A Comparative Corpus-based Analysis of Genre Specific Discourse: The Quantitative and Qualitative Academic Papers in the Field of the TEFL

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Abstract—This study attempts to analysis the different parts of quantitative and qualitative research articles in the field of TEFL comparatively to present a convenient pattern for novice EFL students or researchers in a non-English context. Benefited from mix method, current study investigated the similarities and differences between the two genres-specific corpora. In order to induce accurate and creditable result, data-analyzing process was implemented through both computer-based programs and hand- tagged analysis. Fifty quantitative and qualitative TEFL research articles from high-ranking ELT journals were selected and then analyzed. Swales CARS model (2004) was considered as a framework of analysis. Moreover, interpreting of obtaining results from the vocabulary profile program, the readability statistics of two corpora, fulfilled through non-parametric Mann-Whitney U test. The conducted results according to significant level of x < 0.5 or x = 0.05 demonstrated that the differences between quantitative and qualitative research articles from lexio-grammatical and rhetorical features were insignificant. On the contrary, move-structure analyzing of both genre indicated that there are some variation between some exercise of move-step structure. These findings may provide confirmatory and useful evidences for academic researchers in the EFL context.

Index Terms—discourse analysis, academic writing, CARS model, qualitative and quantitative articles, TEFL, Mann-Whitney U test

I. Introduction

Academic writing has always been one of the controversial issues in the process of second language learning, especially for novice writers. In spite of many years training in the field of EFL, non-native students confront with a great deal of difficulty in professional writing. As Johns (1997) argued that, "ESL students often fail to recognize and appropriately use the conventions and features of academic written prose". Moreover, recognizing the genre of writing is considered as an essential part of social communication. Therefore, it is worth mentioning that, in the field of rhetoric, one of the most discussed subjects is a genre.

Genre Analysis is known for its various pedagogical implications. For instance, Kay and Dudley-Evans (1998) asserted that genre is a "very powerful pedagogic tool" because it defines the types of discourse that the students need to be able to produce, and it also is considering of social context which can explain "why a discourse is the way it is" (p. 310).

In the last decades, according to Işik Taş (2008, p. 1) "genre has become a widely utilized framework for analyzing the form and function of nonliterary discourse such as the genre specific discourse of research". Genre analyzing from the move structure point of view was introduced by Swales in 1981 to illustrate the rhetorical pattern of research articles (Biber, Connor & Upton, 2007). A rhetorical pattern is a type of organized technique that is used by writers to communicate ideas with the readers of a text. Kanoksilapatham (cited in Biber et.al 2007) expressed that the aim of this pattern is to convey "the communicative purpose of a text by categorizing the various discourse units within the text according to their communicative purposes or rhetorical moves. Thus, a move can be defined as "a section of a text that performs a specific communicative function" (cited in Biber, Connor &Upton, 2007, p. 23).

Swales (2004) interpreted genre as 'Genre network' that is "in fact the overall frame that can also capture other concepts within a genre constellation: genre chains, genre hierarchies and genre sets" (Cited in Işik Taş, 2008, p, 1). Swale (2004) stated that in the research world, "genres form intertextual relationships with other genres. In addition, he points out that presentation can lead to research articles, but just as likely, research articles can lead to presentations".

As pointed out by Kanoksilapatham (2007), "A closer examination of Swales' move structure, or framework, for these introductions helps elucidate the interaction between moves and steps in performing communicative functions in scientific texts" (cited in Biber, Connor &Upton, 2007, p. 25). Swales' three-move schema or move – structure pattern

for article introductions is known as the Create a Research Space (CARS) model. Genre specific analyzing of the move-structures between qualitative and quantitative research articles in the field of TEFL is the central issue of this study.

Many novice EFL students endeavor to formulate their thoughts and research onto paper in readable text. Writing a research paper seems to be challengeable issue for non-native students, especially when they have been requested to publish their papers on high impact-factors journals. Choosing the method of collecting data is also another issue. There has been an inconclusive debate about whether qualitative or quantitative method would be preferred. The best reason why this remains unresolved until now is that, each method has its own strengths and weaknesses that actually vary depending upon the topic the researchers want to discuss. Obviously, academic writing is considerate as an influential skill within the acquisition of a second language. As noted by Lea and Street (1998) "Tertiary or higher education involves adapting to new ways of understanding, interpreting and organizing knowledge" (p. 158).

The present study seeks to fill the research gaps by exploring the lexio-grammtical, discoursal and rhetorical features of abstract, introduction, result and discussion, and conclusion sections of qualitative and quantitative research articles in the field of TEFL. Having suitable pattern in writing an article can be considered as a prominent factor in the process of conveying the rationale behind of a text. As mentioned by Gosden (1995) "this procedure might be particularly crucial for non English-speaking academic writers, since they must deal with both apprenticeship as novices in their fields of academic research and the challenge of a new genre" (p. 39).

