

A Genre Analysis of Research Article Abstracts in

English for Specific Purposes Journal

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Abstract

The purpose of this paper is to analyze and compare the rhetorical structure of research article abstracts published in *The ESP Journal* 27 years ago with those published in this journal in 2007. The structural units that constitute the macrostructure of these abstracts are identified following Martin (2003). The results indicate that there are similarities between both groups of abstracts as they present the four basic structural units that constitute different sections of a research article. However, some differences were also observed between the two groups of abstracts. The author has tried to account for these differences in the conclusion section of the article.

1. Introduction

One of the most famous ways to communicate new knowledge to other members of an academic community is writing and publishing research articles. There are established discourse conventions in all academic communities and one criterion for a writer to be considered as a member of a discourse community is to follow those conventions in writing research articles. There are a number of guidebooks and manuals on how to write research, but the fact is that very few of these explain satisfactorily the structural organization and the main linguistic features of these genres. However, recently, under the influence of pioneers like Swales, Halliday, Widdowson, etc., there has been an interest among researchers to study and analyze the rhetorical structure of various academic genres. Connor & Mauranen (1999), for example, focused on the generic structure of grant

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proposals, and the generic structures of sales promotion letters, job application letters, and legislative documents have been analyzed by Bhatia (1993).

Since 1990, specifically after Swales published his "Genre Analysis", many researchers have been busy identifying the generic structure of various sections of a research article. The main focus has been on the Introduction unit (e.g. Swales, 1990) although the other sections like the Results unit (e.g. Brett, 1994; Williams, 1999) and the Conclusion unit (e.g. Holmes, 1997; Hopkins and Dudley-Evans, 1998) have also attracted considerable attention. Among other influential studies I can mention Ozturk (2007) who focuses on the introduction section of research articles published in two related fields, and Samraj (2005) who explores the relationship between research article abstracts and introductions (a genre set) in two disciplines.

Swales, in his 1990 CARS model, states that a research article is composed of four major sections: Introduction, Method, Results, Conclusion (discussion). What is surprising is that the very beginning unit of any research article, i.e. abstract, is ignored in the third part of his book which is about one third of the whole book and in which the generic structure of research articles is fully explained and discussed. However the first five pages of the next chapter of this book is devoted to a very superficial analysis of abstracts. Even the title of this chapter "*Observations on other research-process genres*" indicates that Swales does not consider abstract as an integral part of any research article.

However research article abstracts have an important role in scientific communities. The major function of research article abstract is to inform the reader about the content of the article (the purpose of the study, the way the research was carried out, the results, and the conclusions) in a very short period of time. As a result, writers have to be familiar with the rhetorical organization and the main linguistic features of a good research article abstract if they want to successfully write and publish in their academic community.

Among the studies in which the rhetorical structure of research article abstracts has been investigated the following can be mentioned: Cross and Oppenheim (2006) analyze the generic structure of scientific research article abstracts and Stotesbury (2003) focuses on an element, evaluation, in research article abstracts written in the

narrative and hard sciences. An analysis of the generic structure of medical abstracts is the topic of Anderson and Mclean (1997) article and Martin (2003) compares the rhetorical structure of research article abstracts published in English and Spanish journals. However, it seems no one has compared the rhetorical structure of research article abstracts written in one particular field over a period of time.

The primary purpose of this study is to investigate and compare the rhetorical structure of research article abstracts published in *English for Specific Purposes* journal 27 years ago with the abstracts which are going to be published in this journal in 2007, with the aim of identifying the structural and linguistic similarities and differences between these two groups of abstracts.

2. Methodology

2.1. The corpus

Since I wanted to compare the rhetorical structure of research article abstracts written in one single field at the beginning of the development of that field with the rhetorical organization of research article abstracts published in the same field these days, I selected the ESP field and, consequently *the ESP journal* from which to select my corpus.

In the present study a total number of twenty research article abstracts were used. The corpus is divided to two groups of abstracts: group 1 consists of 10 research article abstracts published in the first volumes and/or issues of *The English for Specific Purposes Journal* 27 years ago. These abstracts were published in volume I, issue 1: Autumn 1980; volume I, issue 2: Spring 1981; volume V, issue 1: 1986; volume V, issue 2: 1986. The research article abstracts in the second group were the abstracts in press in *The ESP journal*. Therefore, the final corpus consisted of 10 research article abstracts published in *The English for Specific Purposes Journal* in 1980-1981-1986 and 10 research article abstracts in pres in *The ESP journal* in 2007.

