different role from the introduction's typical purpose of presenting rationale for the research. The present framework adopts a product move rather than result move as it can better account for humanities abstracts, which might include not only the empirical results but also the argument statement (Hyland, 2000). Research abstracts become common and almost compulsory genre in research works published in academic journals. The academic journals around the world require scholars to accompany a research abstract along with their original articles. English non-native scholars face difficulties and challenges when attempting to present the results and findings of their research works to other international scholars in the same field (Nasseri & Nematollah, 2014).

To the best of researcher's knowledge, there are very few studies that compared rhetorical features of native writers with their non-native counterparts in the field of Applied Linguistics. Also, very few studies compared and contrasted move structures of abstract section written by native and non-native writers. Most of non-native speakers of English seem unaware of the standard conventions of academic writing employed by native English speakers (Candarh, 2012). Therefore, there was a need to conduct a study to help English non-native writers to gain academic writing patterns and conventions by providing them with necessary information to be able to read and write research abstracts and to receive the latest contributions, as well as publishing English articles in the field of Applied Linguistics. This study seeks to investigate the rhetorical structures of RA abstracts written by native and non-native speakers of English. This investigation adopts Hyland's (2000) framework which includes: Introduction, Purpose, Methodology, Product, and Conclusion. This study is also demonstrates the cultural variations that lead to preferences for specific rhetorical strategies by members of

Applied Linguistics community. Next section provides a detailed review of the literature in the area of genre analysis and rhetorical structures.

LITERATURE REVIEW

Genre analysis

Genre analysis was first appeared in the field of ESP in the 1980s. Previous studies in this area indicated the different influences on Genre Analysis such as "genre as social action", the examination of learners' writing, and genre as a new rhetoric (Paltridge, 2007). Notably, the word "genre" indicates various types of artistic and literary works; however, linguists have extended its usage to cover classes of language use and all areas of communication (Allison, 1999). The term "genre" defined by Swales (1990) as "a class of communicative events, the members of which share some set of communicative purposes" (p. 58). Apparently, this definition reveals that a genre is classified due to its communicative purpose. The description of rhetorical structure of genre moves plays a vital role in the field of genre analysis.

Move-step analysis in RA

The move step analysis in RA has been first introduced by Swales (1981-1990) and it was on the structure of RA introductions. Since then, several studies have been conducted by genre analysts on the discourse of RA in terms of move structures. However, there was a problem of the Swale's (1990) definition of identifying genre analysis. Askehave & Swales (2001) noted that the common purpose of written texts is not always clear and some texts have multiple communicative purposes. Hence, genre study in terms of move analysis has been paid a great importance in the last few years as it has great value in understanding the discourse nature. Furthermore, the findings of move-step analyses have invaluable pedagogical implications for both reading and writing classes (Askehave & Swales, 2001). Genre analysis move is defined as a "discoursal or rhetorical unit that performs a coherent communicative function in a written or spoken discourse" (Swales, 2004, p. 228-9). Each move of a written text has its own role and communicative purpose, which, together with other moves, contributes to the general purpose of the text (Pho, 2009). Rhetorical moves can be realized through one or more steps, but not all moves contain constituent steps. These moves or steps are functional units, which can be obligatory or optional in a genre (Samraj, 2009). Regularly occurring steps or moves in a genre are said to be obligatory; others occurring less frequently are considered optional. Nevertheless, the criteria for considering obligatory units are not harmonious. In some studies, obligatory move or step occurs in 50%-80% of a written text. The consistency and identification of moves is an essential step in the analysis of rhetorical structure. Swales (2004) points out that the identification of moves and move boundaries is determined by various criteria. Scholars have also paid attention to linguistic features to assist them identify moves and its boundaries. Therefore, the analysis of RAs features has been the subject of a number of genre studies (Swales, 2004; Pho, 2009).