In the present study, the major issue under scrutiny is recognizing the similarities and differences between the move structure, lexico- grammatical feature of quantitative and qualitative research articles in TEFL. This present study also aims to provide empirical-basis evidences for non-English students who confront with a great deal of difficulty in academic writing. Four important elements of research article structure were selected for the purpose of consideration. The significance of this study was an investigation about the lexio-grammatical, discoursal and rhetorical features of text production in order to yield valuable insights for practitioners and researchers on how non-native undergraduates to utilize rhetorical features.

Research questions and hypothesis

The following questions and hypothesis were the major issue of the present study to be explored:

Research question 1: What is the Genre – Specific feature of different parts of the qualitative and quantitative research articles in the field of TEFL?

Research question 2: What is the lexico- grammatical feature of the qualitative and quantitative research articles in the field of TEFL?

Research question 3: What is the move structure of different parts of the qualitative and quantitative research articles in the case of TEFL?

Null hypothesis (H0): there is not any difference or similarity between these two disciplines and field of study in terms of move structure.

II. Theoritical and Research Background

Genre was first introduced in the area of ESP in the 1980s. Various influences on Genre Analysis have been provided by scholars, namely the examination of children's writings in Australia, composition studies and new rhetoric in North America, and also Miller's (as cited in Paltridge, 2007, p. 931) notion of "genre as social action". For Swales (1990, p. 58), a genre "comprises a class of communicative events, the members of which share some set of communicative purposes." In other words, particular genres share similarities in their structure, style, content, intended audience, and rhetorical movement.

Genres, as perceived in linguistic approaches, are characterized in terms of communicative functions they serve, and can be analyzed into "generic structures" (Flowerdew & Dudley-Evans, 2002) or obligatory and optional elements which comprise these functions. Swales (1990) classified these elements as follows:

A. Moves

Moves represent the writer's social purpose and include *steps*. Move is defined by Nwogu (1997) as "a text segment made up of a bundle of linguistic features which give the segment a uniform orientation and signal the content of discourse in it" (p. 122).

B. Steps

Steps are optional textual elements, which may or may not exist in any specific text.

Due to the importance of analyzing discourse, there have been abundant studies on various disciplines of the research articles, thesis, PhD dissertations, etc. One of the most extensive corpus-based genre analysis studies were held by Biber in 1988. In this study, Biber (1988) provided a unified linguistic analysis of the whole range of spoken and written registers in English. Computational analysis of the linguistic characteristics of 23 spoken and written genres resulted in the identification of the basic, underlying dimensions or parameters of variation in spoken and written English.

Salager-Meyer (1992) utilized a corpus of 84 medical English abstracts written by native speakers of English to consider the verb tense and modality usage in these abstracts. The three main genres were research papers, case reports

and review articles. In addition, in order to analyze how the meaning conveyed by the different tenses and modal verbs, the study also involved a move analysis.

Brett (2002) analyzed a corpus of 20 research articles from the discipline of sociology to present a provisional, pedagogically usable description of the communicative categories or moves found in the "results" sections. In this study, these categories or moves were described in terms of function, lexis, and grammatical form.

Hyland (2004) examined the purposes and distributions of meta-discourse in a corpus of 240 doctoral and masters dissertations including four million words written by Hong Kong students. The analysis suggested how academic writers used language to offer a valuable representation of themselves and their work in different fields, and thus how meta-discourse could be seen as a means of detecting something of the rhetorical and social differentiation of disciplinary communities

Öztürk (2007) investigated the degree of variability in the structure of article introductions within a single discipline. The study analyzed a corpus of 20 research articles to reveal the differences between two sub disciplines of applied linguistics, namely second language acquisition and second language writing research, within the framework of Swales' CARS model. The two disciplines seemed to employ different and almost unrelated move structures. In the second language acquisition, corpus one type of move structure was predominant while in the second language writing corpus two different types of move structure were almost equally frequent.

Eda Işik Taş (2008) explored 50 PhD theses and research article introductions, in order to find out what are the move- structures, lexio-grammatical, and discoursal features, differences between those corpora. Consequently, she concluded that "the language of the RA introductions was structurally more academic, lexically dense, and thus, more difficult to read compared to the PhDT introductions".

III. METHODOLOGY

A. Data

The data in this study were genre specific corpora: the qualitative and quantitative academic writing in TEFL. The analyses included computer- supported and hand-tagged analysis of these two corpora. The 204175 words as a corpus of the research articles were utilized as the reference corpus in this study. The data in this study comprised 50 research articles published between the years 2012 and 2016 by nonnative English speaking TEFL researchers of different nationalities in major academic journals. For accurate and faultless investigating purpose, the journals were chosen according to their impact factor and their field of this study. (See Appendix A for the list of the qualitative and quantitative research articles included in the corpus).