2.2. Procedures

The analysis of the rhetorical structure of the abstracts was done in two stages. In the first stage, I analyzed the macrostructure of the

abstracts by identifying the overall rhetorical organization of each abstract following Martin (2003), Anderson and Mclean (1997), Stotesbury (2003), and Swales (1990). Following Martin (2003), it was assumed that the abstracts contain the four (Introduction, Method, Results, Conclusion) units of a research article. After identifying these units in each abstract, I focused on the Introduction unit and following Swales's 1990 CARS model, I further analyzed the moves and steps used in the Introduction unit of each abstract.

After about one week I began to reanalyze and identify the macrostructure of each abstract once more. When my second analysis of the corpus finished, I compared my first and second analyses with each other and computed Phi Coefficient for intra-analyst reliability which was high (Cramer's $V = 0.89$, $p < .000$).

Finally, I analyzed the main linguistic features (nouns, verbs, and verb tenses) used frequently in the constitutive units of the abstracts in the corpus. Frequencies and percentages were calculated only for the main units that constitutes abstracts and in the case of the Introduction unit for the constitutive moves and steps.

3. Results

In general terms, it was found that the four basic structural components that typically constitute a research article, i.e. I-M-R-C, were present to some degree in both sets of abstracts. Although some similarities in the frequency of occurrence and distribution of these units in both groups of abstracts were revealed, some differences were also observed.

The results in table 1 show that the Introduction unit is the most frequent element in both groups of abstracts. This unit was present in all abstracts in the second group and in 80% of the abstracts in the first group. Based on these frequency of occurrences it can be claimed that the Introduction unit is an obligatory element in the second group of abstracts.

The frequency of occurrence of the Method unit is quite different in the two groups of abstracts analyzed. While this unit happens in only half of the abstracts in the first group, its frequency of occurrence is 90% in the second group. The Results unit also tends to be higher in the second group of abstracts although the difference is

not significant. A similar tendency exists for the Conclusion unit, i.e. its frequency of occurrence is higher in the second group of abstracts than in the first group though the difference is not significant.

Table 1
Frequency of occurrence of structural units in the two groups of abstracts

Structural unit	Group One	Group Two
Introduction	8 (80%)	10 (100%)
Method	5 (50%)	9 (90%)
Results	8 (80%)	9 (90%)
Conclusion	7 (70%)	8 (80%)

The results in Table 2 show that all of the abstracts in the second group present either the four units used at the same time (50% of abstracts in this group) or a combination of three of them (again 50%). No instance of less than three units is observed among the abstracts in this group. In contrast, half of the abstracts in the first group contain only two units while the other half are composed of three (30%) or four (20%) units. A closer analysis of the corpus revealed that in all of the second group abstracts which consist of three units, the Introduction element is present; the next highest frequency of occurrence belongs to the Results element (80%); and the other two units, i.e. the Method and the Conclusion, have 60% frequency of occurrence. For the abstracts in the first group that contain three units, the Results and the Conclusion units are present in all cases, the Introduction unit is present in two of these abstracts, and the Method unit is present in only one of them. In the case of those abstracts of this group which contain two units, the highest frequency of occurrence belongs to the Introduction unit which is present in 4 of these 5 abstracts, the next highly frequent unit is the Results (present in 3 cases) followed by the Conclusion unit which is present in only two of these abstracts.

Table 2
Number of structural units in the two groups of abstracts

	Group One	Group Two
4 units	2 (20%)	5 (50%)
3 units	3 (30%)	5 (50%)
2 units	5 (50%)	-
1 unit	-	-

Following Salager-Meyer's (1990) considerations, from table 2 it can be deduced that the abstracts which are considered to be more complete, in the sense that they contain the four basic structural units, are those in the second group (50%) while only 29% of the abstracts in the first group had all four structural elements.

It was also observed that the linear sequence which these structural elements follow in both groups of abstracts is typically the same: Introduction + Method + Results + Conclusion, except in two cases in the first group of abstracts: No.5 (I+R+I) and No.6 (I+C+I+C). Another two cases in the second group were also found in which the logical order of occurrence of the structural units was altered: No.3 (I+M+I+C) ND No.8 (I+M+I+M+I+C).