Genre analysis of RA sections

Research articles is the one of the most widely studied genres in academic writing. Prior studies in this field have examined the organizational patterns of RA sections. The preliminary concern of these studies was the introduction section of RAs. Swales (1981) examined the structure of RA introduction from a wide variety of disciplines, and indicated that there are four basic move structure in the introduction of Ras: 1. Establishment of the research field, 2. Reporting prior research, 3. Preparing for present research, 4. Introducing present research. Later, Swales (1990) revised the structure to a three-move pattern called Create-a-Research-Space-Model (CARS). This model contains three moves: 1. Establishing a territory, 2. Establishing a niche, and 3. Occupying the niche. This model has influenced many later studies on the structure of the introduction (Bhatia, 1997; Samraj, 2005). As Swales (2004) said, "the basically three-part model for English language introductions in many leading journals is or has become prototypical" (p. 226). Samraj (2002) compared the RA introductions in two disciplines (Biology and Wildlife Behavior) employing CARS model. She stated that one element "the discussion of previous research" is not only found in "establishing a territory move" but also played a vital role in the other moves, "establishing a niche and occupying the niche". Samraj named it "a freestanding sub-step" (p. 16) and stated, "it can be employed in the realization of any step in the introduction" (p. 16). Due to these findings, she presented a revised CARS model. The methodology section is the most straightforward part of Ras, but unfortunately, it has received little attention in the genre analysis field. As a result, Lim (2006) analyzed the move-step on the methodology section of business Ras to explain how the linguistic features link the writer's communicative purposes and how the linguistic choices fulfill these purposes. There was a new move identification "preview the results" which –according to Lim- has never been mentioned in other analyses of the Ras methodology section. In addition, numerous studies conducted move-step analysis on the results and discussion sections. These studies involved cross-linguistics analyses on Agriculture and Economics. These studies have also analyzed the results and discussion sections written by native speakers and non-native speakers of English. It was found that cultural variations had a great impact on the move sequence. Specific organizational choices have been identified within the sections of results, results and discussion, discussion, conclusion, and pedagogic implications (Yang & Allison, 2003).

Genre analysis of RA abstracts

A huge amount of research works are being published around the world every year, and RA abstracts have become an important element to assist readers in select appropriate readings for them. However, RA abstracts are different from RAs in three aspects: function, rhetorical structure, and linguistic realizations (Lores, 2004). Due to that difference, a number of analyses have been conducted to determine the textual organization of RA abstracts. This organization includes: the macro-level features of textual organization, and micro-level features at the sentence level (Pho, 2008). Some of these studies employed the model of five moves which included: situating the research

(M1), presenting the research (M2), describing the methodology (M3), summarizing the results (M4), and discussing the research (M5). The results of these studies concluded that M2 and M3 were essentially compulsory moves in the genre, and the other moves required different linguistic resources to realize theme, tense choice, and voice choice (Candarh, 2012). Other studies have conducted genre analyses employing either CARS or IMRD model. Lores (2004) carried out a genre analysis on a corpus of thirty-six RA abstracts in the linguistics field. The findings of her study revealed that about 61% of those abstracts followed the IMRD model, about 31% of them followed the CARS model, and about 8% showed employment of the two models. Also, three RA abstracts functions were inferred: the indicative, the informative, and the informative-indicative function. The results of this study might explain why previous studies were not consistent in terms of rhetorical organizations of abstracts and the inflexible description of the abstracts' organization.