B. Instruments and Materials

The fifty qualitative and quantitative research articles in this study selected from different TEFL journals. The criteria to accomplish this issue were the journals' impact factor and their field of studies.

The data were analyzed in two stages. The first stage was the computer-supported analysis of the lexico-grammatical features of the qualitative and quantitative research articles. In the second stage, a hand-tagged analysis of the discoursal and rhetorical features of the texts was carried out. Computer supported analysis of selected texts accomplished through Ant mover1.0 software (a text structure analyzer software program developed by Laurence Anthony of Waseda University Japan), Web VP Classic version 4 (a vocabulary profiling software developed by Tom Cobb of the University of Quebec). In addition, Easy PDF to Word Converter version 2.0 program were utilized in order to convert research articles to *txt* files and made it possible to analysis by ant mover software. Moreover, the readability statistics of the corpora were obtained by using the readability analysis feature of the Microsoft Word Program.

IV. RESULTS AND DISCUSSION

A. Data Analysis

In this study, the data collected and then processed in response to the questions posed in the introduction section of this study. This study considered the lexio-grammatical, discoursal, and rhetorical features of the two corpora.

Lexico-Grammatical Features of the qualitative and quantitative Research Article (RA) abstracts

According to the statistical facts, it is conspicuous that qualitative RA abstracts 1.62 in comparing to the quantitative RA abstracts 1.79 were *Exact Sig. / p* = 0.015 were different in tokens per type. The qualitative RA abstracts 1.11 contained *Exact. Sig. / p* = 0.25 nearly the same amount of types per family in comparison with the quantitative RA abstracts 1.13. In addition, the lexical densities (content words) of the quantitative RAs 0.64 abstracts were not as much as different *Exact Sig. / p* = 0.33 in compare to the qualitative RAs 0.63. Therefore, analyzing findings of qualitative and quantitative abstracts represented that the researchers of those papers utilized the same amount of corpora in compare to each other.

Vocabulary Profile of the quantitative and qualitative RA abstracts

According to perceived facts, it is found that *P*-value *Exact* Sig. 0.17 of K1 words in quantitative abstracts 67.31 compared to qualitative abstracts 68.83 were insignificant in an arithmetic expression. Moreover, K_2 words in both quantitative 5.35 and qualitative abstracts (5.18) indicated that the authors of these academic writings benefited from

the similar set of most used lexical resources; *P-value* was equal to 0.97. Academic words (AWL words) and Off-list words were the other subjects that were considered then. As result suggested, quantitative AWL words 13.56 and qualitative AWL words 14.90 P-value is equated with *Exact* Sig. = 0.21. Therefore, it can be induced that the authors of research articles on both methods are interested in using words that are more academic in compare to K2 and off-list words similarly.

Readability Statistics of the quantitative and qualitative research article abstracts

In concerning the readability of the texts, the results *Exact Sig. / p* = 0.084 revealed that both qualitative 6.0 and quantitative 7.12 RA abstracts included approximately similar number of sentences per paragraph in comparing to each other. In addition, the average number of words per sentence was not significantly *Exact Sig. / p* = 0.52 different 27.32 in the quantitative RA abstracts compared with the number of words per sentence in the qualitative RA abstracts 28.19. Over and above that, the average number of characters per word, which was 5.76 for the quantitative RA abstracts, was 5.75 for the qualitative RA abstracts. This difference was also found to be insignificant *Exact Sig. / p* = 0.84. Furthermore, the number of passive sentences was significantly *Exact Sig. / p* = 0.068 different in both quantitative RA abstracts 32.28% compared to qualitative RAs abstracts 22.64%. These findings revealed that the qualitative RAs and quantitative RAs abstracts included similar level of paragraphs, and words compared to each other.   Lastly, the Flesch Reading Ease results was found to be similar *Exact Sig. / p* = 0.69 for the quantitative RA abstracts 19.65, compared to the qualitative RA abstracts 20.51, which means that both qualitative and quantitative RAs abstracts in this study were at the same level of difficulty to read.

Move Structure of the qualitative and quantitative RA Abstracts

In order to clarify the details of using the move structure pattern in quantitative and qualitative papers, all of the papers were scrutinized. According to Move-Step Structure patterns (CARS Model), it is revealed that the three moves in the CARS Model namely, M_1, M_2 and M_3 occurred in approximately all of the 50 qualitative and quantitative research articles.