About the length of the abstracts it is important to mention that they present a great deal of variety in both groups although, in general terms, the average is the same in both sets. For this reason length is not considered a relevant factor to be taken into account in this study.

Some scholars (Carrell, 1984; Salager-Meyer, 1990) believe that there is a relationship between the rhetorical structure of a text and its comprehension. Salager-Meyer (1990) considers that a well-structured abstract should state all the four components in a logical order, i.e. the linear sequence I-M-R-C. Another feature that Salager-Meyer (1990) considers essential in the rhetorical structure of abstracts is the concept of paragraph: when abstracts are made up of more than one paragraph, there should be no conceptual overlapping from one paragraph to another. In this study, all but one of the abstracts in the second group were constituted by one single paragraph. This single abstract was constituted by two paragraphs. The first paragraph consisted of two sentences with the following rhetorical structure: IM1:S1, IM1:S3. The second paragraph consisted of three sentences

which had the following rhetorical structure: IM3:S1B+M, R, R. As you can, no conceptual overlapping exists between the two paragraphs. The second set of abstracts also showed a similar tendency for the use of one paragraph. In this set there was only one abstract which contained two paragraphs each of which constituted by three sentences with the following rhetorical structures: IM3:S1B, C, C and IM3:S1B, IM3:S1B, C. In this case, as is clear from the rhetorical structures of the two paragraphs, there is conceptual overlapping from one paragraph to another.

3.1. The Introduction Unit

In the sample of 20 abstracts analyzed the Introduction section was found to be the most frequent structural unit in both groups of abstracts. It occurred in all abstracts except in two occasions in the first group. Both of these abstracts start with the Method unit followed by the Results and Conclusions.

A closer examination of this unit revealed that the Introduction unit is very complex terms of rhetorical options. Swales also refers to this complexity when he states:

Introductions are known to be troublesome...The opening paragraphs somehow present the writer with an unnerving wealth of options: decisions have to be made about the amount and type of background knowledge to be included; about an authoritative versus a sincere stance. (Swales, 1990:137)

The Introduction unit of abstracts analyzed in this study were further investigated by the application of Swales's 1990 CARS model. Generally speaking, most of the three moves and the steps connected to each move were present in the abstracts. From Table 3 it can be inferred that Move 3, where the writers introduce their current research, was the most frequently used move and so it is the obligatory category in the Introduction unit of the abstracts. This move was always present in the second group of abstracts and in 80% of the abstracts in the first group. The interesting fact is that the two abstracts of group one which do not have Move 3 are those abstracts which do not have the Introduction unit.

Move 3, in both groups of abstracts, was realized through two steps: step 1 A (*Outlining purposes*), or step 1 B (*Announcing present*

research). The second option is used more frequently in both groups of abstracts. To realize step 1 A, an explicit noun was usually used to indicate the purpose of the study:

The purpose of this study is to determine... (G1, No.1)

This paper aims to determine... (G2, No.1)

For the realization of step 1B a preference was observed for using deictics (*this, that*) to refer to the text (*paper, study*) among the authors. The following verb was predominantly in the present tense:

The article examines... (G1, No.6)

This paper describes... (G2, No.5)

Table 3

Frequency and distribution of moves in the Introduction section of the abstracts

	Group one	Group two
Move 1—Establishing a territory	4 (40%)	5 (50%)
Step 1—Claiming centrality	4	5
Step 2—Making topic generalization	-	3
Step 3—Reviewing items of previous	-	2
Move 2—Establishing a niche	2 (20%)	6 (60%)
Step 1A—Counter-claiming	-	-
Step 1B—Indicating a gap	2	6
Step 1C—Question-raising	-	-
Step 1 D—Continuing a tradition	-	-
Move 3—Occupying the niche (100%)	8 (80%)	10
Step 1A—Outlining purposes	4	2
Step 1B—Announcing present research	9	14
Step 2—Announcing principal findings	-	-
Step 3—Indicating RA structure	-	-

A general tendency which was found mainly in the abstracts of the second group was the tendency of the authors to coalesce the Introduction unit with the Method unit. In 70% of the second group abstracts, and in one abstract in the first group, the authors coalesced these two units in the same sentence. This may be because of space constraints:

This paper aims to determine the effectiveness of such a website in an ESP/EAP classroom by evaluating job application letters written by 13 language learners before and after accessing the website. (G2, No.1)

For the other two steps related to Move 3, i.e. step 2 (*Announcing principal findings*) and step 3 (*Indicating RA structure*), no instance was observed in the corpus.

