



**A CORPUS-BASED RHETORICAL MOVE ANALYSIS OF THE
RESULTS SECTIONS IN L1 ENGLISH, L2 ENGLISH AND L1
TURKISH RESEARCH ARTICLES**

Nihan Erdemir

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YAZARIN

Adı : Nihan

Soyadı : Erdemir

Bölümü : İngiliz Dili Eğitimi

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Nihan ERDEMİR tarafından hazırlanan “A Corpus-based Rhetorical Move Analysis of the Results Sections in L1 English, L2 English and L1 Turkish Research Articles” adlı tez çalışması aşağıdaki jüri tarafından oy birliği / oy çokluğu ile Gazi Üniversitesi İngiliz Dili Eğitimi Anabilim Dalı’nda Doktora tezi olarak kabul edilmiştir.

Danışman: Doç. Dr. Hacer Hande UYSAL GÜRDAL
İngiliz Dili Eğitimi, Hacettepe Üniversitesi

H. Hande Uysal

Başkan: Prof. Dr. Bena GÜL PEKER
İngiliz Dili Eğitimi Anabilim Dalı, Gazi Üniversitesi

Bena Gül

Üye: Doç Dr. Kadriye Dilek BACANAK
İngiliz Dili Eğitimi Anabilim Dalı, Gazi Üniversitesi

Kadriye

Üye: Dr. Öğretim Üyesi Fatih GÜNGÖR
İngiliz Dili Eğitimi Anabilim Dalı, Afyon Kocatepe Üniversitesi

Fatih Güngör

Üye: Dr. Öğretim Üyesi Hatice ERGÜL
İngiliz Dili Eğitimi Anabilim Dalı, Hacettepe Üniversitesi

H. Ergül

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Nihan Erdemir
GAZI UNIVERSITY
GRADUATE SCHOOL OF EDUCATIONAL SCIENCES
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ABSTRACT

The concern for analyzing written academic genres has recently received great attention in the context of English for academic purposes. The research article (RA) genre is of great significance for Anglophone and non-Anglophone scholars to understand the rhetorical organization and conventions in English as it is a major means of sharing academic knowledge. Despite a number of rhetorical move analysis studies in various disciplines, the research in educational sciences is very limited, and also, there is still comparatively little research on the results sections compared to other sections. Thus, the present study aims to explore the rhetorical organization of the results sections in L1 English, L2 English and L1 Turkish RAs in educational sciences, identify the communicative moves and steps, examine any similarities and differences in text construction in the sense of frequency, sequencing, patterning and cycling, and lastly suggest a new model. First, in the pilot study move analysis based on Swales' (1990) tradition in genre analysis was conducted to identify moves and steps in the comparable corpora compiled with 36 published RAs by implementing the framework of Cotos et al. (2015). In accordance with the findings of the pilot study the rhetorical model was adapted to the field of educational sciences by adopting the frameworks of Cotos et al. (2015) and Morena and Swales (2018). Then, the new model was consulted in the main study, and move analysis was conducted with 120 published RAs to identify rhetorical moves and steps and examine any similarities and differences in RAs written by Anglophone writers in L1 English and non-Anglophone writers in L2 English and L1 Turkish. Furthermore, frequency analysis was conducted to investigate the similarities and differences of rhetorical functions in the three corpora through Nvivo 12.0. In accordance with the results of the Shapiro-Wilk test of normality, a

non-parametric Kruskal-Wallis H test was implemented through SPSS 21.0, and the p level was calculated to determine statistical significances. The inter-rater coding reliability was measured by *Cohen's kappa (k)* statistic. Different from the previous models, the findings of the current study might contribute to the understanding of the distinctive features characterizing the results and discussion sections. First, the results sections embody the move *describing the methodological procedures* (M2) as essential in addition to *reporting and commenting on the results* move (M3) while the discussion sections lack methodological procedures. Second, *establishing the study* move (M4) which is more identified with the nature of the discussion sections was less frequently noticed in the results sections. Moreover, in the sense of frequency use and sequencing of moves, the findings suggest that L1 English RAs utilized rhetorically more complicated and lengthy text structures than L2 English and L1 Turkish writers, and at the same time L1 English RAs had a better command of using a wide range of steps at high levels. The similarities between L2 English and L1 Turkish RAs by Turkish academic writers were also observed in move patterning, and the similar rhetorical tendencies of the Turkish writers might be attributed to their common linguistic and cultural backgrounds. On the other hand, there appeared similarities between Anglophone writers L1 English and Turkish writers in L2 English. This might suggest that second language writers transferred rhetorical structures and academic writing conventions from their second language, thereby leading to “hybridity” (Sheldon, 2019) and “cross-cultural heterogeneity” (Mauranen, Perez-Llantada & Swales, 2010) in academic genres. The findings of the present study are expected to provide insights to novice writers from different language and culture backgrounds about the accepted conventions of English language regarding the organization of research article results, indicate their own linguistic and cultural tendencies, and also to provide suggestions to practitioners, material designers and coursebook writers to address EAP learners' lack of knowledge of rhetorical organization in academic writing.

Keywords : Academic writing, English for academic purposes, research article genre, rhetorical analysis, move analysis

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**ANADİL İNGİLİZCE, İKİNCİ DİL İNGİLİZCE VE BİRİNCİ DİL
TÜRKÇE ARAŞTIRMA MAKALELERİNİN BULGULAR
BÖLÜMÜNÜN DERLEM TEMELLİ RETORİK EYLEM ANALİZİ
(Doktora Tezi)**

Nihan Erdemir
GAZİ ÜNİVERSİTESİ
EĞİTİM BİLİMLERİ ENSTİTÜSÜ
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ÖZ

Akademik amaçlar için İngilizce bağlamında yazılı akademik türlerin analizi son zamanlarda oldukça ilgi çekmektedir. Araştırma makalesi türü akademik bilginin paylaşımında temel yollardan biri olduğundan retorik yapı ve eğilimleri anlamak ana dili İngilizce olan ve olmayan araştırmacılar için büyük önem taşımaktadır. Çeşitli disiplinlerde yapılan birçok sayıda retorik eylem analizi çalışmalarına rağmen eğitim bilimleri alanında yapılan araştırmalar sınırlıdır ve halen daha diğer bölümlere göre bulgular bölümünde nispeten daha az çalışma bulunmaktadır. Bu yüzden bu çalışma eğitim bilimleri alanında basılmış anadil İngilizce, ikinci dil İngilizce ve birinci dil Türkçe araştırma makalelerinin bulgular bölümünün retorik yapısını incelemeyi, iletişimsel eylemleri ve adımları belirlemeyi, sıklık, dizilim, örüntüleme ve döngü açısından metin yapısında benzerlik ve farklılıkları incelemeyi ve son olarak yeni bir model önermeyi amaçlamaktadır. İlk olarak, pilot çalışmada Cotos ve ark.'nın (2015) modeli benimsenerek 36 araştırma makalesiyle oluşturulan karşılaştırılabilir derlemdeki eylem ve adımları belirlemek için Swales'in (1990) tür analizi yaklaşımına dayanan 'eylem analizi' yapılmıştır. Pilot çalışmanın bulguları göz önünde bulundurularak retorik model Cotos ve ark.'nın (2015) ve Morena ve Swales'in (2018) modelleri benimsenerek eğitim bilimleri alanına uyarlanmıştır. Daha sonra, ana çalışmada bu yeni model esas alınarak retorik eylem ve adımları belirlemek ve ana dili İngilizce olan yazarlardan tarafından anadil İngilizce ve anadil İngilizce olmayan araştırmacılar tarafından ikinci dil İngilizce ve birinci dil Türkçe dillerinde yazılmış araştırma makalelerinin yapısındaki benzerlik ve farklılıkları incelemek amacıyla 120 araştırma makalesiyle 'eylem analizi' yapılmıştır. Ayrıca, üç farklı derlemde bulunan retorik işlevlerin benzerlik ve farklılıklarını araştırmak için Nvivo 12.0

programıyla sıklık analizi yapılmıştır. Shapiro-Wilk normallik testinin sonucuna göre SPSS 21.0 programıyla parametrik olmayan Kruskal-Wallis H testi uygulanmış ve istatistiksel anlamlılığı belirlemek için p düzeyi hesaplanmıştır. Puanlayıcılar arası güvenilirlik *Cohen's kappa (k)* istatistiği ile belirlenmiştir. Önceki modellerden farklı olarak bu çalışmanın sonuçları bulgular ve tartışma bölümlerini doğasını oluşturan karakteristik özellikleri anlamamıza katkıda bulunmaktadır. İlk olarak, tartışma bölümlerine kıyasla bulgular bölümünde *sonuçları raporlama ve yorumlama eylemine* (E3) ek olarak *izlenen yöntemin anlatılması eyleminin* de (E2) esas eylemlerden biri olduğu anlaşılmaktadır. İkinci olarak, daha çok tartışma bölümlerinin doğasıyla tanımlanan *araştırmayı tartışma eyleminin* (E4) bulgular bölümünde daha az sıklıkla kullanıldığı görülmüştür. Ayrıca eylemlerin kullanım sıklığı ve dizilimi açısından bulgular anadil İngilizce olan makalelerin ikinci dil İngilizce ve anadil Türkçe olan makalelere göre retorik olarak daha karmaşık ve ayrıntılı metin yapıları kullandığını göstermektedir. Aynı zamanda anadil İngilizce olan yazarların çok çeşitli eylemleri yüksek düzeyde kullanabilme becerisine sahip olduğunu göstermektedir. Eylemlerin kullanım sıklığı ve dizilimine benzer bir şekilde, eylem örüntülemesinde de Türk araştırmacıların yazdığı ikinci dil İngilizce ve anadil Türkçe olan araştırma makaleleri arasında benzerlikler görülmektedir ve Türk araştırmacıların benzer retorik eğilimleri sahip oldukları ortak dil ve kültür geçmişiyle yorumlanmaktadır. Bir diğer taraftan anadil Türkçe olan yazarlara kıyasla, ikinci dil İngilizcede yazan Türk yazarlar ve anadil İngilizcede yazan yazarların arasında da benzer eğilimlerin olduğu görülmektedir. Bu durum akademik türlerde “melezleme” (Sheldon, 2019) ve “kültürlerarası öbürtürelilik” (Mauranen, Perez-Llantada & Swales, 2010) kavramlarını doğurarak ikinci dil yazarlarının retorik yapıları ve akademik yazı eğilimlerini ikinci dilden aktarmaya eğilimli olduklarını göstermektedir. Bu çalışmanın bulgularının, farklı dil ve kültür geçmişine sahip ve akademik yazmada yeterli derecede uzman olmayan yazarlara araştırma makaleleri bulgular bölümünün yapısıyla ilgili İngilizce’de kabul edilen uygulamalar hakkında fikir vermesi, dilsel ve kültürel eğilimlerini göstermesi ve aynı zamanda akademik amaçlar için İngilizce öğrenenlerin akademik yazmada retorik yapı konusunda bilgi eksikliğine hitap edecek materyal ve etkinliklerin hazırlanması konusunda uygulayıcılar, materyal tasarımcıları ve kitap yazarlarına öneriler sunması beklenmektedir.

Anahtar Kelimeler : Akademik yazma, akademik amaçlar için İngilizce, araştırma makalesi türü, retorik analizi, eylem analizi

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LIST OF SYMBOLS AND ABBREVIATIONS

CA	Contrastive analysis
CARS	Creating a research space
EAP	English for academic purposes
EDUCORP	Corpus of educational sciences
ERPP	English for research and publication purposes
ESP	English for specific purposes
GE	General English
IL	Interlanguage
IMRD/C	Introduction, methods, results, discussion/conclusion
L1	First language
L2	Second language, target language
M	Move
NS	Native speaker
NNS	Nonnative speaker
RA	Research article
S	Step
TL	Target language

CHAPTER I

INTRODUCTION

This chapter provides a brief description of the background to the study, the rationale for the study, and sets the aims of the study. In line with the aims of the study, the research questions of the dissertation are presented. Then, this section highlights the significance and limitations of the study. Lastly, some basic definitions are provided.

1.1. Background to the study

Over the last three decades, English has spread throughout the world and turned into a global language. Crystal (2003) notes that one out of four English speakers is native, therefore non-native language users have outnumbered the native speakers. The increasing demand for the English language has led it to be recognized as a common international language to communicate with people with different first language backgrounds in the fields of business, international relations, trade, education and science (Seidlhofer, Breiteneder & Pitzl, 2006).

Today, the developments in science and research and the accessibility to computer and internet technologies have also led English to become a global language of the academic world (Curry & Lillis, 2018, 2019; Flowerdew, 2002; Meyer, 2004; Swales, 1990) or the lingua franca of the science world (van Weijen, 2012). Research and knowledge have begun to be transferred through academic events and publications under the dominance of English. “With estimates putting the prevalence of English use in academic journals at between 75% and 90%, depending on the discipline” (Curry & Lillis, 2018, p. 1), scholars are required to use standard academic English to get their work published in global academic journals (Eveyik-Aydın, 2015).

Due to the fact that academicians and researchers are challenged to accomplish a good command of English in academic discourse, English for Academic Purposes (EAP) appeared to respond to the demands of students for their academic studies in English. In recent years, the term English for Research and Publication Purposes (ERPP) has been coined to support the “English-medium publishing efforts” of multilingual scholars from various countries (Curry & Lillis, 2019, p. 2). Hyland (2006) summarizes that the discourse of academic practices in EAP, or more recently in ERPP, has been developed for “pre-tertiary, undergraduate and postgraduate teaching (from the design of materials to lectures and classroom tasks),” “classroom interactions (from teacher feedback to tutorials and seminar discussions),” “research genres (from journal articles to conference papers and grant proposals),” “student writing (from essays to exam papers and graduate theses)” and “administrative practice (from course documents to doctoral oral defenses)” (p. 1). Each one is classified as a standardized genre with its lexical, grammatical and rhetorical properties and is seen to change in accordance with the specificity of disciplines, academic settings and registers (Swales, 1990). Thus, the language used in each academic text requires a different genre.

