

# JOURNAL OF LANGUAGE AND LINGUISTIC STUDIES

ISSN: 1305-578X

Journal of Language and Linguistic Studies, 16(1), 390-404; 2020

Move analysis of research article abstracts in the field of ELT: A comparative study\*



<sup>a</sup> Erzurum Technical University, Erzurum, 25050, Turkey
<sup>b</sup> Atatürk University, Erzurum, 25240, Turkey

#### **APA Citation:**

Kaya, F., & Yağız, O. (2020). Move analysis of research article abstracts in the field of ELT: A comparative study. *Journal of Language and Linguistic Studies*, 16(1), 390-404. Doi: 10.17263/jlls.712854

Submission Date:17/12/2019 Acceptance Date:17/03/2019

#### **Abstract**

This study aims to make a comparison between research article abstracts written by two groups in the field of English Language Teaching (ELT) by Turkish scholars and non-Turkish scholars working in Anglophone countries to find the rhetorical structure they employ in their abstracts. To achieve this purpose, 390 research article abstracts, 195 abstracts from each group, were analyzed. To analyze the abstracts, Hyland's (2000) model with five moves was employed. In addition to the descriptive statistics, the Chi-Square test was used to find whether there are any statistical differences between two writer groups in terms of move use. Results showed that there are no statistically significant differences in terms of moves between the two groups. However, three moves (purpose, method, product) frequently occurred in Turkish writers' abstracts while foreign writers include four moves (purpose, method, product, conclusion) more commonly in their abstracts. These findings have some implications for researchers, particularly for developing teaching materials for academic writing courses that can guide scholars to successfully participate in the international discourse community.

© 2020 JLLS and the Authors - Published by JLLS.

Keywords: research article abstracts; move analysis; research for publication; academic writing

## 1. Introduction

To survive in academia is a challenging task where scholars are required to produce and publish scholarly acceptable academic texts with original ideas. Given the place of English as the prominent language in academia, publishing research articles in English is the key factor of academic life as well. However, there has been an increasing need for awareness and knowledge to publish in English, given that a considerable number of scholars are non-native speakers of English (i.e. L2 writers). These L2 writers experience considerable difficulties in writing academic texts accepted by international journals, editors and reviewers (Flowerdew, 2008).

<sup>\*</sup>This study was based on the master thesis of the first author under the supervision of the second author.

<sup>†</sup> Corresponding author. Tel.:+90 444 5388 (22 08) *E-mail address*: fatma.kaya@erzurum.edu.tr

Scholarly writing is a demanding process highlighting the quality of writing and research. Among the types of academic products, research articles (hence RA) are perhaps the commonest genre of the academic performance that researchers are expected to achieve. With no or little awareness of writing conventions and norms, the construction of a research article becomes difficult and can turn into failure for many writers. Abstract is one of the sections of a typical research article and is of considerable importance as being labeled the first phase where the readers can be persuaded to read the rest of the article and as an indicator of whether the research idea has been well established and disseminated. In other words, an abstract serves as a communication tool demonstrating the significance of the article and indicates whether reading the article will enhance scholars' knowledge (Belcher, 2009).

Abstracts are the crucial tools to announce the results researchers obtain in their studies (Tanko, 2017). Therefore, "The marketing of a RA begins with the abstract where writers have to gain readers' attention and persuade them to read on by demonstrating that they have both something new and worthwhile to say" (Hyland, 2009, p.70). Abstract gives the essence of the article and it is the first encounter of the readers with the article (Hartley, 2003; Salager-Meyer, 1990, cited in Pho, 2008).

It may be often believed that writing an abstract is a simple activity for authors compared to the other sections of an article (Lores, 2004). Therefore, many studies are rejected due to the lack of qualities that show the value of the research (Piqué-Noguera, 2012). Hartley and Betts (2009) emphasize the importance of abstracts which may increase the possibility of being read if they provide more information about the article. However, different rules and demands required by journals and book publishers make it challenging to produce well-qualified RA abstracts even for experienced scholars. (Friginal & Mustafa, 2017).

# 1.1. Literature review

Relevant research in recent years has enlarged the ideas and perceptions about genre by changing and developing its scope and context. There appear to be various definitions and explanations for the term genre with some common and distinctive features. In fact, the genre is not a newly established term with a short history; nevertheless, it goes back to the study of literature and rhetoric and today with a highly enlarged scope involves the study of films, music and daily forms of speaking and writing (Imtihani, 2010). "Genres are staged, structured, communicative events, motivated by various communicative purposes, and performed by members of specific discourse communities" (Berkenkotter & Huckin 1995, cited in Flowerdew, 2011, p.516).

Researchers agree that genre-based research is a noteworthy source in providing information and contributing to the literature particularly for scholars writing in L2 (Amirian, Kassaian, & Tavakoli, 2008; Amnuani & Wannaruk, 2013a; Amnuani & Wannaruk, 2013b). The motivation of these studies is to make mostly novice writers and scholars be aware of the rhetorical conventions or at least increase their awareness to facilitate the acquisition of academic writing conventions and norms. As a genre-based approach, move analysis has been extensively used to identify the structure of RAs; therefore, the move—step analysis is a popular research field for scholars and the results of move analysis studies can have considerable implications for academic writing courses and materials for research writing and dissemination. In terms of move analysis, one of the most frequently studied section of research articles is the introduction part. Swales' (1990) Create- A Research-Space (CARS) model is used to analyze the introductions of the articles.