The next move that occurs in half of the introductions in the second group of abstracts and in 40% of those in the first group is Move 1 (*Establishing a territory*). The writers of the abstracts in the second group used the three steps of this move to establish a niche while the strategy most favored by the writers of the abstracts in the first group was step 1 (*Claiming centrality*). Although this step has the highest frequency of occurrence in the second group of abstracts, the other two steps (*Step2: Making topic generalization* and *Step3: Reviewing items of previous*) are also used to achieve the communicative intention of Move 1. Typical examples of step 1 are: While extensive use of the passive is shown by frequency counts of verb tense and aspect which are performed on corpora combining texts from a variety of scientific and technical fields, significantly different results may be obtained when one compares the frequency of the passive and active voices within a single scientific or technical field. (G1, No.4)

Lexical bundles – recurrent sequences of word – are important building blocks of discourse in spoken and written registers. (G2, No.2)

The greatest difference between the first and second groups of abstracts was related to the frequency of occurrence of Move 2 in which authors occupy the niche they have established in the previous move. While this move was present in more than half of the abstracts in the second group (60%), the authors of the abstracts in the first group used this move in only 20% of the cases analyzed. But in both

groups of the abstracts the authors exclusively used step 1B (*Indicating a gap*) to realize the move. The most prominent linguistic manifestation of this step was the use of adversative sentences:

However, very little has been done to identify learner needs in terms of strategic competence in an academic context. (G1, No.10)
Despite the impact of the ESP genre-based framework of teaching discipline-specific writing to L2 learners, specially to L2 graduate students, the writing performance of learners in such a framework is still not fully explored. (G2, No.4)

Table 4 shows 30% of the abstract introductions in the second group contained the three moves and this feature was present in 25% of the abstract introductions in the first group. Half of the abstracts in group one contained two moves while the appearance of two moves happened in 37.5% of the abstract introductions in the second group. And while 37.5% of the abstract introductions in the first group contained only one move, about 20% of the abstract introductions in the second group were constituted by one move. The interesting point is that all of the abstract introductions in both groups which contained only one move were constituted by Move 3: S1A/S1B.

Table 4
Number of moves in the introduction unit of the abstracts

	Group One	Group Two
3 moves	2 (25%)	3 (30%)
2 moves	3 (37.5%)	5 (50%)
1move	3 (37.5%)	2 (20%)

In relation to the sequential order of the three moves which constitute the Introduction unit of abstracts, it was observed that most of the abstracts in both groups presented a linear structure of Move 1+2+3. Among the five abstract introductions in the first group which were consisted by more than one move, one abstract introduction presented sequence variation. In the second group, among the eight abstract introductions consisted by more than one move, only one abstract introduction showed variation.

3.2. The Method Unit

The frequency of this unit was quite different in the two groups of abstracts analyzed. It occurred in 90% of the abstracts in the second group and in 50% of those in the first group. But in the sample of 20 abstracts it was found that in majority of cases this element was short and constituted by a single sentence which described very briefly the most relevant pieces of information about the materials, subjects, or procedures used in the study:

Two hundred eighty-four examination prompts from 15 academic departments at Western Illinois University were classified into four main categories and a number of subcategories on the basis of the type of response they required. (G1, No.9)

An important point to note is that the Method unit in some cases occurred as an independent unit (in two abstracts in the first group and one in the second group), but in some cases this element was mixed with another unit. It was usually combined with the Introduction unit in which the purpose of the study is introduced:

The author conducted a multi-level discourse analysis on a corpus of 30 medical/dental school application letters, using both a hand-tagged move analysis and a computerized analysis of lexical features of texts. (G2, No.1)

This strategy of mixing the Method unit with the Introduction section was observed in one abstract in the first group and one in the second group. In the second abstract of the first group in which the Method unit was not an independent unit, it coalesced with the Results unit in the same sentence. This strategy was observed in two abstracts in the second group:

A series of 11 interviews, 48 classroom observations, 3 case studies and 93 reports from novice teachers yielded a list of language activities and competencies that EFL teachers in Slovenia specially need to develop. (G2, No.6)

The linguistic features typically used in the Method unit of the abstracts analyzed were the use of past tense, passive voice, and impersonal style.