Previous studies on contrastive rhetoric in RA abstracts

A number of studies (Candarh, 2012; Marefat & Mohammadzadeh, 2013; Ismail & Ahmad Shah, 2014; Abarghooeinezhad & Simin, 2015) have been conducted to contrast and compare between RA abstracts written by academicians. Candarh (2012) examined the rhetorical variations between Turkish and English research abstracts. This analysis employed Swale's (2004) model of move analysis. The corpus of this study was selected from Turkish and English journals in the field of education. The results of this study showed some similarities between Turkish and English research abstracts in respect to the use of move and steps. However, there was a significant difference in the frequency of Move 2 where authors provided justifications to their research as a way of creating a niche. In addition, the lexico-grammatical and rhetorical deviations might be attributed to the culture variance and different expectations of the scientific communities. Marefat & Mohammadzadeh (2013) explored the rhetorical variations between research abstracts written by English and Persian native speakers in the field of literature. For this purpose, ninety English and Persian abstracts were selected and analyzed based on IMRD and CARS models of rhetoric analysis. The results of this study demonstrated the writers of literature RAs have generally focused on the Introduction and Results sections, neglecting the Method and Discussion sections, and there was no mention for previous related work to create a niche. Furthermore, the literature abstracts have generally matched CARS model more than IMRD though none of the models were efficient. The abstracts written by Persian native speakers had minor divergences from both Persian and the international norms, and showed the writers' own standard.

Ismail & Ahmad Shah (2014) investigated the rhetorical structure of the abstracts of the Islamic research articles written by Malaysian writers. For this purpose, one-hundred abstracts were selected from five journals devoted to various Islamic topics. This study employed IMRD and CARS frameworks of rhetorical analysis to find out if these abstracts follow these models. The results revealed that few abstracts followed IMRD model. The results have also demonstrated that most of the introduction sections of the abstracts have all the moves specified by CARS model. However, the percentage of

abstracts that follow the linear order 1-2-3 was relatively small. Despite following most of the rhetorical moves, the authors deviated in terms of the abstracts' organization. Abarghooeinezhad & Simin (2015) conducted a study to explore the rhetorical structure variance of the research article abstracts written by native and non-native speakers of English (Iranian) speakers in the Electronic Engineering field. The analysis has mainly focused on the Moves/Sub-Moves, Verb choices, and Verb tense in Move 2 and Move 4 of the rhetoric. For this purpose, twenty-five abstracts written by native writers and twenty-five abstracts written by Iranian writers were selected. All of these abstracts appeared in ISI journals. This study employed Santo's (1996) framework of rhetorical analysis which contains five moves. Also, AntMover software was utilized to identify Moves/SubMoves. The results showed that there were some variations in terms of moves and verb tense and voice between native English speakers and nonnative speakers of English.

RESEARCH METHODOLOGY

The corpus

A total of twenty abstracts were selected from two journals, namely, *Advances in Language and Literary Studies*, and *The Canadian Journal of Applied Linguistics*. The corpus of abstracts written by non-native speakers of English consisted of ten abstracts randomly chosen from the Journal of Advances in Language and Literary Studies, while the corpus of abstracts written by native speakers of English is also consisted of ten abstracts randomly chosen from The Canadian Journal of Applied Linguistics. The selected abstracts were published between years 2012 to 2015. The abstracts were produced for various topics of the applied linguistics field. Both journals are available online and the articles were all checked in terms of the authors' nationality.

Research instrument

The present study employed Hyland's (2000) five-move framework to identify the rhetorical structure of the selected corpus. According to this framework, five moves are involved: Introduction (M1), Purpose (M2), Method (M3), Product (M4), and Conclusion (M5). Each move represents the realization of a communicative purpose. In contrast to the other models, Hyland's (2000) model distinguished the writer's purpose from the introduction move, where it is often located. Table 1 below presents the linear order of Hyland's (2000) five-move model.

Table 1. Linear order of Hyland's five-move model

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

The analysis of written texts involves examining the rhetorical structure of the selected abstracts following Hyland's (2000) model presented above. The analysis was based on "top-down" approach where the content of the abstracts is examined.

RESULTS AND DISCUSSION

This section presents the results obtained from this study. It starts with presenting the frequency of the occurrences of moves in the abstracts written by native and non-native speakers of English.

Table 2. Frequency of the occurrence of the abstracts' moves

Move	Native Speakers	Non-Native Speakers
Introduction	5	3
Purpose	10	10
Method	10	10
Product	10	10
Conclusion	9	4

As shown in table 2, the purpose move (M2), the method move (M3), and the product move (M4) were the most frequently moves occurred in the abstracts written by both native and non-native speakers of English. However, the introduction move (M1) and the conclusion move (M5) occur less frequently. This is obvious that not all authors follow the conventional structure of abstracts. Next section presents the results of each abstract move in details.