No matter how genre was first originated as a literary term, today it is a construct to “analyze the form and function of nonliterary discourse” (Işık-Taş, 2008, p. 1), to refer to “the types of texts used by groups who share communicative purposes, e.g., cause and effect” (Alexander, Argent & Spencer, 2008, p. 37) and “for grouping texts together, representing how writers typically use language to respond to recurring situations” (Hyland, 2004, p. 4). In a way, genre analysis has been seen as an approach to analyzing written texts. Swales (1990) asserts that genre is comprised of rhetorical patterns which bear “some shared set of communicative purposes” with the readers of text (pp. 35-38). Through his move analysis, Swales (2004) aims to make these patterns clear and to identify the features of a genre. “Swales’ model of move analysis and other scholars’ studies on rhetorical moves were continuously considered as essential works for understanding the organization of the research articles” (Fazilatfar, 2016, p. 157). As for the researchers and scholars, having knowledge of genre conventions is of great significance to having their research be accepted by the academic discourse community; thus, the characteristics of a genre in a specific discipline must be recognized by the researchers and scholars so as to be able to write accordingly.

1.2. Statement of the Rationale for the Study

Considering that English is the lingua franca of the academic world, scholars and researchers write their work in English with the aim of reaching as many researchers as possible across the world. Besides several academic events and publication genres, research articles (RAs) written in English are still a major means of sharing and distributing academic knowledge; therefore, it is of great significance for those researchers to understand the structure and conventions of this genre related to academic writing. According to Berkenhotter and Huckin (1995), having knowledge of how to write a research article is necessary to become a member of the international academic community.

The concern of analyzing written academic genres has recently received great attention, and rhetorical organization, lexical and lexico-grammatical features of research articles have been largely studied. However, with Swales' pioneering work (1990) focusing on the moves and steps in the introduction section of research articles across various disciplines, analyzing rhetorical organization of research articles has become more of an issue. As well as the introduction sections, rhetorical structures within the method, results and discussion sections have also been studied primarily in social, natural and medical sciences. Although there has been a great deal of rhetorical analysis studies in a variety of disciplines, the research on written academic genres in the field of educational sciences has been very limited. The few studies that have been conducted in the field of educational sciences are seen mostly in the sub-fields such as educational psychology (Dujsik, 2013) and applied linguistics (Basturkmen, 2009; Eveyik-Aydm 2015; Lim, 2010; Peacock, 2002; Sheldon, 2011; Yang & Allison, 2003).

Moreover, the results sections of research studies have been investigated less as compared to the abstract, introduction, methods, and discussion sections. However, the effective presentation and interpretation of the results obtained are at the heart of research articles in order to convince the scientific discourse community that the study makes a valuable contribution to the field. The problem of the study could be identified, the relevant literature could be reviewed or the data could be collected and analyzed; nevertheless, the work still necessitates the findings to be reported and interpreted appropriately in order to become worthy. Among the few studies that focused on the results sections of RAs, Nwogu (1997) and William (1999) analyzed the results sections in medical sciences, and Kanoksilapatham (2003) investigated the results sections in biochemistry, while Brett

(1994) resorted to the results sections of RAs in sociology, and Yang and Allison (2003) focused on the results sections in applied linguistics. Cotos, Huffman and Link (2015) investigated the results sections of RAs in 30 disciplines, thereby conducting comprehensive research. However, none of these studies compared the results section of RAs by native speakers of English with RAs by native speakers of Turkish and by native speakers of Turkish writing in English. In fact, several issues of rhetorical features in research articles need to be further examined in detail from cross-linguistic/cultural perspectives.

Previous research has also indicated that presentation and interpretation of data in research articles might show variance in the sense of the rhetorical organization of research articles due to the authors' different linguistic and cultural backgrounds. For example, Sheldon's (2011) study focused on the rhetorical differences in RA introduction sections written by native speakers of English, native speakers of Spanish writing in English and native speakers of Spanish using their own language in the field of applied linguistics in order to discover how textual organization in each language is created (p. 238). According to the results of the study, English L1 texts are similar to the rhetorical patterns in Swales' (1990; 2004) CARS model, and English L2 texts mostly bear resemblances to the CARS (Creating a Research Space) model. Spanish L1 texts are found to have "culture-specific writing style" (Sheldon, 2011, p. 238).

Moreover, Soler-Montreal, Carbonell-Oliveras and Gil-Salom (2011) analyzed the introduction sections of 20 PhD theses written in English and Spanish on computing in order to compare the rhetorical strategies used by a group of writers with differing linguistic and cultural backgrounds. The results suggest that the introductory sections in both languages predominantly stress "the presentation of background information and the work" which has been conducted (Soler-Montreal et al., 2011, p. 4). Compared to the Spanish texts, the English writers are often seen emphasizing "the writer's own work, its originality and its contribution to the field of study." In this sense, the findings from such studies are beneficial for native, and especially nonnative English language writers, in order to help meet native language standards in the scientific language of the academic world. However, it is seen that there is almost no study analyzing and comparing the rhetorical organization of research articles written by L1 English, L2 English and L1 Turkish writers in the field of educational sciences.

Considering the significance of the issue and the lack of comprehensive research on the rhetorical structures of the RA results sections in educational sciences, the present study aims to explore this issue by applying Cotos et al.'s (2015) move analysis at the move and step level in RA results sections to texts written by L1 English, L2 English and L1 Turkish writers in the field of educational sciences.

1.3. Purpose of the Study

The present study aims to explore the rhetorical organization of the results sections of L1 English, L2 English and L1 Turkish RAs in educational sciences and to identify the rhetorical patterns (moves and steps) in the research articles. By compiling the L1 English, L2 English and L1 Turkish RAs published in the leading journals in educational sciences, the discipline-specific larger corpus will be developed. The model of move analysis proposed by Cotos et al. (2015) will be adopted. By considering any possible distinctive rhetorical features of RAs, the study aims to examine any similarities and differences in text construction of RAs written in L1 English by the writers working in the institutions located in Anglophone countries, RAs in L2 English by the Turkish writers working in the institutions located in Turkey, and RAs in L1 Turkish by the Turkish writers working in the institutions located in Turkey. The study also aims to test the model proposed by Cotos et al. (2015) by examining written texts by authors from a different language and cultural background, and in a different disciplinary field. Any suggestions and adjustments to the model might be proposed if needed. The following research questions are the major issues in the present study to be explored:

1. What is the rhetorical organization of the results sections of L1 English, L2 English and L1 Turkish RAs in Educational Sciences?
2. What types of moves and steps are used in the results sections of L1 English, L2 English and L1 Turkish RAs in Educational Sciences?
3. What are the cross-linguistic/cultural similarities and differences in the results sections of L1 English, L2 English and L1 Turkish RAs in Educational Sciences in the sense of frequencies of moves and steps?
4. What are the cross-linguistic/cultural similarities and differences in the results sections of L1 English, L2 English and L1 Turkish RAs in Educational Sciences in the sense of move sequencing, move patterning and move cycling?

1.4. Significance of the Study

The study addresses a significant need for more comprehensive research through a corpus-based rhetorical move analysis in the field of educational sciences. Adopting the model for results proposed by Cotos et al. (2015), the study will propose new adjustments to the model of move analysis in accordance with the necessities as a result of the application of the model to the field of educational sciences. In this way, the newly suggested model will be of great benefit to novice writers in the field of educational sciences in order to organize their rhetorical structures for the results sections in the field of educational sciences.

Specifically, this study aims to conduct a comparative study of the rhetorical features in a corpus of quantitative and mixed-method RA results sections of the texts written by native speakers of English and Turkish in both L1 and L2 that have been published in major academic journals. Therefore, the study will contribute to the field by portraying the similarities and differences in the rhetorical patterns utilized by the authors from a Turkish background. The study might enhance the knowledge and awareness of the novice writers from Turkey as nonnative speakers, thereby providing information about their own linguistic/cultural tendencies. Writers from Turkey might notice cross-linguistic/cultural variations in the rhetorical organization of RAs and how they differ from the accepted conventions of their fellows from Anglophone countries in academic writing.

Third, the study will contribute to our understanding of the distinctive features between the results and discussion sections in the discussion of findings. Due to the overlapping features of results and discussion sections, it is challenging for writers to determine whether communicative purposes belong to results or discussion sections. In contrast to the previous studies, this study adopted the approach which differentiates these rhetorical functions in the results sections.

Last, the study will highlight that EAP requires greater consideration as a course so that EAP learners might enhance their knowledge of genres and the accepted academic conventions used in their discipline in terms of presentation and sequence of information, and also as a teaching profession so that EAP teachers might benefit from additional training to become successful at an academic discourse.

1.5. Limitations of the Study

A limitation of this study concerns adopting the top-down type of analysis annotation at the discourse level because it is likely that a corpus coder might add his/her subjective interpretation to the texts during the process of coding the moves and steps of rhetorical organization. Furthermore, the sections in this study were coded by two inter-raters. Coding might show variance between persons; therefore, the third inter-rater might have been included in the inter-rater coding reliability.

Another limitation of the study concerns the specialized corpora compiled for this study. The three corpora that include RAs in L1 English, L2 English and L1 Turkish were created in accordance with the specific research purposes of the study. Because the findings are limited to the data in these corpora, it might be difficult to make generalizations.

The last challenging issue for this research might be attributed to the lack of knowledge about the authors' background education. Although the location of the institutions for which the authors work, the research fields of the authors and also their Anglophone and Turkish names were taken into consideration during the process of research article selection, the information about their background education still remained unknown.

1.6. Definitions of Some Key Concepts

Academic corpus: It includes data produced by experts in academic lectures, research articles and conference papers.

Academic writing: It refers to a specific style of expression that scholars use in order to transfer complex information in a particular area of expertise to researchers.

Comparable Corpus: It is a collection of “the same proportions of the texts of the same genres in the same domains in a range of different languages in the same sampling period” rather than translations (McEnergy & Xiao, 2007, pp. 11-12).

Corpus: It is a collection of written and spoken language.

Corpus linguistics: It is a sub-branch of linguistics which analyzes written and spoken language mostly by means of software programmes in order to explore lexical, structural or discourse-related patterns.

EAP: It is a sub-branch of English for specific purposes to address the needs of language users in academic contexts.

EDUCORP: It is the name of the corpus compiled for the present study and refers to the Corpus of Educational Sciences.

Genre analysis: It is concerned with the discourse features of written and spoken texts in a particular context.

Move: It is a “rhetorical instrument [...] that realize a subset of specific communicative purposes associated with a genre” (Bhatia, 2006, p. 84).

Move analysis: It aims to identify the “discoursal or rhetorical unit that perform a coherent communicative function in a written or spoken discourse” (Swales, 2004, p. 228).

Move cycle: It refers to recurring move sequences and move patterns.

Move pattern: It refers to the regularly repeated composition of moves in which a research article is structured.

Move sequence: It refers to a set of moves which come after another.

Rhetorical analysis: It is concerned with how the author argues his/her claims to persuade readers rather than what the author argues, so it segments the text into feasible parts and analyzes the writing strategies the author uses.

Step: It is a subgroup of moves and is considered an “optional textual element” (Sabet & Minaei, 2017, p. 295).

CHAPTER II

LITERATURE REVIEW

This chapter outlines a conceptual framework for the present study by reviewing the previous research related to English for Academic Purposes, corpus linguistics, genre analysis, rhetorical analysis and move analysis. Then, the relevant cross-disciplinary and cross-linguistic and cross-cultural studies which applied move analysis to different sections of research articles are presented in chronological order, and the models presented in these studies are examined in terms of their strengths and weaknesses. In relation to the research questions of the study, it is aimed to provide a rationale for the two models applied in the pilot and main studies, and for the new model to be presented by the end of this analysis.

2.1. English for Academic Purposes

English has gradually become the global language for communication not only with its native speakers but also with its nonnative users. In the academic world, English has become a necessity for scholars and researchers who are keen on following recent studies in their discipline and sharing their academic knowledge internationally, and so it started to be considered as the language of science, education and research for English language users from various different language backgrounds (Crystal, 2003; Uysal, 2008). However, merely having a command of general English might be insufficient for language users to function in an academic discourse community. They are required to “gain fluency in the conventions of English language academic discourses to understand their disciplines and to successfully navigate their learning” (Hyland & Hamp-Lyons, 2002, p. 1).

As a response to these demands, English for Academic Purposes was developed as a sub branch of English for Specific Purposes (ESP) to address the new language requirements of students, academicians and researchers. First, in the 1950s, ESP appeared because

General English (GE) was insufficient to address the specific needs of learners in different contexts for specific purposes. According to the researchers (Hyland & Hamp-Lyons, 2002; Jordan, 2002; Swales, 1990), ESP has two shifts: English for occupational/vocational/professional purposes (EOP/EVP/EPP) and English for academic purposes (EAP). In the following years, EAP has flourished in accordance with the needs analyses of learners in academic contexts and has become a major area of interest within the field of applied linguistics. Basically, EAP is defined as teaching English to learners in order to develop their study skills and perform research in an academic sense in the target language (Flowerdew & Peacock, 2001; Jordan, 1997). As well as its facilitating role in learners' research, Hyland and Hamp-Lyons (2002) elaborate on this definition. They suggest that EAP "means grounding instruction in an understanding of the cognitive, social and linguistic demands of specific academic disciplines" (p. 2). With the growth of necessity for EAP, the areas in which academic communicative practices exist have been investigated. Hyland (2006) revealed the contexts where academic discourse is practiced as follows:

- Pre-tertiary, undergraduate and post graduate teaching (from the design of materials to lectures and classroom tasks)
- Classroom interactions (from teacher feedback to tutorials and seminar discussions)
- Research genres (from journal articles to conference papers and grant proposals)
- Student writing (from essays to exam papers and graduate theses)
- Administrative practice (from course documents to doctoral oral defenses) (p.1).