3.3. The Results Unit

In the Results unit the authors report the major results obtained in their experiment. This unit, most frequently, began with phrases such as *the*

findings, the results, the analysis, etc. which were followed by such verbs as *show, reveal, indicate, etc.*:

Results show that... (G.1, No.1)

The results reveal that (G1, No.3)

The results of the study show that... (G2, No.1)

The findings show that... (G2, No.2)

Sometimes the main findings were reported without any lexical signals:

Five current moves were identified, namely, explaining the reason to pursue the proposed study, establishing credentials related to fields of medicine/dentistry, discussing relevant life experience, stating future career goals, and describing personality. (G2, No.9)

The frequency of occurrence of this unit in the two groups of abstracts analyzed was similar: 80% in the abstracts of the first group and 90% of those in the second group.

In the majority of cases, this unit occurred as an independent unit in both groups of abstracts analyzed: 62.5% of the abstracts in group one and 55.5% of those in group two. However, a tendency was observed in both groups of abstracts to mix this unit with other units. For example, in two abstracts in group one the Results unit coalesced with the Introduction unit and in one case it coalesced with the Conclusion element. In the second group of abstracts, the Results unit coalesced with the Conclusion unit in one case and with the Method unit in 3 cases.

3.4. The Conclusion Unit

In the Conclusion section of abstracts the writers summarize the main implications of the results of their research. The frequency of occurrence of this unit was not very different in the two groups of abstracts analyzed: 70% in the first group and 80% in the second group.

The verb tense which predominated in this section was the present tense. All the authors in both the first and the second group of abstracts used the present tense in the Conclusion unit and no exception to this tendency was observed in the corpus.

One strategy used by the authors to initiate the Conclusion unit was using a noun which explicitly referred to the function of this unit:

It is concluded that... (G1, No.1 and G1, No.6)

The paper concludes with... (G2, No.5)

I conclude with the view that... (G2, No.8)

From these findings, we conclude that ... (G2, No.10)

Typical verbs used in this unit were *conclude*, *suggest*, *imply*, etc. sometimes in the passive voice. But sometimes there were no linguistic signals to identify this unit and in these cases differentiating between the Results and the Conclusion units was difficult. In such cases the criteria used to make a differentiation between the Results and the Conclusion units was that: in the Results unit the authors report (somehow objectively) the main findings of their study and they do so based on data analysis while in the Conclusion section they interpret (somehow subjectively) their main findings and refer to the implications (and sometimes applications) of the results:

The findings from the analyses are important for the development of the industry, for the training of costumer service representatives, and could help us understand why frustration is experienced by many. (G2, No.3)

The results are of value to all those involved in developing and redesigning EFL teacher training programs, particularly their language training component, in the countries where English is taught as a foreign language. (G2, No.6)

In some of the abstracts analyzed the writers explicitly stated that there is a Conclusion unit in the article in which the implications of the results are discussed or suggestions for further research are given. It seems the function of such statements is to inform the reader about the structure of the article rather than about its content:

Possible reasons which have led to this situation are discussed and tentative solutions indicated. (G1, No.3)

The paper concludes with a discussion of the utility of ESP work in medical discourse and sets a research agenda for further work in the communicative setting and tasks of IMGs. (G2, No.5)

In the majority of cases in both groups of abstracts (85.7% in the first group and 87.5% in the second group) this unit occurred independently and in only one case in each group this unit coalesced with the Results unit.

Finally, both sets of abstracts were similar with regard to the use of hedging devices as a way of reporting the conclusions. The most frequently used hedging devices were verbs such as *suggest*, and modal auxiliaries like *could*, *may*, *can*.

4. Conclusion

This study suggests that there are some similarities and some differences between the rhetorical structure of research article abstracts published in the ESP journal 27 years ago and those published in 2007 although both groups of abstracts reflect the international conventions based on the norms of English academic discourse community.