Move one- introduction

The introduction move usually establishes the research by stating the present knowledge and discussing some points related to the field. There were only eight instances of Move 1 found in the abstracts, five written by native speakers (50%), and three written by non-native speakers (30%). Examples of this move are shown below:

This study builds on previous work exploring reading and listening lexical thresholds in order to investigate productive vocabulary targets that mark successful entry-level undergraduate writing. (Native Speaker, Abstract 1)

Fundamental principles of public speaking and appropriate organizational structure of ideas for occupational and social communication are vital aspects for undergraduates as a pathway to overcome employers' grievances on graduates' lack of communication skills. (Non-Native Speaker, Abstract 5)

This move of abstract is employed to contextualize the study. The authors of these abstracts attempt to do "marketing" their research to the people interested in this field. Thus, this persuasive function is employed to discuss prior research or state the present knowledge in this field. Such results are consistent with the studies of Ismail & Shah (2014) and Abarghooeinezhad & Simin (2015) who found that situating the research through introductory move are relatively small in the abstracts they analyzed. It is apparent that the writers have the freedom to decide whether to situate the research or not. Authors usually start their research abstracts with the introduction move or the purpose move as the initial move of the abstract. As mentioned earlier, the introduction move was included in 50% of the abstracts written by native speakers, and 30% of the abstracts written by non-native speakers. This indicates that native speakers of English consider situating the research as an essential part of the abstract while non-native speakers do so much less.

Move two- purpose

The purpose move is employed to present the purpose of the study. The purpose of the study is classified into two forms: the descriptive form that focuses on presenting the features of the research, or the purposive form that uses some expressions like "the aim" or "the goal". The purpose move constitutes all the abstracts written by native and non-native speakers of English (100%). Examples of this move are shown below:

This paper explores the feasibility of an automated, online form of L2 strategy instruction (SI) as an alternative to conventional, classroom-based forms that rely primarily on teachers. (Native Speaker, Abstract 6)

This study examined instrumental and integrative motivations among Libyan high school students in Kajang, Malaysia. It investigated whether EFL Libyan students are instrumentally or integratively motivated to study English, and the relationship between gender and type of motivation. (Non-Native Speaker, Abstract 7)

As illustrated above, all the authors followed the same sequence of writing the abstracts. Both native and non-native speakers reveal a preference to begin their research abstracts with the purpose move; it occurs in all the abstracts written by native and non-native speakers of English. These findings in line with Van Bonn & Swales (2007) who indicated that all the abstracts they studied included the purpose move. This implements that the purpose move is a compulsory step in the Applied Linguistics abstract genre (Van Bonn & Swales, 2007).

Move three- method

The method move is used by authors to describe the mechanism of conducting their research by presenting the population and sample, materials and instrument, research procedures, and the design of the study. In the present study, all the authors (native and non-native speakers) included the method move in their research abstracts. Examples of this move are as follows:

Thirty-six adults in two classes participated in a 10-week study. One group of 16 adults received content-based instruction that included a focus on form component while the other group of 20 adults received the same content-based instruction with a focus on meaning only. Pre-tests/post-tests/delayed post-tests measured learning of two grammatical forms, the present conditional and the simple past tense, as well as occupational content knowledge. (Native Speaker, Abstract 2)

The pilot study involved two male Indonesian postgraduate students in Universiti Utara Malaysia. The Indonesian students were selected based on the following criteria: (1) had enough knowledge in English writing, indicated by the completion of Academic Writing and Research Methodology courses taken in UUM; (2) had written an unpublished thesis during their undergraduate studies in Indonesia and they are writing their master or doctoral thesis in English; (3) used English extensively in writing their assignments, and in daily activities. Pseudonyms were used to refer to the participants as Sukarno and Suharto. The data were collected through in-depth interviews with the participants. The interview sessions took approximately 15-20 minutes for each participant and were videotaped and audiotaped. Semi-structured interview with 15 questions and probes were used. (Non-Native Speaker, Abstract 1)

These findings concur with Pho's (2008) findings who reported that almost all the analyzed abstracts contained the method move. Again, this move is an obligatory move in any research abstract and it would be very difficult to understand the research if this move is missing (Pho, 2008).