Numerous studies have been conducted on the introduction sections, and most of these studies have focused on research articles (Afshar, Doosti, & Movassagh, 2018; Chahal, 2014; Öztürk, 2007; Samraj, 2002). Ranking the second most frequently studied sections of research articles after introductions are discussion and conclusion sections (e.g., Amnuai &Wannaruk, 2013a; Amnuai &Wannaruk, 2013b;

Ruiying & Allison, 2003). On the other hand, recent studies on the abstract section of RAs have gained considerable popularity. Therefore, the abstract section has increasingly become an essential part of a research article. Due to the significance of abstract writing for academic texts, there has been a growing body of research devoted to investigate the different aspects of abstracts such as comparison of abstracts and introduction parts of RA (e.g., Ebadi, Salman, Nguyen, & Weisi, 2019; Samraj, 2005; Zand-Vakili & Kashani, 2012), metadiscoursal features (e.g., Hu & Cao, 2011; Salager-Myer, 1994), genre analysis of abstracts across disciplines (e.g., Alhuqbani, 2013; Saboori & Hashemi, 2013), comparison of abstracts across languages (Bonn & Swales, 2007; Çandarlı, 2012; Friginal & Mustafa, 2017; Marefat & Mohammadzadeh, 2013), rhetorical moves used in abstracts (e.g., Amnuai, 2019; Hwang, Nguyen, & Su, 2017; Jie, 2010; Martin-Martin, 2003; Özmen, 2016; San & Tan, 2012; Tanko, 2017; Tseng, 2011) and the comparison of abstracts written by novice and expert writers (Menezes, 2013).

A considerable number of studies on abstracts include the move analysis because awareness of rhetorical conventions in the target language is of significance in academic writing, and the researchers need to adapt themselves to the disciplinary discourse and its rhetorical conventions which may be different from their native languages (Ren & Li, 2011). Thus, most of the studies have focused on comparative research across languages, cultures, and disciplines. For example, cross-disciplinary studies are of importance in supporting the claim of the effect of disciplinary differences in the rhetorical and linguistic structure of the texts. These studies are sometimes from two related disciplines or totally different ones such as abstracts extending from conversational biology and wildlife behavior (Samraj, 2005), to the educational technology and applied linguistics (Pho, 2008), applied linguistics and educational technology (Coşmuş, 2011), linguistics and applied linguistics (Suntara & Usaha, 2013), applied linguistics, applied economics and mechanical engineering (Saboori & Hashemi, 2013).

Given the relevant literature, the studies of RAs abstracts have increasingly relied on comparative studies. In a genre study of abstract sections of research articles comparing the German medical abstracts and their English equivalents written by German and Native English speakers, Busch-Lauer (1995) reported that both German medical abstracts and their equivalents were not constructed following the conventions and original form of the article. In another study, Martin-Martin (2003) compared RA abstracts. His purpose was to analyze the macrostructure of the abstracts written in English and Spanish employing the Introduction, Method, Result and Discussion (IMRD) model. He concluded that Spanish abstracts, in general, are in accordance with the rules which are based on the conventions of English speaking communities. The major difference was seen, however, in the introduction parts. Using Swales' (1990) CARS model, he found that Spanish writers included Move 2, establishing a niche, less than English writers. Most importantly, he revealed that universality in terms of scientific discourse is not possible. Bonn and Swales (2007) with a similar purpose, investigated English and French RA abstracts and found that linguistic differences are more common than the variations in the rhetorical organization. They attributed these differences to different discourse communities.

Alotaibi (2013) compared research articles abstracts and introductions in two disciplines and two languages, Arabic and English. As a result, purpose, method, and product were found to be the most frequent moves in all texts while introduction and conclusion moves occurred more frequently in English abstracts. In the same line, Behnam and Golpour (2014) made a cross-disciplinary and cross-linguistic analysis of abstracts. They analyzed English and Persian abstracts in the field of linguistics and mathematics. They found that linguistics abstracts follow conventional structure while mathematics abstracts show variations in both languages. This difference, according to the authors, is basically due to the cultural differences of Persian writing which favors indirect expression of the arguments and thoughts. However, what is noticeable in their results is the frequency of method move which is present in every abstract. Marefat and Mohammadzadeh (2013), with a similar purpose, analyzed 90 English and Persian literature abstracts employing IMRD and CARS models and concluded that abstracts

followed the CARS model more than IMRD. In a more recent comparative study, Noorihzadeh-Honami and Chalak (2018) conducted a comparative study of English and Persian architecture abstracts. The results showed that the use of introduction and discussion moves were relatively higher in Persian abstracts than the English abstracts. Likewise, Amnuai (2019) investigated the move patterns and linguistic realization between two different contexts including international and Thai-based abstracts employing Hyland's model. Amnuai (2019) found that the frequency of introduction and conclusion moves were relatively high in the international corpus. The result of this study showed that the writing preferences of authors were highly influenced from different cultures. While English writers seem to attach considerable importance to the background and the rationale of the study, another group of writers such as Thai authors may tend to ignore these aspects of texts. Lack of awareness of these moves makes these differences more statistically different in the analysis of these two corpora. However, there appear disciplines where relatively few studies have been done on the abstracts section to provide information on the rhetorical structures such as identification of moves and linguistic features. For example, Tanko (2017) analyzed literary RAs abstracts, emphasizing the lack of information about the rhetorical structure and linguistic features, and concluded that the general tendency in these abstracts covers the moves exhibiting background, purpose, methodology, and outcomes of the research.