The four basic structural units that typically constitute a research article, i.e. I,M,R,C, are present in both sets of abstracts and their frequency of occurrence is quite similar in both groups of abstracts except for the Method unit which occurs in only five abstracts in the first group compared to 9 abstracts in the second group. A possible explanation for this state of affairs can attribute the tendency to omit the Method unit in the first group of abstracts to the fact that the field of ESP was a new field in the domain of language teaching 27 years ago (although in my opinion it is still a very young field specifically in comparison to other fields in the domain of language teaching).

The frequency of occurrence of the other three units (I,R,C) in the first group of abstracts is also less than that in the second group of abstracts and this may reveal the fact that within 27 years the authors who write in the field of ESP have become more and more familiarized with the international conventions of abstract writing and have subsequently tried to join the international academic community at least by following its conventions in writing. That is why all the abstracts in the second group are constituted by 4 and/or 3 units while half of the abstracts in the first group are composed of 4 and/or 3 units and the other half of only 2 units. It is generally stated that as a field of study progresses, all the four rhetorical macrostructures which typically constitute the abstract section of a research article are used by the authors who write in that field.

The Introduction unit is the obligatory unit in the second group of abstracts since it occurs in all the 10 abstracts analyzed in the second group. This tendency in the abstracts of the second group can be attributed to the established status of the ESP field. The ESP field is much widely known and practiced than 27 years ago when, for the first time, pioneers like Swales started to publish a journal specifically devoted to ESP issues. So it is logical to expect the abstracts published in 2007 in this journal to be more elaborate regarding their rhetorical structure.

A closer examination of the Introduction unit reveals that the frequency of occurrence of Move 1 in both groups of abstracts is very similar: this move occurs in about half of the abstracts in the corpus. This suggests that the ESP field is still a young field of study and the authors who write in this field do not feel the need (or may not need at all) to first establish a niche in order to occupy it later on.

The second move (*Establishing a niche*) occurs in the second group of abstracts three times more than that in the first group of abstracts and the interesting point is that this move is revealed exclusively by means of step 1B (*Indicating a gap*). A simple justification for this state of affairs is that these days researchers who are active in the domain of ESP observe much more gaps in the literature in this field that deserve attention and research. This is, in my opinion, a good sign because as more and more gaps are identified, more and more studies are carried out and the results of these researches would be the progress and development of this field of study.

Move 3 (*Occupying the niche*) has the highest frequency of occurrence in both groups of abstracts and because it is present in all the abstracts of the second group, it is an obligatory element in this group. This suggests that even 27 years ago the writers in this field occupied the niche before providing details of the method, results, or conclusions of their research and now after these years the authors have rightly understood the importance of this move and it has become an obligatory element in their abstracts.

A very important point to keep in mind about the Introduction unit is that if you refer to Table 3 you can see that the tokens of these three moves and their associated steps are much more in the abstracts of the second group than in the first group. This again is a piece of

evidence which show the abstracts written now in the field of ESP are more complex and complete in terms of their rhetorical structure.

The Method unit is the only unit which has quite different frequency of occurrences in the two groups of abstracts: it occurs in half of the abstracts of the first group and 90% of those in the second group. Its low frequency of occurrence in the first group may be due to the youth of the ESP field 27 years ago. There may have been no established and conventional method of doing research in this field so that the authors may have not felt the need to inform their readers about how they accomplished their goals. The similarity observed between the two groups of abstracts with respect to the length of this unit shows that whenever the authors confront space constraints in their research article, they either omit the Method unit altogether or coalesce this unit with one of the other units in order to shorten the length of their abstract.

The two groups of abstracts are quite similar to each other regarding the third unit, i.e. the Results unit. The frequency of occurrence of this unit, its length, and even the linguistic strategies used to write it are very similar to each other in the two groups of abstracts. The same is true for the fourth element of the abstracts which is the Conclusion unit. The two groups of abstracts analyzed are very similar to each other regarding their Conclusion unit: its frequency of occurrence, its function, the main linguistic features present in this unit, and even the use of hedging devices.

The results of this study indicate some similarities and some differences among the abstracts written and published in the ESP journal 27 years ago and those published in this journal in 2007. I would like to attribute the source of these observed differences to the status of the field of ESP. As time passes and more studies are carried out in this domain, the ESP field becomes more mature and the authors who like to write and publish in this field and this journal follow the international conventions of abstracts writing more closely. As time passes, the abstracts become more complex and complete in their rhetorical structure and less and less moves and/or steps are omitted. As the field of ESP is established, the authors try to write complete and comprehensive abstracts and I think everything is ready for experienced writers in this field to bring about innovations in the rhetorical structure of the abstracts they write.