Regarding the syllabus, there are a number of important differences between GE and EAP. Firstly, Hamp-Lyons (2001) indicated that GE is composed of conversational tasks, while EAP has long and dense academic texts and tasks that are aligned with the specific needs of a degree study (pp. 126-127). Moreover, Alexander, Argent and Spencer (2008) compared GE with EAP language teaching in terms of context, people, teaching and learning content, and suggested that reaching a certain level of proficiency in a language might be enough for GE learners, while EAP learners aim to become successful at a specific academic discourse (pp. 3-5). In teaching GE, the content is oriented to learn English, and speaking and listening are highlighted; on the other hand, in EAP the content is based on academic discourse and genres, and reading and writing are emphasized.

During this transition from GE to EAP, even English language teachers necessitate to adapt to the context as well as to the learners, teaching context, teaching content and materials. In an interview with a group of English language teachers in the UK, Campion (2016) explores the difficulties teachers experience after they start to teach EAP and their views

towards possible solutions to these challenges. Similar to learners, who are supposed to make an additional effort to become successful in an academic context, teachers also require more time to develop themselves in a professional sense in an EAP context through activities such as peer-observations and subject tutors (Campion, 2016, p. 67).

Considering all these challenges in an EAP context, the present study highlights that EAP requires greater consideration as a separate teaching profession, and the lack of attention given to teaching EAP should be realized. EAP learners should be motivated to have knowledge of genres and the agreed academic conventions used in their discipline so that they can identify the similarities and differences among a range of genres such as essays, theses and research articles at the macro (e.g., move structures) and micro level (e.g., linguistic devices). Therefore, this study has centered itself on research articles at the macro level and investigated the rhetorical functions in the results section of research articles to find out the accepted conventions in terms of the presentation and sequence of information. The first reason for selecting research articles is that they are highly preferential because scholars and researchers are expected to write research articles and publish them in major journals within the domain of academic writing in order to become a member of a discourse community. Another reason is that research articles allow relatively easy access to the relevant discourse community to follow recent developments in scientific knowledge all around the world.

2.2. Corpus Linguistics

The word “corpus” means “body” in Latin and refers to “a collection of spoken or written texts to be used for linguistic analysis and based on a specific set of design criteria influenced by its purpose and scope” (Weisser, 2016, p. 13). There are various types of corpus synchronic and diachronic, static and dynamic, general and specific, and monolingual and multilingual. *Specific* and *multilingual* corpora are of interest to this study.

Firstly, a specific corpus has a range of types within itself, and in recent years, *learner* and *academic* corpora have drawn considerable attention (Weisser, 2016, pp. 22-23). Learner corpus consists of spoken or written data produced by students, while academic corpus might include data produced by experts in academic lectures, research articles and conference papers. British Academic Spoken English and British Academic Written

English can be given as an example of academic corpus, which is concerned with language in academic contexts. The main aim of compiling an academic corpus is to analyze the features of the language used in an academic context and provide a baseline for the researchers.

Secondly, a multilingual corpus might include at least three languages and is expected to be comparable by means of using the same sampling methods in terms of size, genre and discipline (McEnergy & Hardie, 2012, pp. 19-20). A multilingual corpus has also a range of types within itself, and *parallel* and *comparable* corpora are used to describe these corpus types. Parallel corpus “contains source texts and their translations”, while comparable corpus contains “the *same proportions* of the texts of the *same genres* in the *same domains* in a range of *different languages* in the *same sampling period*” rather than translations (McEnergy & Xiao, 2007, pp. 11-12). The present study compiled comparable corpora in the sense of “text size, time span, text types, author characteristics (e.g. gender, age, nationality)” (Kenning, 2010, p. 488) in order to compare the potential cross-cultural similarities and differences among the three groups of corpora.

Corpus linguistics is, therefore, “an area which focuses upon a set of procedures, or methods, for studying language” rather than a direct study of language (McEnergy & Hardie, 2012, p. 1). Although it was first viewed as a science and a sub-branch of linguistics, Swales (2011) concluded that corpus linguistics is a methodology, “a way of looking at large bodies of language data for a wide variety of purposes (historical, critical, pedagogic, etc.)” (p. 222). Similar to various researchers (e.g., Granger, 2002; Swales, 2011; McEnergy & Hardie, 2012) considering the corpus linguistics as a methodology, Hyland (2006) also views the corpus linguistics as “an evidence-based approach to language teaching” and supports Sinclair’s (1991) point in its “mov[ing] the study of language away from ideas of what is correct, towards what is typical or frequent” (p. 58).

The basic corpus linguistic methods used for analyzing academic corpora can be listed as: frequency counts of academic wordlists (i.e., identifying both frequent and discipline-specific words), lexical bundles in different disciplinary domains (i.e., identifying the cluster of lexical items or lexicogrammatical patterns), and multidimensional analysis (i.e., investigating variations of all the linguistic features across genres, disciplines and languages at the sentence or discourse level instead of analyzing specific linguistic features) (Nesi, 2016, pp. 211-213).

Corpus analysis has always been favored in terms of handling considerable and complex bodies of linguistic data and making generalizations about language use. However, it has also been criticized for its lack of “capacity to explain the forces that give shape to those generalizations” (Swales, 2011, p. 222), disregarding “the textual and situational context which is important in discourse analysis” and “limit[ing] the analysis to bottom-up type of investigation, which is different from top-down approaches that are adopted by most discourse analysis approaches” (Dobakhti, 2011, p. 63). In the controversial issue of bottom-up and top-down approaches, there are contrasting views among researchers. First, Nesi (2016) supports the bottom-up type of corpus analysis because annotation can be done mostly automatically during the analysis of linguistic features at the sentence level such as parts-of-speech tags and “some superficial features beyond sentence level, such as pronominal reference” and might be relatively rapid. However, during the top-down type of analysis annotation at the discourse level such as moves and steps of rhetorical organization “must still for the most part be done manually, and is thus too time-consuming for most EAP practitioners on a large scale” (Nesi, 2016, p. 213). Some researchers such as Sinclair (2004) are also against top-down approaches based on the idea that a corpus user might add his/her subjective interpretation to the text. On the other hand, other researchers (e.g., Cotos et al., 2015; Hyland, 1993, 2000; Swales, 1990, 2004) support discourse-level annotation by seeing the necessity for creating educational models for novice writers (Nesi, 2016, p. 213).

Biber (2010) classifies the corpus studies into two major research approaches, which are corpus-based and corpus-driven. The main aim of a corpus-based research “is to analyze the systematic patterns of variation and use”, while “linguistic constructs themselves emerge from analysis of a corpus” in a corpus-driven research (Biber, 2010, p. 162). As the present study is concerned with the analysis of systematic organizational patterns of variation at the discourse level in the three groups of corpora, it adopted *a corpus-based approach to discourse analysis*. It is worthy to note that only “few studies have attempted to combine these two research perspectives” because most of the corpus-based studies have analyzed particular linguistic devices in a quantitative way (Upton & Cohen, 2009, p. 586). However, this study has attempted to analyze the internal organization of texts qualitatively by means of following the corpus-based approach to discourse patterns in written texts, more specifically move analysis which will be explained in detail in the next sections.

2.3. Genre Analysis

For academicians, the necessity of knowing how to respond to the differing demands of a research article, a thesis, a book review or a conference paper initiated the development of genre theory. In EAP, the knowledge of a discipline-specific genre and register has started to gain great importance in addition to knowledge of vocabulary and grammar. Also, genre has become a popular groundwork for studying academic discourses within the last two decades. Genre has been defined in different ways from various approaches to genre studies in accordance with the emphasis given to texts or social contexts; however, it can be said that it is mainly concerned with the discourse features of written and spoken texts. Based on a variety of factors, the discourse features and forms in these texts show variance. Regarding the possible sources of changes, there are three approaches to genre theory, including Hyon (1996): Australian (or Sydney) School, North American New Rhetoric and English for Specific Purposes. In Sydney School, the use of language is linked to the context and is considered as a structured, goal-oriented “social process” (Martin, 1992, p. 505); in the second tradition, the New Rhetoric language use is regarded as “recurrent social actions” in a context of situation (Freedman & Medway, 1994, p. 3); in ESP, it is seen as “a class of communicative events” following patterns by a discourse community perceived by specific discourse communities than larger communities (Swales, 1990, p. 58). Considering the three approaches towards genre theory, Bhatia (2004) defines:

Genre essentially refers to language use in a conventionalized communicative setting in order to give expression to a specific set of communicative goals of a disciplinary or social institution, which give rise to stable structural forms by imposing constraints on the use of lexico-grammatical as well as discoursal resources (p. 23).

First, the Sydney School view of genre is built on the linguistic theory of systemic functional linguistics (Halliday, 1994; Martin, 1992). According to this theory, language is composed of a set of systems which is based on four main theoretical claims: language use is seen as functional; it functions to make meaning; meaning is influenced by social (or cultural) context; language use is a semiotic process in which language users make meaning by using certain linguistic choices in accordance with the social context according to Eggins (1994, p. 2). In other words, the language used in a spoken or written text is structured according to the context of the situation. Therefore, this school of genre theory considers genre as “a concept used to describe the impact of the context of culture on

language, by exploring the staged, step-by-step structure cultures institutionalize as ways of achieving goals” (Eggins, 1994, p. 9).

Second, as different from the previous tradition, the New Rhetoric considers that genre is derived from repeated social actions in recurring situations in a particular culture, and these social actions create regular models in the form and content of texts (Bazerman, 1988; Coe & Freedman, 1998; Devitt, 2004; Miller, 1994). In other words, genres are “recurrent patterns of language use” and are “not only parts of a culture, but also, in some ways, [they] shape the culture” (Wang, 2006, p. 42). This tradition considers genre “as typified social action rather than as conventional formulas” (Devitt, 2000, p. 697), and is more concerned with the social and cultural contexts in which genres are utilized. Miller (1994) describes this context as “knowledge of aesthetics, economics, politics, religious beliefs and all the various dimensions of what we know as human culture” (p. 69). For this reason, Miller (1994) suggests the adoption of the ethnomethodological approach to genre analysis in order to understand the attitudes, beliefs, values and behaviors of a particular social context in detail (p. 69). In the new rhetoric tradition, some studies attempt to explain the nature of genres within a discourse community. First, Paré and Smart (1994) suggest that there is likely a common rhetorical organization which is accepted in one discourse community, and it can be easily observed by identifying the conventions of this discourse community. Second, Berkenkotter and Huckin (1995) introduce a sociocognitive perspective to genre theory and define genres as “[...] inherently dynamic rhetorical structures that can be manipulated according to the conditions of use” (p. 3-4). In other words, genres are interrelated with discourse community, and they might evolve through time and be influenced by discipline, discourse community, culture and norms. In this sense, this perspective parallels Connor (1996), arguing that the genre of a particular discipline could be analyzed to understand the characteristics of this discipline-specific discourse (p. 129), “because genres are how we socially construct these situations by defining and treating them as particular exigencies” (Bawarshi, 2000, p. 357).

Third, the ESP approach to genre theory suggests that a conventionalized (or dynamic) structure of a genre could be described by the members of a discourse community (Bhatia, 1993; Swales, 1990). Its origin goes back to Swales’ (1981, 1990) pioneering studies analyzing the rhetorical structure and linguistic features of research articles. Moreover, it draws on theoretical claims from both Sydney School and New Rhetoric with its interest in

structural and social aspects of genres and does not have its own theory of language (Hyland, 2002, p. 115). In this tradition, genre is defined as:

a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognized by the expert members of the parent discourse community, and thereby constitute the rationale for the genre. This rationale shapes the schematic structure of the discourse and influences and constraints choice of content and style. Communicative purpose is both a privileged criterion and one that operated to keep the scope of a genre as here conceived narrowly focused on comparable rhetorical action. In addition to purpose, exemplars of a genre exhibit various patterns of similarity in terms of structure, style, content and intended audience. If all high probability expectations are realized, the exemplar will be viewed as prototypical by the parent discourse community. The genre names inherited and produced by discourse communities and imported by others constitute valuable ethnographic communication, but typically need further validation (Swales, 1990, p. 58).

According to Swales (1990), genres include communicative purposes admitted by the members of a discourse community, and when prototypical language and discourse features of a specific genre are analyzed, the schematic structure utilized by this discourse community can be largely achieved. The discourse community is defined as “groups of people within a discipline or area of special interest that communicate with each other in part through the genres which they ‘possess’” (Dudley-Evans, 1994, p. 220). In a similar vein, Bhatia (1993) perceives genres as structured communicative events that can be understood by the members of their discourse community (p. 13). In this sense, genre and discourse community are considered to be closely related because a discourse community works for “a broadly agreed set of common public goals” by using some specific communicative events, and six common characteristics of a discourse community are detailed by Swales (1990):

- A discourse community has a broadly agreed set of common public goals.
- A discourse community has mechanisms of intercommunication among its members.
- A discourse community uses its participatory mechanisms primarily to provide information and feedback
- A discourse community utilizes and hence possesses one or more genres in the communicative furtherance of its aims.
- In addition to owning genres, a discourse community has acquired some specific lexis.
- A discourse community has a threshold level of members with a suitable degree of relevant content and discoursal expertise (pp. 24-27).

Also, Bazerman (1994) suggests that there is a relation between genre and the members of the discourse community and indicates that these communities produce “a complex web of interrelated genres where each participant makes a recognizable act or move in some recognizable genre, which then may be followed by a certain range of appropriate generic responses by others” (pp. 96-97).