Move four- product

The product move is used to briefly present and summarize the major results of the study. It might also include the arguments or description of the achieved research objectives. All the authors (native and non-native speakers) included the product move in their research abstracts. Examples of this move are as follows:

Participant survey results showed that the L2 writers valued the collaborative in-class writing tasks overall and that many participants in the individual group wished they had done in-class collaborative web-based writing. Three types of collaborative groups emerged. (Native Speaker, Abstract 8)

The Result of the study reveals that students were highly motivated to learn English for future expectations such as local and international communication, academic advancement and employment prospects. It also provide a scenario of English teaching system in rural areas of Bangladesh as well as the problems and prospects of English language in perspective of Bangladesh. (Non-Native Speaker, Abstract 3)

These findings coincide with Candarh (2012) and Marefat & Mohammadzadeh (2013) findings who reported that all the studied abstracts included the product move. It is believed that the product move occurs in all research abstracts to "sell" and promote their research to the community of the same field (Van Bonn & Swales, 2007).

Move five- conclusion

The conclusion move is employed by writers to make their claims about the research and summarize the implications drawn from the results. In the present study, nine instances (90%) of move 5 found in the abstracts written by native speakers, while only four instances (40%) were found in the abstracts written by non-native speakers of English. Examples on this move are as follows:

Consequently, incorporating life themes into adult-based courses, especially through story-based texts, may act as an important springboard for active motivational engagement during task-based interaction. (Native Speaker, Abstract 3)

These concluding results promote the use of ICT and encourage EFL teachers to use these tools in the most beneficial way to improve students' level of English and motivate them. (Non-Native Speaker, Abstract 4)

These results in line with the results found in Li's (2011) study who found that Chinese authors used the conclusion move so much less compared to the native writers of research abstracts. This could be attributed to the awareness that native speakers hold about the importance of the conclusion move, and its essential role for scholars planning to conduct research in the same field. Non-native writers may believe that their research papers are well-organized and no need for conclusions to attract the interested readers in this field (Li, 2011).

CONCLUSION

The present study aimed at investigating the variations in rhetorical structure of abstracts written by native and non-native speakers of English. The findings of this study revealed differences between native and non-native speakers in writing their research abstracts in the textual organization level. Based on Hyland's (2000) model, native writers followed the international convention of academic discourse community, while non-native writers do not literally follow that conventional structure. Three moves (Introduction, Purpose, and Product) were present in every abstract written by native and non-native speakers of English. These imply that both writers are aware of the importance of these moves in the abstract. The striking difference was found in the Introduction and Conclusion moves. Native writers tend to include these two moves much more frequently compared to non-native writers.

The findings of the present study could help both native writers in general and non-native writers in particular in their academic writing. Hyland (2000) pointed out that the improvement of genre knowledge would help novice writers in becoming active members in their disciplinary community. Bhatia (1997) emphasizes the importance of genre analysis in providing useful information to writers by exposing them to a particular genre convention. The findings might also be a guide for writers in realizing the textual variations in terms of moves, moves' sequence, and the role of each move in the research abstract. In addition, the findings obtained from this study help non-native authors to better understand the development occur in the RA abstracts in the Applied

Linguistics field both linguistically and structurally. Through this awareness, non-native writers will improve their opportunities to publish their research in internationally-recognized journals and discourse communities.

REFERENCES

Abarghooeinezhad, A., & Simin, S. (2015). Analyses of Verb Tense and Voice of Research Article Abstracts in Engineering Journals. *International Letters of Social and Humanistic Sciences, 47,* 139-152.