Obtained results suggested that about twenty-one papers out of 50 papers benefited from M_1S_2 pattern. In addition, M_3S_2, M3S1b, and M_3S_3 patterns of structure were the most utilized template in all of the qualitative and quantitative papers. Moreover, the most commonly preferred move-structures combination in the qualitative and quantitative RA abstracts was M1-M3. In comparing Quantitative research articles abstract, qualitative research articles authors were more interested to use a M1S3 move structure pattern. This indicated that those authors reviewed more items from previous researches than quantitative articles' author did. Alternatively, quantitative research articles, authors utilized more M3S4 patterns compare to qualitative research articles. Using M3S4 pattern implies that those researcher evaluated research articles numerical findings. Using M_1-M_2-M_3 pattern of the CARS Model indicates that, the researchers utilized Swales move structure pattern respectively. By "establishing territory" (M_1), they aimed to state that how the topic is useful, significant, and relevant. They also made a topic generalization in order to concern the current state of knowledge and description of phenomena. By referring to other investigators through providing citations, they reviewed other items in previous research. In the second move (M_2) of the M_1-M_2-M_3 pattern, "establishing the niche", the authors provide a research space for their studies by either counter claiming in their field of study (M_2S_{1a}), by indicating a gap (M_2S_{1b}), by making question (M_2S_{1c}), or by continuing a tradition (M_2S_{1d}) in their own research study.

Finally, on the third move (M_3) of the M_1-M_2-M_3 pattern, the authors present their work by occupying the niche. In this move, they aimed to represent their research outline, clarify certain terms, announce current research purposes, state the value of their research descriptively and outline the structure of the paper. According to the obtained results, M1S1 pattern occurred 9 times on qualitative RAs and only once on quantitative RAs. M1S2 pattern was equal to 10 on quantitative RAs abstracts and it was 11 on qualitative research article abstracts. The amount of M1S3 move structure patterns of quantitative and qualitative RAs abstracts was equal to 6 and 4 respectively. This indicated that quantitative RAs authors have referred more frequently to previous investigators' works than qualitative authors have. In "establishing niche", both quantitative and qualitative research article writers benefited almost the same amount of move-structure patterns. After establishing territory and a niche, the researchers have revealed their solution in responding to already mentioned move structures pattern on this stage. M3S1a pattern perceived totally 5 times on both quantitative and qualitative papers. M3S1b pattern, the most commonly preferred combination, was utilized 19and 23 on qualitative and quantitative RAs abstracts respectively. The next common pattern was M3S2 that occurred 44 times on both QN and QL research article abstracts totally. M_3S_3 was also another most used pattern; according to the results qualitative RAs authors' abstract (M3S3 pattern = 14) in comparison with quantitative RAs authors have employed more M3S3 move-structure pattern (M3S3= 20). M3S4 move structure pattern of quantitative and qualitative RAs abstract was equal to 16 and 11. These results indicated that quantitative authors preferred to evaluate the outcomes more descriptively.

Lexico-Grammatical Features of the qualitative and quantitative Research Articles (RAs) introductions

Concerning the qualitative RA introductions tokens per type 2.13 the quantitative RA introductions 2.02 was *Exact Sig. / p* = 0.21 statistically insignificant. In addition, the qualitative RA introductions contained *Exact Sig. / p* =0.13 nearly the same amount of types per family 1.18 in compare to the quantitative RA introductions 1.16. In addition, the lexical density of the quantitative RAs 0.63 introductions were significant *Exact Sig. / p* =0.07 compared to the

qualitative RAs 0.61. The findings indicated that the authors of the quantitative and qualitative RA introductions utilized almost lexical dense vocabulary in compare to each other's.

Vocabulary Profile of the quantitative and qualitative RAs introductions

According to the perceived findings the vocabulary profiling of the introductory sections of the two corpora revealed that quantitative 69.09 and qualitative 72.37 RAs introductions contained significantly *Exact Sig. / p* = 0.12 the same amount of k1words. This outcome also was true for K2 number of words in both quantitative (4.3) and qualitative (4.6). In other words significance level of K2 words was equal to *Exact Sig. / p* = 0.77. Moreover, in comparing AWL words in quantitative 13.21 and qualitative 11.35 introduction parts, the result *Exact Sig. / p* = 0.79 indicated that there is not any difference between those parts, and they are significantly similar. The results indicated that the authors of the qualitative quantitative RAs employed the similar amount of K1, K2, and AWL words.

Readability Statistics of the quantitative and qualitative research article introductions

In concerning the readability of the texts, obtained result *Exact Sig. / p* = 0.64 indicated that both qualitative 6.2 and quantitative 6.9 RA introductions included a similar number of sentences per paragraph in compare to each other. In addition, the average number of words per sentence was remarkably similar *Exact Sig. / p* = 0.38   in the quantitative RA introductions 23.8, compared to the number of words per sentence in the qualitative RA introductions 26.9. Moreover, the average number of characters per word, which was 5.6 for the quantitative RA introductions, was 5.7 for the qualitative RA introductions. This similarity was also found to be salient *Exact Sig. / p* = 0.89. Lastly, the number of passive structures was nearly *Exact Sig. / p* = 0.70 in the same level in both quantitative RA introductions 23.4% and qualitative RA introductions 21.4%. The findings revealed that the qualitative RAs and quantitative RAs introductions included similar level of passive sentences, sentences per paragraphs, character per sentences and words compared to each other. Besides, the Flesch Reading Ease was found to be similar *Exact Sig. / p* = 0.80 for the quantitative RA introductions 25.0, compared to the qualitative RA introductions 21.8, which means that both qualitative and quantitative RA introductions in this study were at the same level of difficulty to read.