Among these three approaches to genre analysis, Swales' (1990) approach has become a highly influential approach. This tradition is concerned with "identifying a recurrent pattern commonly used to organize the content of a genre (category of texts), and then relating the stages of this content-organizing pattern to specific linguistic features" (Bruce, 2009, p. 106). Thereupon, various studies have been conducted to analyze rhetorical structures, linguistic features and forms of genres across a number of texts, genres, disciplines or language backgrounds.

Bhatia (1993) has extended Swales' approach by analyzing the move structures of various genres and contributed to the development of genre theory. Previously, Bhatia (2004) first proposed two research perspectives that involved an ethnographic perspective and a textual perspective to genre knowledge. In recent years, Bhatia (2008) developed a multidimensional approach to genre theory, which includes socio-cognitive and socio-critical perspectives as well as textual (genre as a structured process) and ethnographic (genre as a social action) perspectives (p. 163). He asserted that "ESP genre analysis needs to move beyond linguistic analysis and integrate socio-cognitive and sociocultural analysis to gain a more complex understanding of how these factors contribute to the construction of genres in different disciplines" (Lee, 2011, p. 28).

Today genre-based studies establish connections "between the linguistic patterns of genre and communicative purpose, discourse community, and rhetorical moves" as pioneered by Swales (Devitt, 2015, p. 45). In a similar vein, the present study focuses on the notion of genre theory in the ESP tradition and is established within the Swales-derived 'move analysis' in EAP, in which the text of a particular genre is divided into segments by their prototypical communicative purposes.

2.4. Rhetorical Analysis

Rhetoric is defined as "the strategies the writer uses to convince readers of his/her claims and to increase the credibility of his/her research" (Valero-Garcés, 1996, p. 281). Its origin dates back to Aristotle who refers to rhetoric as "the art of finding the available means of persuasion in a given case." Rhetorical analysis is interested in analyzing these available means that writers utilize in their texts. Interest in the rhetorical organization has grown over the past thirty years. Although a number of previous studies have been conducted in various disciplines, mostly in L1 writing, the new rhetoric tradition has made contributions

to research in L2 writing as part of contrastive rhetoric (Connor, 1996, pp. 66-71). Flowerdew (2005) states that this tendency towards L2 writing is in the interest of ESP studies rather than rhetorical analysis studies, which focuses on L1 writing by establishing the rhetorical characteristics of professional writing (pp. 323-324).

Concerning L2 writing, the concept of contrastive rhetoric emerged as “an area of research that identifies problems in second language writing and attempts to explain them by referring to the rhetorical strategies of the first language” (Connor, 1996, p. 5). Basically, it assumes that culture might influence the way writers write in L1, and that a writers’ native culture might also influence the way they write in L2. First, Kaplan (1966) proposed the fact that the organizational patterns of various languages showed differences. Having observed cross-cultural differences in learners’ essays in English, he realized these organizational differences were derived from learners’ first language and his research paved the way for a new research area called contrastive rhetoric. Tracing back to the thought patterns in the English language, Kaplan (1966) considered that they were derived from the cultural patterns in Europe; therefore, he claimed that the logic in a cultural pattern is most likely related to rhetoric, and that rhetoric “is evolved out of a culture; it is not universal” (p. 2). In a similar way, the fact that rhetoric is a cultural phenomenon is also suggested by Berlin (1984) who stated “rhetoric is a cultural social event. Rhetoric is a social invention. It arises out of a time and place, and a peculiar social context” (p. 1). In view of the relationship between language patterns and culture, the concept of contrastive rhetoric was considered to be mainly based on the weak version of Sapir-Whorf hypothesis of linguistic relativity (Connor, 1996; Matsuda, 2001). The weak version of this hypothesis argues that language influences thought, while the strong version argues that language determines thought.

However, Ying (2001) opposes the idea that contrastive rhetoric was rooted in Sapir-Whorf hypothesis because Kaplan never mentioned this hypothesis in his article. Then, Matsuda accepts Ying’s opposition and concludes the discussion in arguing that “Kaplan’s view of contrastive rhetoric was a result of his effort to synthesize several intellectual traditions, including contrastive analysis, the Sapir-Whorf hypothesis, and then-emerging field of rhetoric and composition, especially Francis Christensen’s generative rhetoric of the paragraph” (Ying, 2001, p. 257). It is a fact that Kaplan has been influenced by contrastive analysis as well as several approaches, and that he made a great contribution to the field by realizing the connection between linguistic and culture-specific components in learners’

sentence structures. Moreover, he later realized that these linguistic and culture-specific components could be observed in learners' paragraph structures, which prompted a shift from sentence-level structures to discourse-level structures. With the increasing interest in rhetorical organization, there became a shift from product-oriented writing to process-oriented writing, and written discourses in various languages started to be investigated in line with the developments in discourse analysis and text analysis of the 1980s (Matsuda, 2003, p. 21).

The concept of contrastive rhetoric accepted that culture has an influence on “our intuitions about language and expectations about appropriacy, audience and ways of organizing ideas and structuring arguments” (Hyland, 2012, p. 34). Also, it has been suggested that the “rhetorical tendencies” writers have in their own language are transferred to L2 and affect their “choice of rhetorical strategies” in L2 writing (Connor, 2002, p. 494). Ranges of studies have explored this influence regarding different genres and languages. The main assumption of these studies was to “identif[y] problems in composition encountered by second language writers, and by referring to the rhetorical strategies of the first language, attempt[...] to explain them” (Connor, 1996, p. 5). Contrastive rhetoric has been influenced by several theories and disciplines such as applied linguistics, linguistic relativity, rhetoric, text linguistics, discourse types and genres, literacy and translation (Connor, 1996, p. 6).

Despite the proponents of contrastive rhetoric, some scholars have discussed its problematic issues. First, it was less focused on the increasing interest in exploring alternative answers for structures of L2 written discourse (Matsuda, 2003, p. 21). Second, “contrastive rhetoric was criticized for its being too ethnocentric” (Hinds, 1983; Mohan & Lo, 1985; Raimes, 1991, as cited in Jogthong, 2001). Third, it was considered simplistic because it was based on a “static theory” which analyzes L2 writing by focusing merely on educational, cultural and linguistic causes (Matsuda, 1997, p. 53). According to the static theory, there is a one-way transition from writer to reader, and three components are seen as fundamental to the organization of texts, as illustrated in Figure 1.

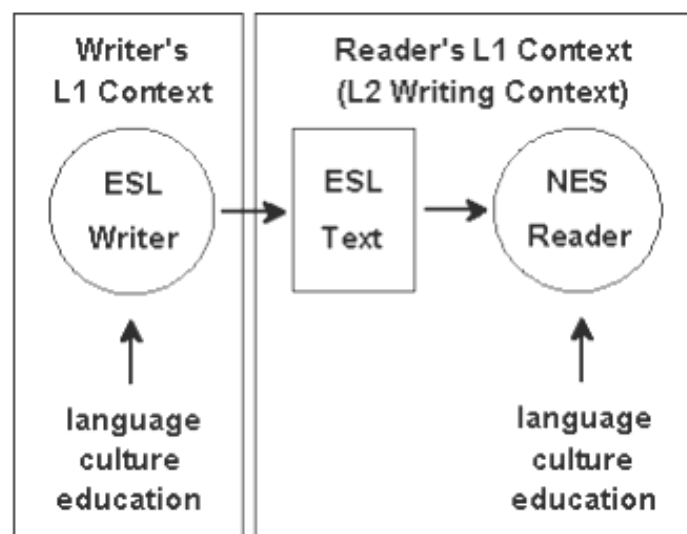


Figure 1. A static theory of L2 writing (Matsuda, P. K. (1997). Contrastive rhetoric in context: A dynamic model of L2 writing. *Journal of Second Language Writing*, 6, 45-60.)

In response to these critiques, Matsuda suggested a dynamic model of L2 writing. In this model, writer's and reader's backgrounds involved "variations within their native language, culture, knowledge of subject matter, past interactions with the reader or prior experience in this type of writing, and the membership to various L1 and L2 discourse communities" (Matsuda, 1997, p. 53) as well as language, culture, education which are three components in the static theory of L2 writing. Also, it is seen that the discourse community has a bidirectional nature between the writer's and reader's backgrounds and can be transformed as a result of negotiation. The dynamic model of L2 writing is illustrated below in Figure 2.

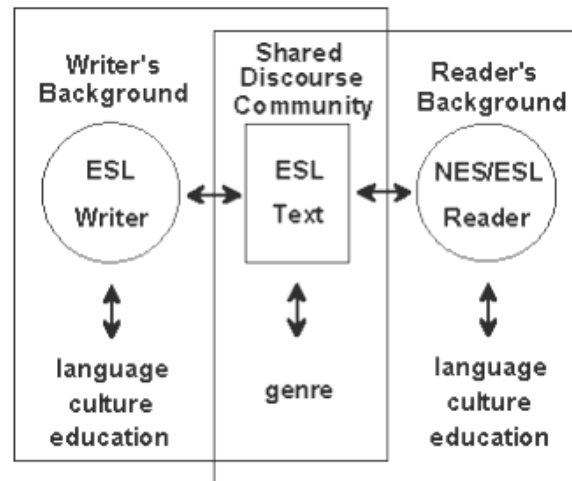


Figure 2. A dynamic model of L2 writing (Matsuda, P. K. (1997). Contrastive rhetoric in context: a dynamic model of L2 writing. *Journal of Second Language Writing*, 6, 45-60.)

Over the years, contrastive rhetoric as a field continued to develop and has transformed in light of the criticisms (Connor, 2002, 2004). Recently, Connor (2004) suggested the term “intercultural rhetoric” instead of contrastive rhetoric stating “this new term is more sensitive to context”, and attempted to build a more culturally comprehensive theory, though Atkinson and Matsuda have neither supported contrastive rhetoric as a field nor are they satisfied with this new term (Connor, 2008, p. 313). As for the understanding of intercultural rhetoric, Connor (2011) defines intercultural rhetoric as:

an umbrella term that includes cross-cultural studies (comparisons of the same concept in culture one and culture two) as well as studies of interactions in which writers from a variety of linguistic, cultural, and social backgrounds negotiate through speaking and writing (p. 2).

By referring to “inter” in the term intercultural, Connor (2008) explains that it emphasizes “the connections rather than the cultural and rhetorical differences” (p. 313), and prefers to use this new term because it embodies “both cross-cultural and intercultural studies” (p. 314).

Considering the changing directions in writing, Connor (2008) suggests that the field of intercultural rhetoric should be developed by means of three postmodern mappings: “the text in context theory,” “large and small cultures in discourse” and “interaction and accommodation in intercultural communication” (p. 305). The first map draws on Fairclough’s (1992) three-dimensional conception of discourse and suggests that writing should be considered not only as a text but also together with the discursive and social practices around it. The second map includes Holliday’s (1994, 1999) and Atkinson’s (2004) model on culture. In arguing that the concept of ‘culture’ should not be limited to

ethnicity, nations, and races, Holliday (1994) introduced “small cultures” that need to be taken into consideration instead of centering on the “big culture” (e.g., national or ethnic culture). By exemplifying the small cultures in a classroom such as student culture, youth culture, and so on, Holliday indicated the overlapping influences of various social and educational practices on L2 writing, as shown in Figure 3.

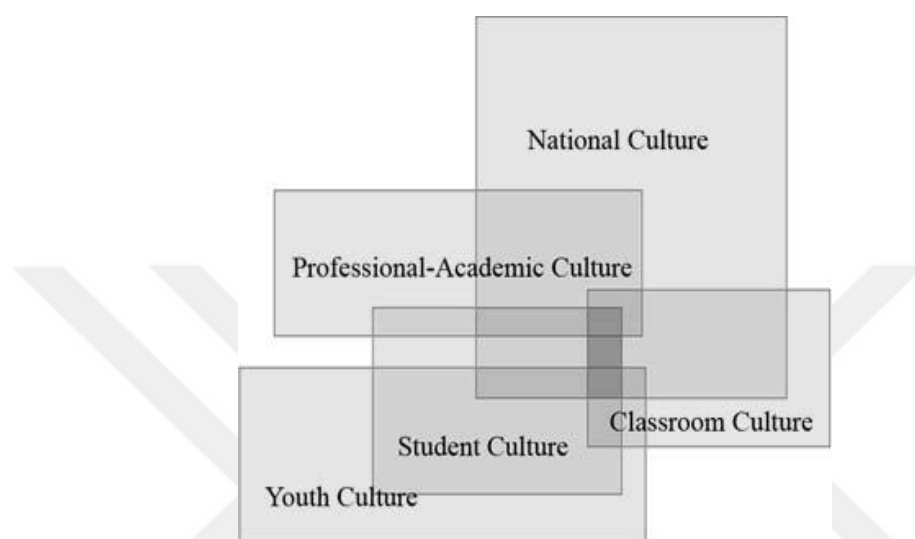


Figure 3. Small cultures in educational settings (Adapted from Holliday (1999) and Atkinson (2004) by Connor, U. (2008). Mapping multidimensional aspects of research: Reaching to intercultural rhetoric. In U. Connor, E. Nagelhout & W. V. Rozycki (Eds.), Contrastive rhetoric: reaching to intercultural rhetoric (pp. 299-315). Amsterdam: John Benjamins Publishing Company.)

Atkinson (2004) points out how these small cultures might interact with the national or ethnic culture, but merely nationality or ethnicity cannot be referred as cultural actions (p. 279). To indicate the possible other influences of small cultures, Uysal’s (2008) study can be exemplified. She analyzed the essays written in L1 and L2 by a group of Turkish writers in their own small culture as the educational context, and investigated whether there was any common rhetorical pattern among the writers from shared cultural backgrounds and possible reasons in case of the presence of said patterns. Regarding the probable reasons, the results showed that the observed bidirectional transfer cannot not only be derived from the educational context, but might also be related to other effects such as L2 level, topic and audience (Uysal, 2008, p. 183).