On the other hand, in the Turkish context, Cosmus (2011) conducted a contrastive study on abstracts written in English and Turkish languages. She explored 100 RA abstracts, 50 written in English and 50 written in Turkish in the field of Applied Linguistics and Educational Technology. She applied a mixed model of IMRD and CARS model. As a result of this comparative study, she found the introduction, methodology and results moves as the most frequently used moves in the abstracts of both Turkish and English papers However, what makes the difference was the discussion move. Discussion move occurred in nearly half of English abstracts while the situation was the opposite for the Turkish equivalents. The author attributed this difference to the editorial policy of the journals in Turkish corpus because the writers may prefer to give purpose and findings briefly without discussing the results in the abstract section. Another study within the Turkish context was done by Kafes (2012). His purpose was to explore the possible influence of the different cultural and linguistic backgrounds on the rhetorical choices of American, Taiwanese and Turkish academicians while constructing their abstracts. It was found that Turkish, American and Taiwanese academicians, in general, follow the rules of Anglo American conventions which include purpose, method and result moves in their abstracts which were also demonstrated by Martin-Martin (2003). The abstracts written by these three groups include purpose, method and results moves, while the introduction and conclusion moves were the least frequently used moves; they were actually accepted as optional. Moreover, these optional moves were employed in Turkish writers' abstracts less than the other two groups and they were most frequently used in American scholars' papers. This may be due to various factors including different intellectual backgrounds, requirements of discourse communities, and effects of academic writing instructions. In fact, the less occurrence of the conclusion move in the Turkish context is also confirmed by Çandarlı's (2012) study. Candarlı (2012) argues that Turkish writers' tendency of omitting the conclusion move may be based on either the effect of academic writing conventions of Turkish writers or it may be a kind of face-saving strategy for them. Moreover, this study also points to a major problematic area for Turkish scholars which is related to the use of step 1 of move 2 (i.e. indicating a gap in the literature). Therefore, this problematic area constitutes a need for further research to exactly reveal the underlying factors that lead to problems. Unlike Kafes (2012), she revealed the introduction unit as the most frequent one in both groups. These groups have similarities in terms of introduction, method and results moves; however, the occurrence of the conclusion move is more in English abstracts. Given the relevant studies, general tendencies in structuring abstracts have been explored; however, while using genre-based approaches to compare abstracts, we also need to turn attention to the genre-specific features since they are of the

potential to lead to the variations in the construction of abstracts. For example, El-Dakhs (2018) examined the reason for the differences between abstracts in PhD theses and research articles. As a result, it was found that presenting findings occupies the largest place in both genres while they are given more briefly in theses abstracts. The researcher attributes this difference to the competitive nature of RAs abstracts and considers RA and thesis two different genres. Moreover, the variations are explained in terms of the genre-specific features, such as space limitations and writers' goals while producing the papers. Therefore, the findings of El-Dakhs' (2018) study reveals that researchers cannot neglect these variations while interpreting the results and concluding generalizations in studies exploring the rhetorical structure and linguistic features of abstracts. These variations also motivate future studies and emphasize the importance of comparative studies in establishing rules and conventions of academic writing peculiar to different genres.

Abstracts represent the whole article from introduction to the conclusion within their limited framework which is recognized as an advertisement of the whole article. Therefore, scholars are required to structure their abstracts with a persuasive tone reflecting the quality of the research. In line with this significance, a need emerges to conduct studies that may display the general structure of abstracts and reveal linguistic and disciplinary variations between various research communities. Given the studies in the relevant literature, exploring the rhetorical and linguistic features of abstracts adopting a comparative approach is potentially of value to identify general tendencies in abstract writing. Moreover, the research exploring the comparison between native and non-native researchers may yield significant insight into L2 writers' problems and create awareness of the rhetorical structure of abstracts. Therefore, the present study explore the rhetorical structure of RA abstract sections published by foreign writers in Anglophone countries and by Turkish writers in the field of ELT within 2010-2018 years to make a comparison between the two research communities. The study may demonstrate the different tendencies in terms of the conventions and rules of academic writing that Turkish writers and writers in Anglophone academic settings employ while structuring the abstracts sections of their research articles. Moreover, the findings of this comparative study may have pedagogical implications that can be taken into consideration for developing L2 writing instruction and materials.

# 1.2. Research questions

The current study addresses the following research questions:

- What are the frequency of rhetorical moves used in abstracts written by Turkish and foreign writers?
- Is there any statistically significant difference in terms of moves employed in abstracts written by Turkish and foreign writers?
- What moves are most commonly used together in the abstracts written by two writer groups?

#### 2. Method

# 2.1. Corpus

The current study has a corpus analysis and includes two corpora. The corpus is composed of 390 ELT research article abstracts. The articles were selected randomly from journals published between 2010 and 2018 years and they are written by Turkish and foreign writers in English, 195 by Turkish writers and 195 by foreign writers living in Anglophone countries. In this study, only research articles written in ELT field were chosen and analyzed because of the possible effect of disciplinary variations

and only empirical research article abstracts were used in the study being aware of the fact that rhetorical organization and linguistic elements of empirical and theoretical RA abstracts show substantial differences (Pho, 2008). The criteria for foreign writers and their abstracts had two- dimensions: only the authors from Anglophone countries such as America, England, Australia, New Zealand, and Canada and working at universities in these countries were selected. Moreover, the articles published in reputable journals indexed in SSCI and ERIC were included in the study. On the other hand, for the Turkish corpora, a certain criterion was established. Only RA abstracts published in journals indexed in SSCI, ERIC, ESCI, and ULAKBIM [Turkish Academic Network and Information Center] were collected and included in the study. ULAKBIM is a reputable database which aims to provide common access to the articles published in Turkey. The main purpose of ULAKBIM is to develop the capacity of education and research in Turkey extending the national wide dissemination of scientific knowledge. Therefore, the articles were selected from ULAKBIM because Turkish authors seem to show a tendency to publish their articles in journals indexed in this database and it is also a must for them to publish their articles in ULAKBIM.