Alcaraz Ariza, M. & Navarro, F. (2006). Medicine: Use of English. In *Encyclopedia of language and Linguistics*. Retrieved from http://www.sciencedirect.com/science/referenceworks/9780080448541

Allison, D. (1999). Genre. *ELT Journal, 53*(2), 144.

Askehave, I., & Swales, J. M. (2001). Genre identification and communicative purpose: A problem and a possible solution. *Applied Linguistics*, *22*(2), 195-212.

Bhatia, V. K. (1997). Introduction: Genre analysis and world Englishes. *World Englishes*, *16*(3), 313–319.

Candarh, D. (2012). A cross-cultural investigation of English and Turkish research article abstracts in Educational Sciences. *Studies about Language, 2*, 12-17.

Flowerdew, J., & Dudley-Evans, T. (2002). Genre analysis of editorial letters to international journal contributors. *Applied Linguistics, 23*(4), 463-489.

Hyland, K. (2000). *Disciplinary discourses: Social interactions in academic writing*. London, UK: Longman.

Ismail, S., & Ahmad Shah, M. (2014). A genre analysis of abstracts in Islamic Journals. *Middle-East Journal of Scientific Research 20 (Language for Communication and Learning), 20*, 75-82.

Li, Y. (2011). *A genre analysis of English and Chinese research article abstracts in Linguistics and Chemistry*. Published Master's thesis. San Diego University.

Lim, J. M. H. (2006). Method sections of management research articles: A pedagogically motivated qualitative study. *English for Specific Purposes*, *25*(3), 282-309.

Lorés, R. (2004). On RA abstracts: From rhetorical structure to thematic organization. *English for Specific Purposes*, *23*(3), 280-302.

Marefat, H., & Mohammadzadeh, S. (2013). Genre analysis of literature research article abstracts: A cross-linguistic, cross-cultural study. *Applied Research on English Language, 2*(2), 37-50.

Martin, P. M. (2003). A genre analysis of English and Spanish research paper abstracts in experimental social sciences. *English for Specific Purposes, 22*, 25-43.

Nasseri, D. & Nematollah, B. (2014). A contrastive genre analysis of abstract of master of Arts (MA) theses in Applied Linguistics written by native and non-native speakers of English with respects to moves and move markers. *Indian J.Sci.Res. 7(1),* 1-14.

Paltridge, B. (2007). Approaches to genre in ELT. *International handbook of English language teaching, 15,* 931-943.

Pho, P. D. (2009). An evaluation of three different approaches to the analysis of research article abstracts. *Monash University Linguistics Papers, 6*(2), 11-16.

Samraj, B. (2002). Disciplinary variation in abstracts: The case of wildlife behavior and conservation biology. In J. Flowerdew (Ed.), *Academic discourse* (pp. 105-120).

Samraj, B. (2005). An exploration of a genre set: Research article abstracts and introduction in two disciplines. *English for Specific Purposes, 24*(2)*,* 141-156.

Samraj, B. (2009). *Move structure.* Manuscript submitted for publication.

Santos, M. B. D. (1996). The textual organization of research paper abstracts in applied linguistics. *Text, 16*(4), 481-499.

Swales, J. M. (1981). *Aspects of article introductions.* Birmingham, England: Language Studies Unit, University of Aston.

Swales, J. M. (1990). *Genre analysis: English in academic and research settings.* Cambridge, UK: Cambridge University Press.

Swales, J. M. (2004). *Research genres: Explorations and applications.* Cambridge, UK: Cambridge University Press.

Swales, J. M., & Feak, C. B. (2009). *Abstracts and the writing of abstracts.* Ann Arbor, MI: University of Michigan Press.

Taylor, G., & Chen, T. (1991). Linguistic, cultural, and subcultural issues in contrastive discourse analysis: Anglo-American and Chinese scientific texts. *Applied Linguistics, 12*(3), 319-336.

Van Bonn, S., & Swales, J. M. (2007). English and French journal abstracts in the language sciences: Three exploratory studies. *Journal of English for Academic Purpose, 6*(2), 93-108.