The third map stresses “the inclusion of intercultural studies of interaction in addition to cross-cultural studies” (Connor, 2008, p. 312). To understand the distinction, Sarangi (1995) differentiates between cross-cultural and intercultural studies and indicates that

“‘cross-cultural’ attends to abstract entities across cultural borders, while the ‘intercultural’ deals with the analysis of an actual encounter between two participants who represent different linguistic and cultural back-grounds” (p. 22). According to Sarangi (1995), studies on intercultural communication are mainly divided into two types. In the first type, there are fixed value systems, and this intercultural consistency might be explained by culture. While in the second type, interlocutors might tend to diverge from their own language culture and accommodate the language culture of the other party in order to maintain communication (Connor, 2008, p. 310). Therefore, individual social activity should also be considered as part of social structures.

To sum up, these approaches to rhetorical analysis provided evidence that L2 writing might be related to various factors such as small cultural contexts, different linguistic and cultural backgrounds, writer’s previous experiences, subject matter knowledge and the discourse community. However, regardless of these probable influences, it is clear that there are common rhetorical patterns among the writers in a particular genre and that they show variations in accordance with cultural variables in a context. Therefore, the present study examines the accepted rhetorical patterns in a specific genre in terms of move patterning and sequencing in order to understand the detected patterns in the academic texts written in English by native and non-native authors and texts written in Turkish by native authors of Turkish and to explain the reasons for possible variations.

2.5. Move Analysis

Research articles are present in all disciplines and are highly important to introduce one’s academic research to the scientific community as a compact version of a book. Chubin (1990) emphasizes the role of research articles as follows:

journals and the articles they contain are so characteristic of science and so firmly entrenched that today these regularly published collections of research results drive, and perhaps define, the scientific enterprise (p. 83).

It is a fact that there are some accepted and established discourse conventions in research articles; therefore, genre researchers try to explore the criteria that identify research articles (Van Enk & Power, 2017, p. 9). Research article is a complicated genre with its specific nature changing by discourse communities, disciplinary specialties and sociocultural norms. An experimental research article has standard sections, *Introduction*, *Methods*, *Results* and *Discussion* which is abbreviated as IMRD. According to the IMRD model,

“literature review [...] was not treated as a separate section but covered in Introduction or regarded as one similar to it” (Tseng, 2018, p. 82). For that reason, few researchers have investigated the literature review as a separate section in research articles (e.g., Tseng, 2018) and doctoral theses (e.g., Kwan, 2006).

All the sections of this macrostructure in research articles have been analyzed over the years to find their characteristics and linguistic features, and the data from several studies have established that each section has its own written forms or patterns (Amnuai, 2017, p. 1). Therefore, reaching a practical rhetorical structure for the sections of RAs has gained importance in academic writing. Swales’ (1981) influential study led researchers to the concept of move analysis, and ‘move analysis’ has become by far the most common approach adopted to analyze the rhetorical structures of RAs. It is referred as a ‘top-down approach’ because it deals with the “meaning and ideas” (Upton & Cohen, 2009, p. 588), while a bottom-up approach deals with “the lexical and/or form-focused corpus analysis” (Upton & Cohen, 2009, p. 585).

Move analysis draws heavily on the assumption that each text has specific features of its genre, in other words, “predictable set of communicative acts” (Flowerdew, 2011, p. 140) or “sets of communicative purposes” (Swales, 1990, p. 58). Move analysis categorizes phrases or sentences in the text per these communicative purposes and frames the rhetorical patterns of written academic discourse. Swales (1990) and Bhatia (1993) name these rhetorical structures as moves and steps. Therefore, move is “a discoursal or rhetorical unit that performs a coherent communicative function in a written or spoken discourse” (Swales, 2004, p. 228), or “rhetorical instruments that realize a subset of specific communicative purposes associated with a genre, and as such they are interpreted in the context of the communicative purposes of the genre in question” (Bhatia, 2006, p. 84). As it is seen from these definitions, Swales and Bhatia highlight the aspect of communicative purposes. On the other hand, Nwogu stresses the aspect of linguistic features and defines move 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” (Nwogu, 1997, p. 122). Each move is composed of steps; however, step is an “optional textual element that may or may not exist in any specific text” (Sabet & Minaei, 2017, p. 295).

Before starting the move analysis, a rhetorical framework is developed, which identifies and describes the move types that might occur in this specific genre. Then, the whole discourse structure of a text selected for the corpus is divided into move and step segments, and finally it becomes possible to understand the rhetorical organization of this specific genre through analyzing move types and move sequences (Upton & Cohen, 2009, p. 588). For example, the introduction section of a research article might first begin with a move that presents the topic and follow with another move that describes the gap in previous studies. Upton and Cohen (2009) compare the *corpus-based approach to move analysis* with the *traditional corpus-based analysis* and assert that move analysis has mainly qualitative labor, in which researchers identify each move type and tag individually by making subjective judgments about the communicative purposes of phrases, sentences or paragraphs (p. 600). Since it is rather laborious work, they, for example, analyzed a corpus of 46 letters and considered a corpus of such size to be enough to reach valid data, while Baker (2006) assumes that a larger corpus allows for the validation of these patterns more easily.

Move analysis was first recognized with the pioneering study of Swales' (1981) four-move model. Analyzing the introduction sections of 48 RAs from three fields of research: natural sciences, medical sciences and social sciences, he introduced the rhetorical framework including four moves, eleven steps and seven sub-steps following a numerical order, as seen in Table 1.

Table 1

The Swales' Four Move Model (1981)

48 RAs, 3 disciplines: Natural sciences, medical sciences and social sciences	Introduction	
	Move 1- Establishing the field	Step 1- Showing centrality i) by interest ii) by importance iii) by topic-prominence iv) by standard procedure Step 2- Stating current knowledge Step 3- Ascribing key characteristics
	Move 2- Summarizing previous research	Step 1- Strong author-orientations Step 2- Weak author-orientations Step 3- Weak author-orientations
	Move 3- Preparing for present research	Step 1- Indicating a gap Step 2- Question-raising Step 3- Extending a finding
	Move 4- Introducing present research	Step 1- Giving the purpose Step 2- Describing present research i) by this/the present signals ii) by Move 3 take-up iii) by switching to first person pronouns

Note: Swales, J. M. (1981). *Aspects of article introductions*. Birmingham: University of Aston.

Although this model was useful for nonnative English speakers who were interested in research articles in English, several studies discussed the problems of this structure. For example, Crookes (1986) criticizes the generalizability of his conclusions because Swales' corpus is limited to research articles including only reports of previous research. Similarly, having analyzed RA introductions from two different fields of research: physics and educational psychology, Swales and Najdar (1987) found distinctive rhetorical features between these two fields and a mismatch between moves in practice. For this reason, Swales (1990) revised and introduced a Create a Research Space (CARS) model based on the analysis of these RA introductions, as shown in Table 2.

Table 2

The Swales' CARS Model (1990)

48 RAs, 3 disciplines: Natural sciences, medical sciences and social sciences	Introduction		
	Move 1- Establishing the field	Step 1- Claiming centrality and/or Step 2- Making the topic generalization and/or Step 3- Reviewing items of previous research	Declining rhetorical effort ↓
	Move 2- Establishing the niche	Step 1A- Counter-claiming or Step 1B- Indicating a gap or Step 1C- Question-raising or Step 1D- Continuing a tradition	Weakening knowledge claims ↓
	Move 3- Occupying the niche	Step 1A- Outlining purposes or Step 1B- Announcing present research Step 2- Announcing principal findings Step 3- Indicating research article structure	Increasing explicitness

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

In this model, there are three moves and eleven steps. In this model, summarizing previous research was eliminated as a move and was included as a step. The ways for establishing the niche were extended, and announcing principal findings and indicating research article structure were added as steps. In this version, Swales found that some moves and steps should unquestionably appear, which are named 'obligatory', while other moves might appear less frequently, which are named as 'optional'. In some later studies (i.e., Zhang & Wannaruk, 2016, p. 164) this criterion classifying moves and steps was divided into three categories, combining Swales' (2004) and Kanoksilapatham's (2003, 2005, 2011) classification: "obligatory ($x=100\%$), conventional ($60\% \leq x < 100\%$), optional ($x < 60\%$)."

Moreover, regarding move patterning, Swales (1990) found that moves and steps might occur in a fixed, variable or recursive order.

In response to some critiques concerning the CARS model (Anthony, 1999; Chu, 1996; Samraj, 2002), Swales (2004) updated the CARS model and introduced three new moves and eleven new steps, as seen in Table 3.

Table 3

The Swales' Updated CARS Model (2004)

48 RAs, 3 disciplines: Natural sciences, medical sciences and social sciences	Introduction	
	Move 1- Establishing a territory	Step 1- Topic generalizations of increasing specificity
	Move 2- Establishing a niche	Step 1A- Indicating a gap or Step 1B- Adding to what is known Step 2- (optional) Presenting positive justification
	Move 3- Presenting the present work	Step 1- (obligatory) Announcing present research descriptively and/or purposively Step 2*- (optional) Presenting RQs or hypotheses Step 3- (optional) Definitional clarifications Step 4- (optional) Summarizing methods Step 5- (PISF**) Announcing principal outcomes Step 6- (PISF) Stating the value of the present research Step 7- (PISF) Outlining the structure of the paper
*Steps 2-4 are not only optional but less fixed in their order of occurrence than others.		
**PISF: Probable in some fields, but unlikely in others		

Note: Swales, J. (2004). *Research genres: explorations and applications*. Cambridge: Cambridge University Press.

In this version, the first two steps of Move 1 in the CARS model (1990) were combined into one step and the step of *reviewing items of previous research* was excluded. In the updated model (2004), the first three steps of Move 2 in the CARS model (1990) were combined into one step. The step *continuing a tradition* in Move 2 of the older version was named as *adding to what is known*. Taking into consideration the suggestions of Samraj (2002), Swales (2004) added a new step *presenting positive justification*. Move 3 was renamed as *presenting the present work*. The first two steps of Move 1 in the CARS model (1990) were combined into one step *announcing present research descriptively and/or purposively*, which is conventional. The next three steps *presenting RQs or hypotheses*, *definitional clarifications* and *summarizing methods* are optional, while the rest of the steps are identified as probable in some fields. The steps *announcing principal outcomes* and *outlining the structure of the paper* are similar to the steps *announcing principal findings* and *indicating research article structure* in the CARS model (1990). Taking into consideration the suggestions of Anthony (1999), Swales (2004) added a new step *stating the value of the present research*.

Over the years, changes have been made in the move and step pattern of the introduction sections of research articles by observing some problems and considering further necessary

rhetorical functions. The move analysis, which flourished within the prominent study of Swales on the introduction sections of RAs, has started to be studied in various genres and disciplines. Numerous studies have been conducted in a variety of genres from dissertations (e.g., Bunton, 2005; Flowerdew & Forest, 2009; Işık-Taş, 2008; Kwan, 2006) to letters of application (Henry & Roseberry, 2001) and movie reviews (Pang, Lee & Vaithnayathn, 2002), and also in a variety of disciplines from medical sciences (Nwogu, 1997; Williams, 1999), natural and applied sciences (Kanoksilapatham, 2003, 2005; Posteguillo, 1999) to social sciences (Brett, 1994; Dujsik, 2013; Holmes, 1997) and linguistic studies (Cotos et al., 2015, Eveyik Aydın, 2015; Işık-Taş, 2008; Lim, 2010; Toprak, 2011; Yang & Allison, 2003).

A search of the literature revealed that few studies have investigated the field of education (i.e., Al-Quahtani, 2006) and the sub-disciplines of education such as applied linguistics (i.e., Eveyik-Aydın, 2015), engineering education and health education (i.e., Zhang & Wannaruk, 2010). Also, there has been almost no investigation in the field of educational sciences as a main discipline. Therefore, the present study aimed to adopt a corpus-based move analysis, explore the rhetorical structures observed in the field of educational sciences, and compare them with the patterns obtained from other different disciplines in previous literature.

2.5.1. Cross-Disciplinary and Cross-Linguistic/Cultural Move Analysis Studies on Research Articles

Among the genres, research articles have drawn considerable interest from the academic community. A large and growing body of literature has investigated RAs to identify the accepted rhetorical functions of the abstract, introduction, methodology, results, discussion and conclusion sections and propose useful rhetorical organizational frameworks for these sections. That's why, a variety of cross-disciplinary and cross-linguistic studies analyzed different divisions of research articles. During the past 30 years, much more information has become available on the rhetorical organizations of RAs. Initially, many studies examined the abstract sections (Alharbi & Swales, 2011; Bhatia, 1993; Hyland, 2000; Li, 2011; Martin-Martin, 2003a; Melander, Salager-Meyer, 1992; Santos, 1996; Swales, 1990; Swales & Fredrickson, 1997), and the introduction sections (Al-Quahtani, 2016; Alotaibi, 2013; Anthony, 1999; Jogthong, 2001; Najdar, 1990; Swales, 1990; Swales & Najdar, 1987) in several disciplines. Thereafter, researchers attempted to focus on the methodology

sections (Bruce, 2008; Cotos et al., 2015; Kanoksilapatham, 2003; Lim, 2006; Martinez, 2003; Nwogu, 1997; Pho, 2008; Zhang & Wannaruk, 2016), the results sections (Allison, 2003; Brett, 1994; Bruce, 2009; Cotos et al. 2015; Lim, 2010; Kanoksilapatham, 2003; Nwogu, 1997; Posteguillo, 1999; Thompson, 1993; Weissburg & Buker, 1990; Williams, 1999; Yang & Allison, 2003) and the discussion/conclusion sections (Amnuai, 2017; Baştürkmen, 2012; Belanger, 1982; Cotos et al., 2015; Dudley-Evans, 1994; Dujsik, 2013; Eveyik-Aydın, 2015; Holmes, 1997; Kanoksilapatham, 2003; Morena & Swales, 2018; Mutinda, 2017; Nwogu, 1997; Peacock, 2002; Peng, 1987; Posteguillo, 1999; Toprak, 2011; Yang & Allison, 2003).