Move Structure of the qualitative (QL) and quantitative (QN) RAs introductions

According to perceived Move-Step Structure patterns (CARS Model) on qualitative and quantitative RAs introductions, it is revealed that about forty-seven papers out of 50 papers benefited from M_1S_3 pattern. These results indicated that, almost all of the authors interested to state their essay structures on the opening part of their article. The remaining parts of RAs introduction included a variety of move- structure combinations with pattern cycling. For instance, M1-M3-M1-M3 was occurred in nearly all of the articles. The number of move units in the M3S2 pattern of the quantitative and qualitative papers was equal to six. This indicates that research articles authors have a low tendency to discuss about the result of the research articles in the introduction section. In addition, M_3S_3 and M_2S_{1b} patterns of structure were the most utilized template in all of the qualitative and quantitative papers. Moreover, another most common structure in the qualitative and quantitative RA introductions was $M_3S_{1b.}$

Lexico-Grammatical Features of the qualitative and quantitative Research Articles results and discussions

The obtained results from this section represented that both the qualitative RAs result and discussion section 3.80 and the quantitative RAs result and discussion section 4.13 were statistically similar in tokens per type *Exact Sig. / p* = 0.52. Therewith, analyzing of result and discussion sections of quantitative and qualitative research article types per family displayed that, the qualitative RAs result and discussion 1.39 contained nearly the similar amount of types per family *Exact. Sig. / p* =0.21 in comparison with the quantitative RAs result and discussion 1.36. Considering the lexical density of the quantitative RAs 0.59 results and discussion were prominently different E*xact Sig. / p* = 0.00 compared to the qualitative RAs 0.55. In sum, the authors of the quantitative RA result and discussion utilized significantly different sets of the lexicon in compare to authors of qualitative RAs.

Vocabulary Profile of the quantitative and qualitative RAs results and discussions

The vocabulary profiling of the two corpora revealed that qualitative RAs results and discussions 76.47 contained significantly *Exact Sig. / p* = 0.003 the different number of K1words, compared to the quantitative results and discussions 72.34. The number of K2 words was nearly at the same level *Exact Sig. / p* = 0.55 on the quantitative RA results and discussions 4.82 compared to the qualitative RAs 4.50. However, the number of AWL words was significantly different *Exact. Sig. / p* = 0.003 for the quantitative RAs result and discussion 11.55, than for the qualitative RA results and discussions 9.42. These findings indicated that the authors of the qualitative RA results and discussions tended to use frequently more K1 words than K2 and the author of the quantitative writing utilized more academic words (AWL words) compared to the authors of the qualitative RAs.

Readability Statistics of the quantitative and qualitative research articles results and discussions

The readability analyzing of the qualitative 5.9 and quantitative 6.2 RAs result and discussion indicated that, both of those research articles result and discussion authors used similar number of sentences per paragraph in compare to each other *Exact. Sig. / p* = 0.77. Moreover, the average number of words per sentence was significantly *Exact Sig. / p* = 0.060 different 25.1 in the quantitative RAs result and discussion, compared to the number of words per sentence in the qualitative RAs result and discussion 23.6. In addition, the average number of characters per word, which was 5.2 for the quantitative RAs result and discussion, was 4.6 for the qualitative RAs result and discussion. This similarity was also found to be insignificant *Exact Sig. / p* = 0.77. Lastly, the number of passive structures was significantly *Exact Sig. / p* = 0.91 in the same level in both quantitative RAs result and discussion 18.4% and qualitative RAs result and

discussion 15.4%. These findings revealed that the qualitative RAs and the quantitative RAs result and discussion included similar level of passive structures, paragraphs, compared to each other. Thus, the Flesch Reading Ease was found to be similar *Exact Sig. / p* = 0.37 for the quantitative RAs result and discussion 33.08, compared to the qualitative RAs result and discussion 34.22, which means that both qualitative and quantitative RAs result and discussion in this study were at the same level of difficulty to read.