# 2.2. Instrument(s)

Different models are used to analyze abstracts; however, in this study, Hyland's (2000) five-moves model was employed to analyze the RA abstracts. This model was selected because the model includes five main moves covering introduction, purpose, method, product, and conclusion. Moreover, unlike the IMRD Model (introduction-method-result-discussion), developed by Swales (1990) introduction and purpose moves are separated in Hyland's model (Ghasempour & Farnia, 2017). Another reason for selecting Hyland's model is that the model was obtained after the analysis of 800 abstracts covering eight disciplines in science and social sciences (Amnuai, 2019) and thus, was more appropriate for the current study. The framework of this model was given in Table 1.

Table 1. Hyland's (2000) classification of rhetorical moves in article abstracts

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

During the analysis process, the conventional and optional moves should be identified; however, a certain criterion is not available for defining the moves' being optional and conventional. Nevertheless, for most of the studies, 60% is an appropriate percentage (e.g., Suntara & Usaha, 2013). Thus in this study, if a move appears in at least 60 % of abstracts, the move is accepted as conventional. On the other hand, if the move occurs less than 60%, then it is considered optional.

#### 2.3. Data analysis

By means of Hyland's (2000) model, the abstracts were analyzed and to establish the reliability, the researchers studied with an invited coder who has experience in move analysis. The analysis was carried

out in several phases. At the first phase, researchers independently identified each move. Then individual codings were discussed by the researchers. When disagreement appeared about coding, researchers and the invited coder discussed, and when a consensus was found on the moves, then the moves were categorized. Each RA abstract was analyzed in this way and then the data were transferred to SPSS 20.0. First, the results were descriptively analyzed and shown in terms of frequencies and percentages. Then, within a non-parametric test procedure, the Chi-square test was employed for the analysis. Chi-Square test was employed to determine whether there are statistically significant differences between Turkish and Anglophone writers in terms of the use of moves in abstracts. Finally, the common moves used together in abstracts were identified neglecting the linear, i.e., Introduction-Purpose-Method-Product or non-linear, e.g., Introduction-Product-Method-Purpose sequences.

## 3. Results and Discussion

The abstract sections of research articles are generally divided into five moves. The limited number of words and sentences allowed for abstracts significantly influence the distribution of moves. In some articles, moves can be embedded incorporating two or more moves within a sentence due to the constraints about rules of abstract writing, which are established by journals. In this study, abstracts written by Turkish and Anglophone authors were separately analyzed, then a comparison between groups was made.

## 3.1. Move Occurrence

The Chi-Square statistic is most commonly used to test of independence. Since the data were categorical and consist of two or more independent groups, the Chi-Square distribution allowed the researchers to test whether the observed values significantly differ from the expected values. For the move analysis of the abstracts in the field of English Language Teaching, Hyland's (2000) model was applied. 390 RA abstracts, 195 abstracts from each group, were analyzed and their percentages were given. According to the results of the move analysis, the frequency of moves was found to make a comparison between Turkish and foreign writers. Significant differences were not found between the two corpora. The frequency of moves is given in Table 2.

Table 2 shows the frequency and the percentages of moves in Turkish and Anglophone corpus. As shown in the table, it is possible to see the use of five moves in Hyland's (2000) model in both corpora. However, there appear some differences and similarities in the frequency of moves. First of all, the conventional five-move model was not used in all abstracts. When the two corpora were compared, it has been seen that the frequency of introduction, purpose, method and product moves were similar; however, the most notable difference can be seen in the frequency of conclusion moves. Introduction and conclusion moves were categorized as optional for Turkish corpus because their percentages are lower than 60% and purpose, method and product moves were identified as conventional due to their percentages being over 60%. On the other hand, purpose, method, product and conclusion moves were conventional while the introduction move is optional in Anglophone corpus. Interestingly, foreign writers living and working in Anglophone countries prefer to give conclusion in the abstract sections of their RAs more than Turkish writers. This difference between two groups may be attributed to the variations between two research communities because Anglophone writers may prefer discussing the implications of their studies while Turkish writers generally conclude their abstracts with the findings instead of adding implications and conclusions of their study. This result was confirmed by previous studies (Alotaibi, 2016; Amnuani, 2019; Çandarlı, 2012; Kafes, 2012). However, the distinguishing point between their results and our study is that they also found the less occurrence of introduction and

conclusion moves in non-native authors' abstracts when compared to international ones. In this study, unlike the less occurrence of introduction moves in previous studies, Turkish authors include introduction moves in their abstracts. This implies that both author groups in the study do not ignore the significance of introducing the topic, making generalizations and indicating the gaps in the literature before presenting their purpose for their studies. However, the frequency of this move is not as high as other moves in both groups.

	Turkish Writers		Anglophone Writers	
Moves	f	%	f	%
Introduction	97	49.7	104	53.3
Purpose	187	95.9	168	862
Method	187	95.9	161	82.6
Product	181	92.8	171	87.7
Conclusion	74	37.9	136	69.7
Embedded Moves	7	3.6	21	10.7
Total	733		761	

**Table 2.** Frequency and percentages of moves in abstracts

Table 2 shows the high frequency of purpose, product and method moves and this finding shows consistency with the previous studies (Alotaibi, 2013; Amnuai, 2019). These results indicate that the researchers are aware of the significance of these three moves in their studies. However, while interpreting the variations between the findings, the disciplinary differences should be taken into consideration because the disciplinary variations significantly affect the rhetorical structures of the abstracts.