The present study focuses on the results sections of research articles in the field of educational sciences. Thus far, as it can be seen, a number of studies have explored the rhetorical structures in different sections of research articles. However, few studies have a systematic understanding of the rhetorical organization of the research article results in the field of educational sciences. Due to the nature of research article results that both report and discuss results at the same time, it might not be easy to make a distinction between the results and discussion sections (Swales & Feak, 1994, p. 170). Surprisingly, after the pilot study in the present study, it has been also observed that the results sections in the field of educational sciences have drawn on moves and steps not only from the results sections but also from the discussion/conclusion sections and the methodology sections. In addition to these integrated structures among sections, a parallelism has been established between the rhetorical structures of the introduction and results sections (Swales, 1990, 2004). Therefore, the previous studies, belonging to each IMRD/C section of research articles, are respectively presented with their models below. Moreover, considering that there has been no research comparing differences in the rhetorical organizations of research article results written in L1 English, L2 English and L1 Turkish, the present study compiled multilingual corpora in order to investigate probable variations in rhetorical structures of the three corpora.

2.5.1.1. Move Analysis Studies on Research Article Abstracts

First, Salager-Meyer (1992) analyzed a corpus of 84 research article abstracts including three types of major medical English text such as research papers, case reports and review articles in order to find the relationship between the communicative function of the moves within the different rhetorical divisions of abstracts in these genre-specific discourses and

the use of verb tense and modality within these moves. The results showed that verb tense and modality usage were found to be associated with a text type. This study was more concerned with the move analysis at the micro-level.

In the following study, a model was introduced for research article abstracts. Taking into consideration that a research article abstract is an overview of the whole article, Bhatia (1993) expected an abstract to address to the following questions: “What the author did, how the author did it, what the author found and what the author concluded, which are basically the moves in introduction, method, results and discussion/conclusion (IMRD/C) sections” (p. 78). As can be seen in Table 4, Bhatia (1993) presented a four-move model, and it was perceived as universal in a traditional structure of the RA abstract (pp. 78-79).

Table 4

The Bhatia's Model (1993)

240 RAs, 6 disciplines: Sociology, psychology, linguistics, physics, chemistry and biology	Abstract
	Move 1- Introducing purpose
	Move 2- Describing methodology
	Move 3- Summarizing the results
	Move 4- Presenting conclusions

Note: Bhatia, V. K. (1993). *Analysing genre: Language use in professional settings*. London: Longman.

Although this model was criticized due to the fact that it did not include the *introduction* move, which provides general knowledge about the topic of the research, there were a variety of comparative studies that applied the model in different disciplines and languages. For example, Martin-Martin (2003a) analyzed research article abstracts written in English for international journals and in Spanish for Spanish journals in the area of social sciences including phonetics and psychology in order to understand the extent of rhetorical variation across the two languages. Based on the low frequency of the *summarizing the results* move in the abstracts in Spanish compared to its high frequency in their counterparts in English, Martin-Martin (2003a) indicated this rhetorical divergence might have mainly derived from “the different expectations that the members of the international and Spanish scientific communities have” (p. 25). By comparing this study with the results of Alharbi and Swales’ (2011) study in which a low frequency of the *summarizing the results* move in the abstracts written in Arabic and English was observed, Alotaibi (2013) argued that writers attributed these differences to “the discipline

conventions (thus, discourse community)” more than “the language and/or culture of the writer” (p. 51).

Another cross-disciplinary and cross-linguistic research project by Melander, Swales and Fredrickson (1997) adopted Santos’ (1996) five-move analysis (See Table 5) and analyzed a corpus of 30 research article abstracts from three different linguistic backgrounds in the field of biology, medicine and linguistics. Of the abstracts analyzed, American scholars were writing in English, Swedish scholars were writing in English and Swedish scholars were writing in Swedish. This study aimed to understand whether the variation in the rhetorical move pattern of abstracts was derived from the discipline or language backgrounds. According to Alotaibi (2013), the variation was associated with the discipline, and the most noticeable moves observed in applied linguistics are the least seen in biology research articles, while medical texts have more complicated and different patterns compared to these two disciplines. On the other hand, Samraj (2018) stated “linguistics abstracts in English produced by Swedes were more likely to exclude introductions and conclusions [...] than those produced by American English writers” and provided support for cross-linguistic differences (p. 202).

Table 5

The Santos’ Five-Move Analysis (1996)

94 RAs, 1 discipline: Linguistics	Abstract	
	Move 1- Situating the research	Step 1A- Stating current knowledge and/or Step 1B- Citing previous research and/or Step 1C- Extended previous research and/or Step 2- Stating a problem
	Move 2- Presenting the research	Step 1A- Indicating main features and/or Step 1B- Indicating main purpose and/or Step 2- Hypothesis raising
	Move 3- Describing the methodology	
	Move 4- Summarizing the findings	
	Move 5- Discussing the findings	Step 1- Drawing conclusions and/or Step 2- Giving recommendations

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

Hyland (2000) analyzed a corpus of 800 research article abstracts in eight disciplines and introduced the model for RA abstracts through criticizing Bhatia’s (1993) model for its being incompatible with cross-disciplinary comparisons. Parallel to Santos’ (1996) structure analysis, Hyland (2000) added that the *introduction* move “establishes (the)

context of the paper,” and renamed the *summarizing the findings* move as “product” (p.67), as seen in Table 6.

Table 6

The Hyland’s Model (2000)

800 RAs, 8 disciplines: Biology, physics, electronic engineering, mechanical engineering, applied linguistics, marketing, philosophy and sociology	Abstract
	Move 1- Introduction
	Move 2- Purpose
	Move 3- Method
	Move 4- Product
	Move 5- Conclusion

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

By adopting Hyland’s model, Li (2011) analyzed a corpus of 40 research article abstracts in English and Chinese from the fields of chemistry and linguistics in order to reveal any cross-disciplinary and cross-linguistic variations. The results of her master thesis indicate that variation in structure can be attributed to the writers’ disciplinary as well as linguistic background. For example, linguistic RA abstracts follow a M2-M3-M4-M5 move pattern following the conventions of the international discourse community in both languages, while chemistry RA abstracts in English follow a M2-M3 pattern, and Chinese writers use a M3-M4 pattern. These results aid in understanding to what extent disciplinary or cultural variations might occur; however, it could have been better to focus on either different disciplines or different languages/cultures and to display possible cross-linguistic or cross-disciplinary differences in a more clear way. Therefore, the present study attempts to create a homogenous, comparable corpus in the field of educational sciences, which has been neglected as an area of research in move analysis studies, and explore any possible cross-linguistic differences within the same discipline.

2.5.1.2. Move Analysis Studies on Research Article Introductions

After the introduction of the CARS model, a variety of studies were conducted to validate its reliability. When it is determined as a valid, reliable and holistic tool to understand the rhetorical structure of research article introductions, two types of studies appeared: The first type of studies investigated disciplinary variations in an English academic discourse, and the second type of studies included cross-cultural studies and compared other languages to English (Al-Qahtani, 2006, p. 43).

For this purpose, Swales and Najdar (1987) first analyzed a corpus of 110 research article introductions in order to understand any discipline-specific differences. They acknowledged the specific disciplinary variations between physics and educational psychology, and that rhetorical needs might change in accordance with different disciplines. Also, it has been highlighted that rhetorical needs might change with time because a type of genre evolves within a few decades. Then, Najdar (1990) analyzed a corpus of 48 Arabic research article introductions in the field of agriculture to compare and contrast RA introductions written by native English speakers and nonnative English speakers. By utilizing the CARS model (Swales, 1990), he noted that 27 introductions in his corpus complied with the model and the sequence of the model. Then, he explained that Move 1 occurred in all the articles, Move 2 was seen only in seven articles, and Move 3 was found in 23 articles out of 27 articles. In terms of the occurrence of the steps *claiming a centrality* and *indicating a gap*, the Arabic articles in this corpus paralleled with their English counterparts; however, the frequency of the step *indicating similarity* was used at low levels in the Arabic RAs.

As a cross-linguistic study, Jogthong (2001) analyzed a corpus of 40 Thai RA introductions in the areas of medicine and education, and the results showed that the rhetorical structure of Thai research article introductions was found to mainly conform to the CARS model (Swales, 1990), whereas the specific steps were less compatible with the model. The differences were attributed to “socio-cultural aspects, cultural linguistics and research environments” (Jogthong, 2001, p. ii). For example, regarding Move 1, Thai writers avoided using the steps *claiming centrality* and *reviewing previous research* because asserting an argument and evaluating others’ work might be found unpleasant in their culture. Similarly, regarding Move 2, Thai writers tended to avoid *indicating a gap* in the literature in contrast to American writers competing for research space. Lastly, as for Move 3, Thai writers did not present their principal findings in the introduction sections, and moreover, they noted implications of their study as well as announcing their research and outlining purposes of their study in general.

In another cross-linguistic study, Al-Quahtani (2006) analyzed a corpus of 15 research article introductions written in Arabic by Arabic-educated Arab scholars and US-educated Arab scholars, and in English by American native speakers of English in the field of education by adopting the CARS model (Swales, 1990). This study concentrated on a single discipline to be able to compare and contrast the two languages in the same genre,

which is unique in this sense. The similarities and differences between two Arabic groups educated in Arabia and the US were found at two levels: macrostructure level and move-step level. For example, Arabic-educated scholars did not tend to use Move 2 whereas US-educated scholars used this move by means of Step 1B *indicating a gap* that is the most frequently used step in English RA introductions according to Swales (1990). When the results of two Arabic groups and American native speakers were compared, US-educated Arab scholars and American scholars were observed to employ the three moves of the CARS model in almost the same way. Another similarity between Arabic-educated Arab scholars and American scholars was seen in the extent of variations in using the six linguistic devices comprising Move 3.

In a recent study, Alotaibi (2013) analyzed a corpus of 40 Arabic and English research article introductions in two fields of social sciences including sociology and educational psychology by adopting the modified version of the CARS model (Swales, 2004). The analysis indicated a number of significant cross-disciplinary and cross-linguistic divergences in the three moves. Although Move 1 occurred most frequently in both disciplines, in English RAs there was a clear difference between writers in sociology using more instances of Move 1 and writers in educational psychology not preparing the reader for the topic. In addition, fewer occurrences of Move 2 and Move 3 were observed in Arabic RAs in contrast to English RA introductions. Parallel to Jogthong' (2001) and Al-Quahtani' (2006) studies, the findings suggest that *indicating a gap* in Move 2 was not often observed in other languages, although native speakers of English strongly attempt to indicate a gap.

In a cross-linguistic study including the Turkish context, Kafes (2018) analyzed a corpus of 74 research article introductions in English by American academic writers, in English and in Turkish by Turkish academic writers in the field of social sciences by adopting the Sheldon's (2011) modified version of the CARS model (Swales, 1990). This cross-linguistic study found some similarities between L2 English and L1 Turkish RAs by Turkish academic writers, and the compliance of these two corpora with the local discourse community conventions was considered as a sign of socio-cultural factors (Kafes, 2018, p. 76). For example, compared to the established global discourse conventions observed in L1 English by American academic writers, L2 English and L1 Turkish RAs seem to indicate gaps in previous research less, exceed the normal use in only two moves and follow a cyclical patterning rather than a linear patterning (Kafes, 2018, pp. 75-76).

2.5.1.3. Move Analysis Studies on Research Article Methods

Compared to the introduction section of research articles that have an acceptable model of rhetorical move structure (Swales, 1981, 1990, 2004), there has been no unified and clear model suggested for the methods section, and also only a small number of studies have analyzed the methods section. According to Kanoksilapatham (2003), the organization of rhetorical moves in the CARS model (Move 1-Move 2-Move 3) can be applied in any discipline; on the other hand, different rhetorical patterns are required in each discipline. This variation is derived from the distinct nature of each scientific discipline that follows specific methodologies (Skelton, 1994).

In the field of biochemistry in which there are many experimental procedures, Kanoksilapatham (2003) analyzed a corpus of 60 research article methods to identify rhetorical moves used and to provide a baseline. By the end of the move analysis, four moves were identified, as seen in Table 7. The first two moves were central to the methods section, while the last two moves appeared less frequently.

Table 7

The Kanoksilapatham's Model for Research Article Methods (2003)

60 RAs, 1 discipline: Biochemistry	Methods	
	Move 1- Describing materials (obligatory)	Step 1- Listing materials Step 2- Detailing the source of the materials Step 3- Providing the background of the materials Step 4- Justifying data collection procedures
	Move 2- Describing experimental procedures (obligatory)	Step 1- Documenting established procedures Step 2- Detailing procedures Step 3- Providing the background of the procedures
	Move 3- Detailing equipment (optional) Move 4- Describing statistical procedures (optional)	

Note: Kanoksilapatham, B. (2003). *A corpus-based investigation of scientific research articles: linking move analysis with multidimensional analysis* (Unpublished Doctoral Dissertation). Georgetown University, Washington.

On the other hand, in a study conducted in specific disciplines of applied linguistics and educational technology, Pho (2008) analyzed research article methods sections, and proposed only two moves including *data collection* and *data analysis procedures*, as shown in Table 8. The analysis of these studies revealed that each discipline has unique characteristics, and these wide cross-disciplinary variations in the methods section cause difficulty in reaching a conclusive model in terms of rhetorical move organization.