Move Structure of the qualitative and quantitative RAs results and discussions

As was expected, the most commonly used Move-Step structure pattern in this section was M3S2 pattern. The general move-structure pattern here was M3M1M2M3M1M3. Other obtained results were as follow: the number of move units of M_1S_1 pattern was equal to 3. In addition, the number of M_1S_2 pattern was equal to 8 on qualitative research article and 5 on quantitative articles. This indicated that qualitative RAs authors referred to previous research more than quantitative authors did. Another most commonly used sketch was M_2S_{1b} this mean that the authors of both qualitative and quantitative articles filled the gaps with clarifying expressions. In order to outline the niche, researchers utilized 25 instances of M3S1b pattern, 25 instances of M3S3pattern, and 58 instances of M3S4 pattern respectively. Findings showed that M3S4 move structure pattern existed approximately on most of the quantitative research articles in comparison with qualitative articles. This can be interpreted as quantitative authors were interested to demonstrate their results descriptively.

Lexico-Grammatical Features of the qualitative and quantitative Research Articles (RAs) Conclusions

In compare to the qualitative RA conclusions 1.96, the quantitative RA conclusions 2.17 were statistically insignificant *Exact. Sig. / p* = 0.16 in tokens per type. In addition, the quantitative RA conclusions 1.19 contained different amount of types per family *Exact. Sig. / p* =0.027 in compare to the qualitative RA conclusions 1.16. In addition, the lexical density of the quantitative RAs conclusions 0.60 was not much different *Exact Sig. / p* = 0.44 compared to the qualitative RAs 0.59. These outcomes indicated that the authors of the quantitative and qualitative RA conclusions benefited from almost the same set of lexicon in compare to each other's.

Vocabulary Profile of the quantitative and qualitative RAs conclusions

The vocabulary profiling of the two corpora revealed that quantitative RAs conclusions 72.13 contained significantly *Exact. Sig. / p* = 0.56 the same amount of K1 words, compared with the qualitative conclusions 72.63. Moreover, the number of K2 words was also nearly *Exact Sig. / p* = 0.16 similar in the quantitative RA conclusions 4.39, compared to the qualitative RA 5.06. These outcomes also were true for the number of AWL words *Exact Sig. / p* = 0.91 in both quantitative RA conclusions 12.64 and qualitative RA conclusions 12.78. These results indicated that the authors of the quantitative and qualitative RA conclusions utilized the same number of content and academic words.

Readability Statistics of the quantitative and qualitative research articles conclusions

Obtained result from readability statistics of the texts demonstrated this fact that *Exact Sig. / p* = 0.36 both qualitative 6.31 and quantitative 5.78 RA conclusions included a similar number of sentences per paragraph in comparing to each other. Moreover, the average number of words per sentence was not significantly different *Exact Sig. / p* = 0.45 in the quantitative RA conclusions 27.46, compared to the number of words per sentence in the qualitative RA conclusions 27.32. In addition, the average number of characters per word, which was 5.57 for the qualitative RA conclusions, was 5.49 for the quantitative RA conclusions. This similarity was also found to be insignificant *Exact Sig. / p* = 0.41. Lastly, the number of passive structures was significantly in the same level *Exact Sig. / p* = 0.22 in both qualitative RA conclusions 21.9% and quantitative RAs conclusions 19.84%. These findings revealed that the qualitative RAs and quantitative RAs conclusions included similar level of passive structures, paragraphs, sentences and words compared to each other. The Flesch Reading Ease was also found to be similar *Exact Sig. / p* = 0.57 on the qualitative RA conclusions 26.57, compared to the quantitative RA conclusions 26.08, which means that both qualitative and quantitative RAs conclusions in this study were at the same level of difficulty to read.

Move Structure of the qualitative and quantitative RAs conclusions

The most commonly existed patterns in the conclusion part of research articles were M1S2 and M3S2. On the other hand, the most general move-structure pattern was M1M3-M3M1 in the cycling manner. Total result showed that M2S1a exercise (claiming centrality) was dispreferred option in both corpora. Further analysis of the moves of two corpora revealed that two genres shared a number of similarities in the use of steps. For instance, the number of move units of M3S4 pattern was the same and it was equal to 93.

V. CONCLUSION, PEDAGOGICAL IMPLICATIONS AND FUTURE STUDIES

A comparative corpus-based analysis of genre specific discourse is a very common practice. Swales (2004) "emphasizes the shift in the definition of the genre from a static entity towards a dynamic entity by introducing the concept of genre networks". As Işik Taş (2008) stated "writing a research article is not an easy task for novice researchers, who begin their study as outsiders in the academic community". The focus of this study was specifically the abstract, introduction, result and discussion, and conclusion parts of the quantitative and qualitative research articles, in order to provide a general template for novice scholars who are interested to study meticulously in the TEFL domain. These are the most challengeable area for the academic writers who are addressed to choose one of those data collecting methods to study. Opening sentence for abstract part should be appealing enough in order to provoke readers. In addition, the abstract section should be compendious and profound enough to convey the purpose of the study. The

introduction part of research does not have a word limit unlike abstract sections, but it should be as concise as possible to inform readers about the rationale behind the study. Result and discussion part of research article was another part that was under consideration in this study. Obviously, the writers in this part present their assumed results and their interpretations respectively. Lastly, conclusion, which is concerned as a closure of research, provides a final perspective on the topic to the readers. This study employed both qualitative and quantitative approaches, comprising fifty papers from high impact factor language and linguistic magazines to do provide valuable evidences for the future researchers and novice practitioners.