The use of embedded moves is another point to be addressed. In both corpora, there appear embedded moves and the purpose move, in particular, was embedded with method move (Darabad, 2016). Following the incorporation of method and purpose move, method move was embedded with the product and sometimes product move was embedded with the conclusion move. The reason for this incorporation stems from the condensed nature of abstracts. To find whether any statistically significant difference exists in terms of the use of moves, the Chi-square test was employed. The results of the test are given in table 3. The outputs related to the Chi-Square test were given in Appendices.

As shown in Table 3, despite the slight differences in the frequency of the move occurrence between two corpora, there is no statistically significant difference between the use of five moves. However, previous studies mainly used frequency and percentages instead of employing inferential statistics to interpret the rhetorical structures of abstracts. One of the studies employing Chi-square test conducted by Hwang et al., (2017) also shows similar results concluding no statistically significant difference between two different writer groups. However, unlike our results, Noorizadeh-Honami and Chalak (2018) comparing Persian and English RAs, found statistically significant differences in terms of introduction and discussion moves as a result of Chi-square test. The reason for this difference may be explained by the differences between writing culture of writers and the context included in their study. The cross-cultural difference primarily has to do with the interference of L1 on the application of the organization of another language. Both positive and negative transfer contribute to the similarity and

discrepancy between two groups of corpus. As Mohan and Lu (1985) indicated that individuals with deficient rhetorical strategies in their first languages display the similar lack of writing strategies. This deficiency on one hand may be due to developmental stage of learning, it may be on the other hand EFL writers' transfer of writing skills and strategies which is independent of language proficiency (Jones & Tetroe, 1987).

n <sup>1</sup> =390							
Chi-square Test of Independence	$Value(\chi^2)$	df <sup>2</sup>	Asymptotic Significance (two-sided)				
Introduction	0.04	1	0.83				
Purpose	0.33	1	0.63				
Method	3.91	1	0.08				
Product	0.3	1	1				
Conclusion	0.02	1	0.9				

Table 3. The results of the chi-square test

#### 3.2. Move Patterns

Another point explored in the study is the move patterns used in Turkish and Anglophone corpora. Instead of exploring the linear or non-linear structure of abstracts sections, the main purpose of the current study is to determine which moves are preferred together. The most commonly used moves are given in Figure 1. In Figure 1, I is introduction; P is Purpose; M is Method; PRO is Product and C is Conclusion.

Figure 1 indicates the variations between the moves used in two writer groups. As shown in the figure, three-move patterns including P-M-PRO appear with the highest frequency in Turkish corpora. On the other hand, in the Anglophone context, four move patterns including P-M-PRO-C appear with the highest frequency. Following these models, Turkish writers use I-P-M-PRO more than P-M-PRO-C and Anglophone writers use I-P-M-PRO-C moves more than other variations. Moreover, it should be also considered that these moves follow not only linear but also a non-linear sequence in Turkish and Anglophone contexts. The noticeable difference between two corpora is that the authors in the Anglophone context employ five moves more than the authors in the Turkish context and writers in the Anglophone context tend to follow standards in writing abstracts. This difference is not just valid for Turkish writers, Hwang et al., (2017) also confirmed that English authors use models including five moves more than their Vietnamese counterparts. Therefore, Turkish authors neglect some moves in their studies particularly the conclusion move and end their abstracts without the wider implications or conclusions of the studies as also stated by Candarli (2012). However, the cultural context may be the reason for this variation (Hwang et al., 2017) and explicit presentation of each move may not be available in every abstract. Through a contrastive rhetoric perspective, Connor (1996) highlights the cognitive and cultural dimensions of transfer in which the first language conventions and norms influence the use of another language particularly regarding writing. For this reason, when discussing the rhetorical discrepancies between two corpora, the cross-cultural writing differences should be considered in terms L1 interference and schematic knowledge. That is, L1 literacy background and the prior experiences of EFL writers (Liebman, 1992) seem to be the major factors for these rhetorical differences even at the academic writing genre among adult writers. Writers with less interaction and experience with the second language conventions can be said to tend to differ in a second language due to more interference of L1 discourse and rhetorical structure. Moreover, there appear abstracts omitting basic moves including only moves such as P-M-C, I-P-PRO, I-M-PRO, I-P-M in Turkish context and models such as P-M-C, I-P-M-C, I-M-PRO, and I-M-C in the Anglophone context. Interestingly, in both corpora there were studies without purpose, method and product and these differences may be the result of writers' emphasis on different aspects of their studies because the writers show various tendencies while emphasizing the notable parts of their research. While for some authors, giving the purpose is the dominant factor, for other authors the largest part of abstract consists of the results without dealing with method or purpose.