Appendix A. Articles in Corpus

Articles in Group One

- No.1 Johns, A.M. (1980). Cohesion in written business discourse: some contrasts. *English for Specific Purposes*, 1, 35-44.
- No.2 Lou Dubois, B. (1980). The use of slides in biomedical speeches. *English for Specific Purposes*, 1, 45-50.
- No.3 Ewer, J.R. & Boys, O. (1981). The EST textbook situation: An enquiry. *English for Specific Purposes*, 1, 87-105.
- No.4 Tarone, E., Dwyer, Sh., Gillette, S. & Icke, V. (1981). On the use of the passive in two astrophysics journal papers. *English for Specific Purposes*, 1, 123-140.
- No.5 Hüllen, W. (1981). A study of certain verbs occurring in the language of international pilots. *English for Specific Purposes*, 1, 141-154.
- No.6 Williams, R. (1981). A procedure for ESP textbook analysis and evaluation on teacher education courses. *English for Specific Purposes*, 1, 155-162.
- No.7 Doushaq, H.H. (1986). An investigation into stylistic errors of Arab students learning English for academic purposes. *English for Specific Purposes*, 5, 27-39.
- No.8 Zak, H. (1986). Features of word omission and abbreviation in telexes. *English for Specific Purposes*, 5, 59-71.
- No.9 Horowitz, D. (1986). Essay examination prompts and the teaching of academic writing. *English for Specific Purposes*, 5, 107-120.
- No.10 Jacobson, W.H. (1986). An assessment of the communication needs of non-native speakers of English in an undergraduate physics lab. *English for Specific Purposes*, 5, 173-187.

Articles in Group Two

- No.1 Henry, A., Evaluating language learners' response to web-based, data-driven, genre teaching materials, *English for Specific Purposes* (2007), doi: 10.1016/j.esp.2007.01.003
- No.2 Biber, D. & Barbieri, F., Lexical bundles in university spoken and written registers, *English for Specific Purposes* (2007), doi: 10.1016/j.esp.2006.08.003

No.3 Forey, G. & Lockwood, J., “*I’d love to put someone in jail for this*”: An initial investigation of English in the business processing outsourcing (BPO) industry, *English for Specific Purposes* (2007), doi: 10.1016/j.esp.2006.09.005

No.4 Cheng, A., Transferring generic features and recontextualizing genre awareness: understanding writing performance in the ESP genre-based literacy framework, *English for Specific Purposes* (2007), doi: 10.1016/j.esp.2006.12.001

No.5 Hoekje, B.J., Medical discourse and ESP courses for international medical graduates (IMGs), *English for Specific Purposes* (2007), doi: 10.1016/j.esp.2006.09.002

No.6 Sešek, U., English for teachers of EFL – towards a holistic description, *English for Specific Purposes* (2007), doi: 10.1016/j.esp.2006.11.001

No.7 Cowling, J.D., Needs analysis: planning a syllabus for a series of intensive workplace courses at a leading Japanese company, *English for Specific Purposes* (2007), doi: 10.1016/j.esp.2006.10.003

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سرسرف

بررسی (ساختار) ژانر چکیده مقالات تحقیقی در مجله "انگلیسی برای اهداف ویژه"

کبری جمشیدی^۱

هدف این مقاله بررسی و مقایسه ساختار بلاغی چکیده مقالات تحقیقی چاپ شده در مجله ESP در ۲۷ سال پیش با مقالات چاپ شده در این مجله در سال ۲۰۰۷ است. با پیروی از مدل ۲۰۰۳ مارتین واحدهای ساختاری تشکیل‌دهنده این چکیده‌ها مشخص شده‌اند. نتایج بیانگر این است که شباهت‌هایی میان هر دو دسته چکیده وجود دارد از آنجا که این چکیده‌ها شامل چهار واحد ساختاری اصلی هستند که تشکیل‌دهنده بخش‌های مختلف یک مقاله تحقیقی‌اند تفاوت‌هایی نیز میان دو گروه چکیده یافت شده است. تلاش نگارنده بر این است تا به توجیه این تفاوت‌ها در قسمت پایانی مقاله بپردازد.

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