Further analyses of two corpora from discoursal and rhetorical aspects revealed that the authors of qualitative articles due to applying M3S1 pattern were more interested to refer to previous research than the quantitative authors were. On the other hand, the quantitative article's authors were more interested to use the M3S4 move- structure pattern to indicate their findings numerically in compare to qualitative article authors were. In order to indicate the uniqueness of the papers, both qualitative and quantitative papers' authors used self-mention phrases in their papers. This strategy interpreted as self-promotional strategies by Harwood (2005).The results of Mann Whitney non-parametric U test as well as other statistical procedure revealed that, except for some variation on the move- structure pattern on both corpora, the differences of lexio-grammatical and rhetorical features of qualitative and quantitative research articles were insignificant. In spite of time-consuming procedure of this study, the findings of this study can be useful for non-English novice researchers who would like to publish their papers in the high impact academic journals.

Further studies should be undertaken in the following areas: language and linguistic field, English language literature thesis and research articles, English for academic or specific purpose (EAP/ESP), other abundant area of second language learning as well as non-English fields of study.

APPENDIX A. LIST OF QUALITATIVE AND QUANTITATIVE RESEARCH ARTICLES

List of Qualitative Research Articles Corpus

RA 1. Abukhadrah, Q. A. (2015). The difficulties of learning English as perceived by a group of international students: A case study. *International Journal of English Language Teaching, 3*(8), 40-48.

RA 2. Ahmadi, P., & Samad, A. A. (2015). Oral Academic Discourse Socialization of In-Service Teachers in a TEFL Program. *English Language Teaching,8*(4). doi:10.5539/elt.v8n4p97

RA 3. Al Khaiyali, A. (2013). Comprehension strategy instruction in language learning classrooms selecting and using childerns'picture books for explicit reading comprehension instruction. *International Journal of English Language Teaching, 1*(2), 1-16.

RA 4. Amara, T. M. (2015). Learners'' perception of teacher written feedback commentary in an ESL writing classroom. *International Journal of English Language Teaching, 3*(2), 38-53.

RA 5. Arnó-Macià, E., & Mancho-Barés, G. (2015). The role of content and language in content and language integrated learning (CLIL) at university: Challenges and implications for ESP. *English for Specific Purposes, 37*, 63-73.

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List of Abbreviations

AWL: Academic Word List of Coxhead (2000)

CARS: Create a Research Space

K1: Most frequent first 1000 words in the BNC (British National Corpus)

K2: Most frequent second 1000 words in the BNC

QN: Quantitative

QL: Qualitative

RA: Research Articles

TEFL: Teaching English as a Foreign Language

APPENDIX B. SAMPLE MOVE-STRUCTURE PATTERN (RAs ABSTRACTS)

Quantitative RAs Abstract	The Move and Step Patterns	Number of move units
RA 1	$[M_1S_2- M_3S_3 - M_3S_2- M_3S_4]$	4
RA 2	$[M_3S_{1b} - M_2S_{1a} - M_3S_{1a} - M_3S_2]$	4
RA 3	$[M_3S_{1b}- M_3S_3- M_3S_4- M_3S_2]$	4
RA 4	$[M_3S_{1b}- M_3S_3- M_1S_2 - M_3S_3]$	4
RA 5	$[M_3S_{1b}- M_3S_3- M_3S_2]$	3
RA 6	$[M_3S_{1b}- M_3S_3- M_3S_2- M_3S_4]$	4
RA 7	$[M_1S_2- M_3S_{1a}- M_3S_3- M_3S_2 - M_3S_4]$	5
RA 8	$[M_1S_2- M_2S_{1a} -M_3S_{1b}- M_3S_3- M_3S_2]$	5
RA 9	$[M_3S_{1b} -M_3S_3- M_3S_2]$	3
RA 10	$[M_1S_2- M_1S_3 -M_2S_{1b} - M_3S_{1b}- M_3S_2- M_3S_4]$	6
RA 11	$[M_1S_2- M_3S_{1b} - M_3S_3- M_3S_2- M_3S_4]$	5
RA 12	$[M_2S_{1b}- M_3S_{1b}- M_3S_2- M_3S_4]$	4
RA 13	$[M_3S_{1b}- M_3S_3 - M_3S_2- M_3S_4]$	4
RA 14	$[M_3S_{1b}- M_1S_3 - M_3S_{1b} - M_3S_3 - M_3S_2]$	5
RA 15	$[M_1S_2- M_3S_{1b}- M_3S_3 - M_3S_4]$	4
RA 16	$[M_1S_2- M_3S_{1b} - M_3S_3 -M_3S_2 - M_3S_4]$	5
RA 17	$[M_1S_2- M_3S_{1b} -M_3S_3 - M_3S_2 - M_3S_4]$	5
RA 18	$[M_1S_2- M_2S_{1b} -M_3S_{1b} - M_3S_2]$	4
RA 19	$[M_1S_1- M_3S_{1b}- M_3S_3 - M_3S_2 - M_3S_4]$	5
RA 20	$[M_3S_{1b}- M_3S_3 -M_3S_2 -M_1S_3]$	4
RA 21	$[M_3S_{1b} -M_3S_3 -M_3S_2 - M_3S_4]$	4
RA 22	$[M_1S_3- M_3S_3 -M_3S_2]$	3
RA 23	$[M_1S_2 -M_2S_{1b} -M_3S_{1b} - M_3S_3 - M_3S_2 - M_3S_4]$	6
RA 24	$[M_3S_{1b}- M_3S_2- M_3S_2 - M_2S_{1b} - M_3S_2 - M_3S_4]$	6
RA 25	$[M_2S_{1b}- M_3S_{1b} -M_3S_2 -M_3S_4]$	4