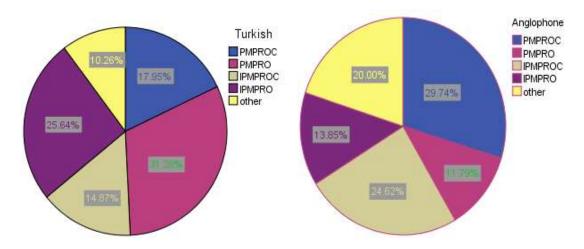


Figure 1. The percentages of the most commonly used moves in abstracts

#### 4. Conclusions

Abstracts are the concise forms of the articles and they are the basic sections, which have the impact to persuade the reader about the quality of the articles. Therefore, acquiring the conventions of rhetorical features of abstracts is necessary to produce acceptable papers. Given the important role abstracts play for the research article, the present study aimed to explore the rhetorical structure of English RA abstracts written in the ELT field by Turkish and Anglophone scholars in various reputable journals. In this study, three moves including purpose, method and product moves were found to be conventional in Turkish corpus while four moves were found to be conventional in Anglophone corpus. In the Turkish context, the frequency of the conclusion move is not high when compared to foreign context. Moreover, in the Anglophone context, writers' tendency to include five-moves model is more than the Turkish context's. This variation may be attributed to lack of organizational knowledge of the genre, lack of practice as well as the cognitive transfer of L1 on the production of L2. The transfer of L1 may lead to organizational differences with absences or variety of pattern use and often cause organizational problems in L2 writing. The findings from this comparative study have some implications for authors to be familiar with the conventions of abstract writing. Moreover, the results derived from this study can contribute to the production of academic writing materials for scholars and to the content of academic writing courses through culture-specific writing perspectives. Given the results of comparative studies, national writers may be aware of the conventions of academic writing and these results may guide them as they involve in the process of global research dissemination particularly with explicit instruction. Further studies may enlarge the scope of the current study and compare abstracts written in different fields and cross-linguistic and cross-cultural studies with larger scope may yield comprehensive results.

# 5. Ethics Committee Approval

The authors confirm that the study does not need ethics committee approval according to the research integrity rules in their country. (Date of Confirmation: 23.03.2020)

#### References

- Afshar, H. S., Doosti, M., & Movassagh, H. (2018). A genre analysis of the introduction section of applied linguistics and chemistry research articles. *Iranian Journal of Applied Linguistics*, 21(1), 163-214. Retrieved on April 15, 2019 from https://ijal.khu.ac.ir/article-1-2856-en.html
- Alhuqbani, M. N. (2013). Genre-Based analysis of Arabic research article abstracts across four disciplines. *Journal of Educational and Social Research*, *3*(3), 371-382. DOI:10.5901/jesr.2013.v4n3p371
- Alotaibi, H. (2013). Research article abstracts and introductions: A comparative genre-based study of Arabic and English in the fields of educational psychology and sociology. (Doctoral dissertation). Retrieved from https://search.proquest.com/pqdtglobal/docview/1443852060/8669883F30E4445DPQ/1?accountid =8403
- Amirian, Z., Kassaian, Z., & Tavakoli, M. (2008). Genre analysis: An investigation of the discussion sections of applied linguistics research articles. *The Asian ESP Journal*, *4*(1), 39-63. Retrieved on December 13, 2018 from http://asian-esp-journal.com/wp-content/uploads/2016/01/AESP-Volume-4-Issue-1-April-2008.pdf
- Amnuai, W. (2019). Analyses of rhetorical moves and linguistic realizations in accounting research article abstracts published in international and Thai-Based journals. *SAGE Open*, 1-9. DOI:10.1177/2158244018822384
- Amnuai, W., & Wannaruk, A. (2013a). Investigating move structure of English applied linguistics research article discussions published in international and Thai Journals. *English Language Teaching*, 6(2), 1-13. DOI:10.5539/elt.v6n2p1
- Amnuai, W., & Wannaruk, A. (2013b). A move-based analysis of the conclusion sections of research articles published in international and Thai journals. *The Southeast Asian Journal of English Language Studies*, 19(2), 53-63. Retrieved on October 23, 2018 from http://ejournals.ukm.my/3l/article/view/1782/2039
- Behnam, B., & Golpour, F. (2014). Genre analysis of English and Iranian research articles abstracts in applied linguistics and mathematics. *International Journal of Applied Linguistics & English Literature*, *3*(5), 173-179. DOI:10.7575/aiac.ijalel.v.3n.5p.173
- Belcher, W. L. (2009). Writing your journal article in 12 weeks: A guide to academic publishing success. United States of America, SAGE Publication.
- Bonn, S. V., & Swales, J. (2007). English and French journal abstracts in the language sciences: Three exploratory studies. *Journal of English for Academic Purposes*, 6, 93-108. DOI:10.1016/j.jeap.2007.04.001
- Busch-Lauer, I.-A. (1995). Abstracts in German medical journals: A linguistic analysis. *Information Processing & Management*, 31(5), 769-776. DOI:10.1016/0306-4573(95)00024-B
- Çandarlı, D. (2012). A Cross-cultural investigation of English and Turkish research article abstracts.