Therefore, the studies analyzing research article methods have become more oriented on exploring cross-disciplinary differences rather than seeking an answer to whether or not cross-linguistic variations may occur.

Table 8

The Pho's Model (2008)

120 RAs, 2 disciplines: Applied linguistics and educational technology	Methods	
	Move 1- Describing data collection procedures	Step 1- Describing the sample Step 2- Describing research instruments Step 3- Justifying data collection procedures
	Move 2- Describing data analysis procedures	Step 1- Recounting data analysis procedures

Note: Pho, P. D. (2008). *How can learning about the structure of research articles help international students?* In T. McGrath (Ed.), *19th ISANA International Education Conference Proceedings* (pp. 1-11). The Gap: ISANA International Education Association.

Being aware of the fact that each scientific discipline might necessitate particular rhetorical organization, Zhang and Wannaruk (2016) aimed to create a unified model for the field of education by including a wide range of studies from engineering education to educational sociology and analyzed a corpus of 120 research article methods. For the initial coding, they adopted Pho's (2008) model, and finally, they presented the finalized coding framework with new moves and new steps, as shown in Table 9. The newly added *describing research design* move occurred in over half of the articles. The *Describing research context* step, which was identified after modifications to the coding framework, was seen in over one-third of the articles. Another step *verifying compliance with ethical standards* occurred in a considerable number of research article methods. Education as a discipline analyzes individuals, so sensitivity to ethical requirements is considered important. In a similar vein, *justifying data analysis procedures* and *establishing inter coder reliability* steps were also included because data analysis procedures require education researchers to present more details about their methodological practices.

Table 9

The Zhang and Wannaruk's Model (2016)

120 RAs, 10 sub disciplines in Education: engineering education, management and business education, literacy education, health education, educational technology, learning, development and teaching, educational sociology, applied linguistics, science education, learning theory and pedagogy	Methods	
	Move 1- Describing research design (optional)	
	Move 2- Describing data collection procedures (obligatory)	Step 1- Describing research context (optional)
		Step 2- Describing the sample (conventional)
		Step 3- Describing instruments (optional)
		Step 4- Elaborating on data collection procedures (optional)
		Step 5- Justifying data collection procedures (optional)
	Move 3- Describing data analysis procedures (conventional)	Step 6- Verifying compliance with ethical standards (optional)
		Step 1- Recounting data analysis procedures (optional)
		Step 2- Justifying data analysis procedures (optional)
		Step 3- Establishing inter coder reliability (optional)

Note: Zhang, B., & Wannaruk, A. (2016). Rhetorical structure of education research article methods section. *Journal of Language Teaching and Learning in Thailand*, 5, 155-184.

In contrast to the studies that attempt to limit the number of disciplines and create an applicable model for a particular discipline, Cotos et al. (2015) compiled a highly comprehensive corpus of 900 research article methods in a wide range of disciplines. In addition, different from the previous studies, all of the moves in earlier models for the methods section were combined under one move *describing the study* in this coding framework, and two new moves *contextualizing the study methods* and *establishing credibility* were included. Considering the range of disciplines, this study surely revealed some discipline-specific conventions. However, as the aim was to create a unified model for the methods section, a common ground was found, as shown in Table 10. In the corpus, *describing the study* move was seen in over half of the methods sections. *Contextualizing the study methods* was seen in less than one-third of the articles while *establishing credibility* occurred in less than ten percent.

Table 10

The Cotos, Huffman and Link's Model for Research Article Methods (2015)

900 RAs, 30 disciplines: 8 in humanities and social sciences, 22 in natural and applied sciences	Methods	
	Move 1- Contextualizing the study methods	Step 1- Referencing previous works and/or Step 2- Providing general information and/or Step 3- Identifying the methodological approach and/or Step 4- Describing the setting and/or Step 5- Introducing the subjects/ participants and/or Step 6- Rationalizing pre- experiment decisions
	Move 2- Describing the study	Step 1- Acquiring the data and/or Step 2- Describing the data and/or Step 3- Identifying variables and/or Step 4- Delineating experimental/ study procedures and/or Step 5- Describing tools/instruments/materials/equipment and/ or Step 6- Rationalizing experiment decisions and/or Step 7- Rationalizing experiment decisions and/or
	Move 3- Establishing credibility	Step 1- Preparing the data and/or Step 2- Describing the data analysis and/or Step 3- Rationalizing data processing/analysis

Note: Cotos, E., Huffman, S., & Link, S. (2015). Furthering and applying move/step constructs: Technology-driven marshalling of Swalesian genre theory for EAP pedagogy. *Journal of English for Academic Purposes*, 19, 52-72.

2.5.1.4. Move Analysis Studies on Research Article Results

Regarding research article results, the previous studies indicated there are distinctive rhetorical features that characterize results sections. Although the results section is expected to report and interpret the findings, and the discussion section to discuss the findings, some rhetorical structures involved both the presentation and interpretation of the findings, and the discussion of the findings. Therefore, Swales and Feak (1994) claim that making a distinction between results and discussion is not as simple as it seems (p. 170).

The very first model for research article results sections emerged with the analysis of Weissburg and Buker (1990). According to them, there should be two possible ways to provide results, which are *alternating* and *sequential*. In the alternating pattern, each *result* was followed with a *comment*, while in the sequential pattern, *comments* followed after all the *results* were reported.

Thompson (1993) analyzed a corpus of 36 research article results in the field of biochemistry. Although researchers from nationalities such as French, British, Japanese and Swiss authored 20 of the research articles that were analyzed, it could not be categorized as a cross-linguistic study. As a result of Thompson's analysis, six rhetorical moves were identified, as shown in Table 11. In contrast to Weissburg and Buker's (1990)

two-sequence model, this study indicates that in the results section the authors not only report and interpret results but also justify the methods, as compared to the previous studies, and state limitations.

Table 11

The Thompson's Model (1993)

36 RAs, 1 discipline: Biochemistry	Results
	Move 1- Justifications for methodological selections
	Move 2- Interpretations of experimental results
	Move 3- Evaluative comments on experimental data
	Move 4- Statements citing agreement with pre-established studies
	Move 5- Statements disclosing experimental discrepancies
	Move 6- Statements admitting interpretive perplexities

Note: Thompson, D. K. (1993). Arguing for experimental "fact" in science: A study of research article results sections in Biochemistry. *Written Communication*, 10(1), 106-128.

When compared with the previous models, Brett's (1994) move structure shows similarities with Weissburg and Buker's (1990) model in the sense of classifying the results section as *presenting results* and *commenting on results*, and also with Thompson's (1993) model in the sense of including *methods* and *reviewing literature*. Brett (1994) analyzed a corpus of 20 research article results sections in the field of sociology and identified three major types of communicative move categories: *metacontextual*, *presentation* and *comment*, as shown in Table 12. Nevertheless, this model is different from Weissburg and Buker's (1990) model which focused exclusively on *highlighting* and *interpreting results* and from Thompson's (1993) model which lacked discipline-specific steps in sociology. In Brett's (1994) model, the *metacontextual categories* move aims to introduce the section by providing guiding information. Then, the *presentation categories* move includes restating methodological procedures, hypothesis and exposition of results, and finally, the *comment categories* move compares the results to the literature, interprets results, gives recommendations for further studies and stipulates implications and summary. The move categories seem to occur cyclically, and the most frequently used pattern is *metacontextual* followed by *presentation*, while the *comment* move is less frequent.

Table 12

The Brett's Model (1994)

20 RAs, 1 discipline: Sociology	Results	
	Move 1- Metacontextual categories	Step 1- Pointer Step 2- Structure of sections
	Move 2- Presentation categories	Step 1- Procedural Step 2- Hypothesis restated Step 3- Statement of data
	Move 3- Comment categories	Step 1- Comparison of finding with the literature Step 2- Evaluation Step 3- Further research suggested Step 4- Implications Step 5- Summarizing

Note: Brett, P. (1994). A genre analysis of the results section of sociology articles. *English for Specific Purposes*, 13(1), 47-59.

In another study centering on one specific discipline, Nwogu (1997) analyzed a corpus of 30 research article results in the field of medicine. According to Nwogu (1997), the data can be presented in a two-sequence move structure in which the findings are first highlighted and then discussed (p. 135), as shown in Table 13. Although the model bears similarities with Brett's (1994) model in the sense of its two-sequence structure, the steps in the field of medicine do not seem to be as complex as that identified in the field of sociology.

Table 13

The Nwogu's Model for Research Article Results (1997)

15 RAs, 1 discipline: Medical sciences	Results	
	Move 1- Reporting results	Step 1- Restating data analysis procedures Step 2- Restating research questions Step 3- Stating general findings Step 4- Stating specific findings
	Move 2- Commenting on results	Step 1- Interpreting results Step 2- Comparing results with previous studies Step 3- Evaluating results (or research)

Note: Nwogu, K. N. (1997). The medical research paper: Structure and functions. *English for Specific Purposes*, 16(2), 119-138.

Williams (1999) conducted another study in the medical sciences. S/he analyzed a corpus of 8 research article results sections by modifying Brett's (1994) model, as shown in Table 14. William concluded that Brett's model might be "an adequate basic model for the rhetorical categories of Results sections for interdisciplinary genre analysis" (p. 362). Nevertheless, this study with biomedical articles indicated there are distinctive rhetorical features that are characterized by each discipline. For example, Brett's rhetorical move

structure for the medical research articles was outlined more complicatedly when compared to Nwogu's simple and precise model in the same discipline (Kanoksilapatham, 2003, p. 41). Also, linear patterning was identified in this discipline as compared to the cyclical patterning identified in Brett's study. After additional adjustments to Brett's model, ten moves were identified. Though it was based on Brett's model, the moves such as *making recommendations on subsequent research*, *drawing implications* and *summarizing* were not observed in medical research articles.

Table 14

The William's Model (1999)

8 RAs, 1 discipline: Medical sciences	Results
	Move 1- Pointer
	Move 2- Structure of section
	Move 3- Procedural
	Move 4- Statement of finding/result
	Move 5- Substantiation of finding
	Move 6- Non-validation of finding
	Move 7- Explanation of finding
	Move 8- Comparison of findings with literature
	Move 9- Evaluation of finding re hypotheses
	Move 10- Interpretation of finding

Note: Williams, I. A. (1999). Results sections of medical research articles: Analysis of rhetorical categories for pedagogical purposes. *English for Specific Purposes*, 18, 347-366.

Posteguillo (1999) analyzed a corpus of 22 research article results in the field of computer sciences. Using Brett's (1994) model of rhetorical moves, Posteguillo found a similar rhetorical organization of the results section in computer sciences as to the ones identified in the field of sociology, and identified ten communicative moves, as shown in Table 15.

Table 15

The Posteguillo's Model (1999)

22 RAs, 1 discipline: Computer sciences	Results
	Move 1- Pointer
	Move 2- Structure of section
	Move 3- Procedural
	Move 4- Hypothesis restated
	Move 5- Statement of data
	Move 6- Comparison of findings with literature
	Move 7- Evaluation
	Move 8- Further research suggested
	Move 9- Implications
	Move 10- Summarizing

Note: Posteguillo, S. (1999). The schematic structure of computer science research articles. *English for Specific Purposes*, 18(2), 139-160.

In a comprehensive study including each IMRD/C section, Kanoksilapatham (2003) analyzed a corpus of 60 research article results in the field of biochemistry in order to provide a linguistic identification of rhetorical moves and create a rhetorical organization model for research articles in a particular discipline, as shown in Table 16. Four moves which might occur cyclically and vary in order were identified: The first move which begins with the description of the procedures occurred in 95% of the results section corpus and is categorized as a conventional move; the following *methodological justification* move was also identified in Thompson's model as *justifications for methodological selections* move for biochemistry research article results, and occurred in 71% of the corpus; *statement of results* move was composed of two steps which validate and invalidate the results, and *substantiation of the results* step was noticed to precede the following step *non-validation of the result* constantly; the last *commentary* move which occurred in 91% of the corpus includes the discussion of the findings and "neutralizes the conventional distinction between the last two internal sections of research articles: Results and Discussion" (Kanoksilapatham, 2003, pp. 186-190).

Table 16

The Kanoksilapatham's Model for Research Article Results (2003)

60 RAs, 1 discipline: Biochemistry	Results	
	Move 1- Procedural statement	Step 1- Purpose(s)/Aim(s)/Objective(s) Step 2- Research question(s) Step 3- Hypotheses(is) restated Step 4- Procedures
	Move 2- Methodological justification	Step 1- Established knowledge of the topic Step 2- Previous literature
	Move 3- Statement of results	Step 1- Substantiation of the result Step 2- Non-validation of the result
	Move 4 - Commentary statement	Step 1- Explanation Step 2- Interpretation or generalization Step 3- Evaluation and/or comparison Step 4- Suggested further studies Step 5- Limitation Step 6- Summary

Note: Kanoksilapatham, B. (2003). *A corpus-based investigation of scientific research articles: linking move analysis with multidimensional analysis* (Unpublished Doctoral Dissertation). Georgetown University, Washington.