Qualitative RAs Abstracts	The Move and Step Patterns	Number of move units
RA 1	[M_3S_{1b}- M_1S_2 - M_3S_4]	3
RA 2	[M_3S_{1b}-M_3S_3-M_3S_2]	3
RA 3	[M_1S_1- M_3S_2 - M_3S_{1b}-M_3S_2- M_3S_{1b}-M_3S_2]	6
RA 4	[M_2S_{1b}- M_3S_{1b} - M_3S_2-M_3S_4]	4
RA 5	[M_1S_1-M_2S_{1b}-M_3S_1-M_3S_3-M_3S_2-M_3S_4]	6
RA 6	[M_3S_{1b}- M_1S_2-M_2S_{1b}-M_3S_{1a}]	4
RA 7	[M_1S_1- M_1S_2- M_2S_{1b}- M_3S_{1a}- M_3S_4-M_3S_2]	6
RA 8	[M_1S_1- M_2S_{1b}- M_3S_2 - M_3S_4]	4
RA 9	[M_3S_{1b}- M_3S_3- M_3S_2- M_3S_3]	4
RA 10	[M_1S_2- M_3S_3- M_3S_2- M_3S_4]	4
RA 11	[M_1S_1- M_3S_{1b}- M_3S_2-M_3S_4]	4
RA 12	[M_1S_3- M_3S_2 M_3S_3]	3
RA 13	[M_3S_{1b}- M_3S_3-M_3S_2]	3
RA 14	[M_1S_2- M_3S_{1b}-M_3S_3- M_3S_2-M_3S_4]	5
RA 15	[M_1S_2- M_1S_3- M_3S_3- M_3S_2- M_1S_3]	5
RA 16	[M_1S_2- M_3S_{1b}-M_3S_4]	3
RA 17	[M_1S_2- M_3S_{1b}- M_3S_2]	3
RA 18	[M_1S_1- M_3S_{1b}]	2
RA 19	[M_1S_3- M_3S_{1b}- M_3S_3- M_3S_2- M_3S_4]	5
RA 20	[M_3S_{1b}- M_3S_3- M_3S_2]	3
RA 21	[M_1S_1- M_3S_{1b}- M_3S_3- M_3S_2- M_3S_4]	5
RA 22	[M_1S_1- M_3S_3 -M_3S_{1a}- M_3S_2]	4
RA 23	[M_3S_{1b}-M_1S_1 -M_3S_3- M_3S_2]	4
RA 24	[M_1S_2- M_2S_{1b}-M_3S_{1b}]	3
RA 25	[M_1S_2-M_2S_{1b}-M_1S_3 -M_3S_{1b}]	4

APPENDIX C. SAMPLE STATISTICS RESULTS

Vocabulary profiling analyzing through SPSS software (QN and QLconclusion parts)
Academic Words(AWL)

Test Statistics[a]

	AWL
Mann-Whitney U	306.500
Wilcoxon W	631.500
Exact Sig. (2-tailed)	.912
Exact Sig. (1-tailed)	.456
Point Probability	.004

a. Grouping Variable: G7

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
AWL	50	12.7126	3.13247	6.61	20.19
G7	50	1.5000	.50508	1.00	2.00

Readability analyzing samples of conclusion part (Passive Sentences/ PS)
Passive sentences

Test Statistics[a]

	ps
Mann-Whitney U	249.000
Wilcoxon W	574.000
Exact Sig. (2-tailed)	.221
Exact Sig. (1-tailed)	.111
Point Probability	.002

a. Grouping Variable: g4

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Ps	50	.3007	.16447	.10	.80
g4	50	1.5000	.50508	1.00	2.00

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