- Studies About Languages, 20, 12-17. DOI:10.5755/j01.sal.0.20.1770
- Chahal, D. (2014). Research article introductions in cultural studies: A genre analysis exploration of rhetorical structure. *The Journal of Teaching English for Specific and Academic Purposes*, 2(1), 1-20. Retrieved on March 26, 2019 from http://espeap.junis.ni.ac.rs/index.php/espeap/article/view/54/28
- Connor, U. (1996). Contrastive rhetoric. Cambridge: Cambridge University Press.
- Coşmuş, C. (2011). Structural organization of abstracts in English and Turkish research articles. (Master's thesis, Uludağ University Graduate School of Educational Sciences, Bursa, Turkey). Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp
- Darabad, A. M. (2016). Move analysis of research article abstracts: A cross disciplinary study. *International Journal of Linguistics*, 8(2), 125-140. DOI:10.5296/ijl.v8i2.9379
- Ebadi, S., Salman, A. R., Nguyen, T. T., & Weisi, H. (2019). Rhetorical structure variations in abstracts and introductions of applied linguistics master's theses by Iraqi and international students. *Iranian Journal of Language Teaching Research*, 7(1), 101-117. Retrieved on February 11, 2019 from http://ijltr.urmia.ac.ir/article\_120635\_fc65684b49849e3cd22b1e89da34eba8.pdf
- El-Dakhs, D. A. (2018). Why are abstracts in PhD theses and research articles different? A genrespecific perspective. *Journal of English for Academic Purposes*, *36*, 48-60. DOI:10.1016/j.jeap.2018.09.005
- Flowerdew, J. (2008). Scholarly writers who use English as an additional language: What can Goffman's "Stigma" tell us? *Journal of English for Academic Purposes*, 7, 77-86. DOI:10.1016/j.jeap.2008.03.002
- Flowerdew, J. (2011). Action, content and identity in applied genre analysis for ESP. *Language Teaching*, 44(4), 516-528. DOI:10.1017/S026144481000042X
- Friginal, E., & Mustafa, S. S. (2017). A comparison of U.S.-based and Iraqi English research article. *Journal of English for Academic Purposes*, 25, 45-57. DOI:10.1016/j.jeap.2016.11.004
- Ghasempour, B., & Farnia, M. (2017). Contrastive move analysis: Persian and English research article abstracts in law. *The Journal of Teaching English for Specific and Academic Purposes*, *5*(4), 739-753. DOI:10.22190/JTESAP1704739G
- Hartley, J., & Betts, L. (2009). Common weaknesses in traditional abstracts in the social sciences. Journal of The American Society for Information Science and Technology, 60(10). DOI:10.1002/asi.21102
- Hu, G., & Cao, F. (2011). Hedging and boosting in abstracts of applied linguistics articles: A comparative study of English- and Chinese-medium journals. *Journal of Pragmatics*, *43*, 2795–2809. DOI:10.1016/j.pragma.2011.04.007
- Hwang, J. V., Nguyen, T.-H., & Su, T.-J. (2017). Move analysis for scientific abstract sections: A study of nanoscience and nanotechnology research article abstracts. World Transactions on Engineering and Technology Education, *15*(1), 19-22. Retrieved on January 28, 2019 from http://www.wiete.com.au/journals/WTE&TE/Pages/Vol.15,%20No.1%20(2017)/03-Hwang-C-s.pdf
- Hyland, K. (2000). *Disciplinary discourses: Social interactions in academic writing*. Harlow: Pearson Education.
- Hyland, K. (2009). Academic discourse. London, GBR: Continuum International Publishing.

- Imtihani, N. (2010). Genre analysis in the frame of systemic functional linguistics. *Humaniora*, 22, 86-93. DOI:10.22146/jh.v22i1.988
- Jie, C. (2010). A generic analysis of English research article abstracts and the use of modal verbs for financial economics. *Sino-US English Teaching*, 7(12), 33-37. Retrieved on July 02, 2019 from https://files.eric.ed.gov/fulltext/ED514815.pdf
- Jones, S., & Tetroe, J. (1987). Composing in a second language. In A. Matsuhashi (Ed.), *Writing in Real Tie: Modelling Production Processes* (pp. 34–57). Norwood, NJ: Ablex.
- Kafes, H. (2012). Cultural traces on the rhetorical organization of research articles. *International Journal on New Trends in Education and Their Implications*, *3*(3), 207-220. Retrieved on July 29, 2019 from http://www.ijonte.org/FileUpload/ks63207/File/20.kafes.pdf
- Liebman, J. D. (1992). Toward a new contrastive rhetoric: Differences between Arabic and Japanese rhetorical instruction. *Journal of second language writing*, *1*(2), 141-165. DOI:10.1016/1060-3743(92)90013-F
- Lores, R. (2004). On RA abstracts: from rhetorical structure to thematic organisation. *English for Specific Purposes*, *23*, 280-302. DOI:10.1016/j.esp.2003.06.001
- 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. DOI:10.22108/are.2013.15469
- Martin-Martin, P (2003). A genre analysis of English and Spanish research paper abstracts in experimental social sciences. *English for Specific Purposes*, 22, 25-43. DOI:10.1016/S0889-4906(01)00033-3
- Menezes, C. A. (2013). A comparative study of textual and rhetorical features of abstracts written by expert and novice writers. *A Palavrada-Bragança*, *3*, 10-18. Retrieved on October 20, 2019 from https://revistaapalavrada.files.wordpress.com/2014/05/1-a-comparative-study-of-textual-and-rhetorical-features-of-abstracts-written-by-expert-and-novice-writers-cilc3a9ia-alves-menezes.pdf
- Mohan, B. A., & Lo, W. A. Y. (1985). Academic writing and Chinese students: Transfer and developmental factors. *TESOL quarterly*, 19(3), 515-534. DOI:10.23073586276
- Noorizadeh-Honami, L., & Chalak, A. (2018). Comparative analysis of architecture research article abstracts written by native and nonnative authors: A cross-linguistic, cross-cultural study. *Theory and Practice in Language Studies*, 8(3), 325-330. DOI:10.17507/tpls.0803.08
- Özmen, K. S. (2016). Rhetorical analysis of the doctoral abstracts on English language teaching in Turkey. *i-manager's Journal on English Language Teaching*, 6(1), 25-35. DOI:10.26634/jelt.6.1.4808
- Öztürk, İ. (2007). The Textual organisation of research article introductions in applied linguistics: Variability within a single discipline. *English for Specific Purposes*, 26, 25–38. DOI:10.1016/j.esp.2005.12.003
- Pho, P. D. (2008). Research article abstracts in applied linguistics and educational technology: A study of linguistic realizations of rhetorical structure and authorial stance. *Discourse Studies*, *10*, 231-250. DOI:10.1177/1461445607087010
- Piqué-Noguera, C. (2012). Writing business research article abstracts: A genre approach. *Ibérica*, 24, 211-232. Retrieved on February 05, 2019 from https://pdfs.semanticscholar.org/e992/1b7021c8e4fa8dd460f3261f65c07c5ffa31.pdf?\_ga=2.647419

- 99.1923805056.1566990716-900848606.1564906786
- Ren, H., & Li, Y. (2011). A comparison study on the rhetorical moves of abstracts in published research articles and master's foreign-language theses. *English Language Teaching*, *4*(1), 162-166. Retrieved on March 07, 2019 from https://pdfs.semanticscholar.org/d146/a4c03ca2cc7d9b6bc4dd26dfe74bbf7d082d.pdf
- Ruiying, Y., & Allison, D. (2003). Research articles in applied linguistics: Moving from results to conclusions. *English for Specific Purposes*, 22, 365-385. DOI:10.1016/S0889-4906(02)00026-1
- Saboori, F., & Hashemi, M. (2013). A Cross-Disciplinary move analysis of research article abstracts. *International Journal of Language Learning and Applied Linguistics World*, 4(4), 483-496. Retrieved on April 06, 2019 from https://profdoc.um.ac.ir/articles/a/1038627.pdf
- Salager-Meyer, F. (1994). Hedges and textual communicative function in medical English written discourse. *English*, *13*(2), 149-171. DOI:10.1016/0889-4906(94)90013-2
- Samraj, B. (2002). Introductions in research articles: Variations across disciplines. *English for Specific Purposes*, *21*, 1-17. DOI:10.1016/S0889-4906(00)00023-5
- Samraj, B. (2005). An exploration of a genre set: Research article abstracts and introductions in two disciplines. *English for Specific Purposes*, 24, 141-156. DOI:10.1016/j.esp.2002.10.001
- San, L. Y., & Tan, H. (2012). A comparative study of the rhetorical moves in abstracts of published research articles and students' term papers in the field of computer and communication systems engineering. *International Journal of Applied Linguistics & English Literature*, 1(7), 40-50. DOI:10.7575/ijalel.v.1n.7p.40
- Suntara, W., & Usaha, S. (2013). Research article abstracts in two related disciplines: Rhetorical variation between linguistics and applied linguistics. *English Language Teaching*, 6(2), 84-99. DOI:10.5539/elt.v6n2p84
- Swales, J. (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- Tanko, G. (2017). Literary research article abstracts: An analysis of rhetorical. *Journal of English for Academic Purposes*, 27, 42-55. DOI:10.1016/j.jeap.2017.04.003
- Tseng, F.-P. (2011). Analyses of move structure and verb tense of research article abstracts in applied linguistics journals. *International Journal of English Linguistics*, 1(2), 27-39. DOI:10.5539/ijel.v1n2p27
- Zand-Vakili, E., & Kashani, A. (2012). The Contrastive move analysis: An investigation of Persian and English research articles' abstract and introduction parts. *Mediterranean Journal of Social Sciences*, 3(2), 129-137. DOI:10.5901/mjss.2012.v3n2.12

# İngiliz dili eğitimi alanında yazılmış araştırma makalesi özetlerindeki aşamaların analizi: Karşılaştırmalı bir çalışma

## Öz

Bu çalışma İngiliz Dili Eğitimi alanında, Türk araştırmacılar ve ana dili İngilizce olan ülkelerde çalışan araştırmacılar tarafından yazılan araştırma makalelerinin özet bölümlerindeki retorik yapıyı belirleyerek, karşılaştırma yapmayı amaçlamaktadır. Bu amaçla, her gruptan 195' şer makale olmak üzere 390 makale özeti analiz edilmiştir. Analiz için Hyland (2000) tarafından oluşturulan ve 5 aşamayı içeren model kullanılmıştır. Betimsel istatistiğe ek olarak, iki grup arasında aşamaların kullanımı açısından, istatiksel farklılık olup olmadığını belirlemek için Ki-Kare testi yapılmıştır. Elde edilen sonuçlar, aşamaların kullanımı açısından iki grup arasında istatiksel farklılık olmadığını göstermiştir. Ancak Türk yazarlar tarafından oluşturulan özetlerde (amaç, metot, bulgu) 3 aşama daha çok kullanılırken, yabancı yazarlar tarafından oluşturulan özetlerde (amaç, metot, bulgu, sonuç) 4 aşamanın daha çok tercih edildiği görülmüştür. Bu bulgular özellikle, akademik yazma dersleri için geliştirilecek olan ve araştırmacıların söylem topluluğunda başarılı bir şekilde yer almaları adına rehberlik edecek materyallerin geliştirilmesi adına bazı çıkarımlar sunmaktadır.

Anahtar sözcükler: araştırma makalesi özetleri; aşama analizi; yayın için araştırma; akademik yazım

#### **AUTHOR BIODATA**

Fatma Kaya is an English lecturer and works at Erzurum Technical University, School of Foreign Languages in Turkey. She is a PhD candidate at Atatürk University, School of Education, Department of English Teaching. Her research interests are English academic writing and educational research.

Asst. Prof. Oktay Yağız works at Atatürk University, School of Education, Department of English Teaching in Turkey. His research interests are English academic writing, educational research and pronunciation based studies. He also teaches at undergraduate and graduate levels in the fields mentioned above.