In addition to sociology, another study in social sciences was conducted in the sub discipline of applied linguistics. Yang and Allison (2003) analyzed a corpus of 40 research article results in the field of applied linguistics. Different from the previous studies that analyzed the results section, their study compared results only section with combined results and discussion section. Six moves were identified, as shown in Table 17. The first move *preparatory information* is seen as a connector between moves and gives related information before presenting the results such as methodological instruments, a statistical procedure, the location of tables or graphs where results are displayed and a general preview of the section (Yang & Allison, 2003, p. 373). In contrast to the previous models that include a separate move or step for the methodological procedure or justification of the methodology (Thompson 1993; Nwogu 1997; Williams, 1999; Posteguillo, 1999; Kanoksilapatham, 2003, 2005), this model has only this all-inclusive move. Then, the obligatory two moves are seen in reporting results and commenting on results. Contrary to the common belief that the results sections are responsible only for reporting results, it is confirmed in this discipline-specific study that the presentation of the results is followed by the interpretation of research results by means of evaluating the underlying reasons, establishing the meaning and comparing with the related literature. This result is in line with previous findings in sociology (Brett, 1994), in computer sciences (Posteguillo, 1999) and medical sciences (Nwogu, 1997). Interestingly, the analysis did not indicate any

significant differences in terms of the occurrence of *reporting and commenting on results* moves between the research articles with headings of only results or findings, and the combined results and discussion. Then, Yang and Allison accounted for this similarity that writers' preference of using the combined section heading might be a deliberate act to emphasize the predominant use of the commenting communicative function, and it is, vice versa, for writers labeling it with only the results. The following move *summarizing results* is optional, and similarly, the last two moves *evaluating the study* and *recommending further research* rarely occurred. In addition, this study indicates that the result sections are strikingly cyclical.

Table 17

The Yang and Allison's Model for Research Article Results (2003)

20 RAs, 1 discipline: Applied linguistics	Results	
	Move 1- Preparatory information	
	Move 2- Reporting results	
	Move 3- Commenting on results	Step 1- Interpreting results Step 2- Comparing results with previous studies Step 3- Evaluating results (or research) Step 4- Accounting for results
	Move 4- Summarizing results	
	Move 5- Evaluating the study	Step 1- Indicating limitations Step 2- Indicating significance/advantage
	Move 6- Deductions from the research	Step 1- Recommending further research

Note: Yang, R., & Allison, D. (2003). Research articles in applied linguistics: moving from results to conclusions. *English for Specific Purposes*, 22(4), 365-385.

In the cross-disciplinary study, Bruce (2009) analyzed a corpus of 40 research article results in two disciplines including sociology and organic chemistry. Adopting a model that draws upon both social genre knowledge (i.e., *context, epistemology, writer stance, content schemata*) and cognitive genre knowledge (i.e., *report, explanation, discussion, recount*), Bruce (2009) conducted a cross-disciplinary analysis of the results sections, and at the same time made an interview with a group of research article authors (p. 108). It is important to note that this interview methodology was recommended by some intercultural rhetoric researchers (i.e., Hyland, 2000; Uysal, 2008) because of the increasing interest in the social nature of discourse. S/he found that there are disciplinary differences in the written texts and the discourses embracing these texts, and “these differences appear to

arise from the objects of enquiry, epistemological viewpoints and research paradigms and textual structures characteristic of the two disciplines” (Bruce, 2009, p. 115).

Cotos et al. (2015) analyzed a corpus of 900 research article results in 30 disciplines including humanities, social sciences, natural and applied sciences, and identified four moves, as shown in Table 18. The move *approaching the niche* introduces the study with general information and objectives, by varying across disciplines and occurred in 24% of the corpus. The following *occupying the niche* is the most frequently employed move at 61% and involved *reporting results* and an *alternative way of reporting results* with tables, figures, and so on. Then, the *construing the niche* move evaluated the meaning and significance of the results in several ways and occurred in 14% of the whole corpus. In a similar vein, variation among disciplines was observed in the frequency of steps. Some disciplines tend to compare the results with the previous results (e.g., chemical engineering, geological and atmospheric sciences, synthetic chemistry), while other disciplines tend to account for results (e.g., agricultural and bio-systems engineering, animal science, curriculum and instruction, meteorology). The last move *expanding the niche* occurred in 1% of the corpus, and it was reminded that this move would be used for the research articles that combine the results and discussion sections and have a separate conclusion. Since this study is highly comprehensive and includes a wide range of disciplines, it is easier to argue that Swales’ hypothesis of disciplinary variation in the rhetorical organization of research article results is highly probable.

Table 18

The Cotos et al. 's Model for Research Article Results (2015)

900 RAs, 30 disciplines: 8 in humanities and social sciences, 22 in natural and applied sciences	Results	
	Move 1- Approaching the niche	Step 1- Providing general orientation Step 2- Restating study specifics Step 3- Justifying study specifics
	Move 2- Occupying the niche	Step 1- Reporting specific results Step 2- Indicating alternative presentation of results
	Move 3- Construing the niche	Step 1- Comparing results Step 2- Accounting for results Step 3- Explicating results Step 4- Clarifying expectations Step 5- Acknowledging limitations
	Move 4- Expanding the niche*	Step 1- Generalizing results Step 2- Claiming the value Step 3- Noting implications Step 4- Proposing directions
* Note: "The inclusion of Move 4 here accommodates for RAs that integrate the discussion in the Results section and have a separate Conclusion. Separate Conclusion sections generally fulfill the communicative goal of Move 4 and exhibit the respective steps."		

Note: Cotos, E., Huffman, S., & Link, S. (2015). Furthering and applying move/step constructs: Technology-driven marshalling of Swalesian genre theory for EAP pedagogy. *Journal of English for Academic Purposes* 19, 52-72.

All in all, in the relevant literature there has been no investigation of the research article results in the discipline of educational sciences. In addition, no research has been found that conducted a cross-linguistic investigation in the results sections so far.

2.5.1.5. Move Analysis Studies on Research Article Discussions/Conclusions

Concerning the dilemma that there are greater similarities and differences between the rhetorical organization of results and discussion sections, Mutinda (2017) concludes that she found many similarities between these two sections of research articles and highlights that differences indeed show variances in accordance with the focus of each section.

Regarding the rhetorical analysis in the discussion sections of research articles, the first study followed Swales' CARS model. Belanger (1982) investigated a corpus of 10 research article discussions in the field of neuroscience. Nine moves were identified, as seen in Table 19. The structure of the discussion sections was found to be cyclical and follow the same order repeatedly rather than a move from specific to general. On the other hand, Hill, Soppelsa and West (1982, cited in Toprak, 2011) contrasted the organization in the

introduction and discussion sections, stating that the discussion sections moved from solution of each research problem to broader implications, while the introduction sections moved from a presentation of a broader field to the particular research problems.

Table 19

The Belanger's Model (1982)

10 RAs, 1 discipline: Neuroscience	Discussion
	Move 1- Introduction
	Move 2- Summarizing results
	Move 3- Conclusion
	Move 4- What results suggest
	Move 5- Further questions
	Move 6- Possible answers to further questions
	Move 7- Reference to previous research
	Move 8- References to present research
	Move 9- Summary/conclusion

Note: Belanger, M. (1982). *A preliminary analysis of the structure of the discussion sections in ten neuroscience journal articles*. (Mimeo), LSU: Aston University Reference Collection.

Different from the previous model, Peng (1987) analyzed a corpus of 10 research article discussions in the field of chemical engineering and proposed an eleven-move structure, as identified in Table 20. The results indicated a cyclical patterning of discussion sections. Cycles were observed in two ways. The first cycle addressed research questions, while the second cycle addressed the findings with comments.

Table 20

The Peng's Model (1987)

10 RAs, 1 discipline: Chemical engineering	Discussion
	Move 1- Background information
	Move 2- Statement of result
	Move 3- Observation
	Move 4- Comparison
	Move 5- (Un)expected outcome
	Move 6- Explanation
	Move 7- Deduction
	Move 8- Hypothesis
	Move 9- Justification
	Move 10- Validation
	Move 11- Recommendation

Note: Peng, J. 1987. Organizational features in chemical engineering research articles. In T. Dudley-Evans (Ed.), *Genre analysis and ESP* (pp. 79-116). The University of Birmingham: ELR Journal 1.

Having confirmed the cyclical organization of discussions, Hopkins and Dudley-Evans (1988) analyzed master theses in the field of biology and conference proceeding papers in

the field of agricultural science and proposed an eleven-move structure. By revising their earlier model, they developed a new model (1994) by including finding, explanation, claim, limitation and recommendation moves, as shown in Table 21. Hopkins and Dudley-Evans' (1988) model was similar to Peng's (1987), and also the cyclicity of discussion sections was approved by their analysis indicating that the findings were discussed in a repetitive order. According to Dudley-Evans (1994), there are three main communicative functions in the rhetorical organization of discussion sections: "Introduction-Evaluation-Conclusion" (p. 224). Similarly, Swales and Feak (1994) condense the discussion sections into three main communicative functions that include *consolidating research space*, *indicating limitations* and *suggesting further studies* (p. 196). However, these communicative functions show variances significantly in accordance with research questions and where these research questions are lined.

Table 21

The Dudley-Evans' Model (1994)

Master dissertations and Conference proceeding papers, 2 disciplines: Biology and agricultural sciences	Discussion
	Move 1- Information
	Move 2- Statement of result
	Move 3- Finding
	Move 4- (Un)expected outcome
	Move 5- Reference to previous research
	Move 6- Explanation
	Move 7- Claim
	Move 8- Limitation
	Move 9- Recommendation

Note: Dudley-Evans, T. (1994). Genre Analysis: An approach to text analysis for ESP. In M. Coulthard (Ed.), *Advances in written text analysis* (pp. 219-228). Routledge, London.

Holmes (1997) analyzed a corpus of 30 research article discussions in the fields of history, political sciences and sociology. By modifying Hopkins and Dudley-Evans' (1988) model, s/he focused on cross-disciplinary differences between the move structures of social and natural sciences rather than creating a new framework. Although there were structural similarities, it is worth noting that history research articles have unique features when compared to research articles in social sciences.

Compared to the higher number of move sequences in the previous models, Nwogu (1997) analyzed a corpus of 30 research article discussions in the field of medicine and identified a three-move structure that highlights specific rhetorical functions in medical sciences, as shown in Table 22. Dobakhti (2011) notes that medical research articles might require

fewer moves compared to Dudley-Evans' (1994) model (p. 45). Nevertheless, the number of research articles was limited, so it was not considered representative of the research area.

Table 22

The Nwogu's Model for Research Article Discussions (1997)

15 RAs, 1 discipline: Medical sciences	Discussion	
	Move 1- Highlighting overall research outcome	
	Move 2- Explaining specific research outcome	Step 1- Stating a specific outcome Step 2- Interpreting the outcome Step 3- Indicating significance of the outcome Step 4- Contrasting present and previous outcomes Step 5- Indicating limitations of outcomes
	Move 3- Stating research conclusions	Step 1- Indicating research implications Step 2- Promoting further research

Note: Nwogu, K. N. (1997). The medical research paper: Structure and functions. *English for Specific Purposes*, 16(2), 119-138.

Posteguillo (1999) analyzed a corpus of 40 research article discussion/conclusions in the field of computer sciences. Based on Swales' eight-move structure, two findings were underlined: the presence of cyclical patterning and two obligatory moves occurring frequently which are the *statement of results* and *recommendation for further study*.

In one highly comprehensive study, Peacock (2002) analyzed a corpus of 252 research article discussions in the seven disciplines of physics, biology, environmental science, business, language and linguistics, public and social administration and law. This study is significant in investigating the differences between native and nonnative speakers as well as in cross-disciplinary research. By combining the *statement of result* and the *finding* moves into one move known as the *finding* move, Dudley-Evans' (1994) model was modified. The results showed that three moves *claim*, *finding* and *reference to previous research* are obligatory, while the *information*, *(un)expected outcome* and *limitation* moves are optional. A number of differences in the frequency and type of moves and move cycles were observed between native speaker (NS) and nonnative speaker (NNS) research articles. The *claim* and *limitation (of the study)* moves were used less frequently by NNS writers than by NS writers, and similarly, in all three of the sciences, the *recommendation (for future research)* move was used far less often by NNS writers. On the other hand, NNS writers tend to use *(un)expected outcome* and *explanation* moves more frequently than

their NS counterparts. To exemplify some interdisciplinary variations, the moves *referring to previous research*, *describing limitations* and *making recommendations for further research* were less commonly used in the disciplines of physics and environmental sciences.

By adopting the previous models (Hopkins & Dudley-Evans, 1988; Peng, 1987; Swales & Feak, 1994) with some modifications, Kanoksilapatham (2003) analyzed a corpus of 60 research article discussions in the field of biochemistry. As a result of the two-level move analysis, four moves were identified, as shown in Table 23. The first move *contextualizing the study* frequently occurred and is classified as conventional. The writers tended to introduce the study with background information including *generalizations*, *claims*, *deductions* or *research gaps* in biochemistry texts in contrast to computer science research articles involving a lower frequency of this move (e.g., Posteguillo, 1999). Compared to the previous models involving a higher number of moves, Kanoksilapatham's (2003, 2005) model brings these ranges of moves together and divides the discussion sections into two main moves as *consolidating results* supporting the study and *stating limitations of the study* criticizing the study. The *consolidating results* move involves the restatement of methodological procedures and research questions, presenting findings, validating findings with previous studies, comparison and contrast, generalization and exemplification, and is considered as conventional. The *stating limitations* move provides limitations regarding the methodology, findings or the claims, and was classified as conventional because it occurred in 80% of the corpus. The last move *suggesting further research* was identified as optional with 53% occurrence in the corpus. As for the move patterning, a M1-M2-M3-M4 cycle was found when all moves occurred. M1-M2 or M2-M1 cycles were always present and cyclical. M3 and M4 usually followed M2 and occurred towards the end of the discussion section.

Table 23

The Kanoksilapatham's Model for Research Article Discussions (2003)

60 RAs, 1 discipline: Biochemistry	Discussion	
	Move 1- Contextualizing the study (conventional)	Step 1- Describing established knowledge Step 2- Presenting generalizations, claims, deductions or research gaps
	Move 2- Consolidating results (conventional)	Step 1- Restating methodology (purposes, research questions, hypothesis restated, and procedures) Step 2- Stating selected findings Step 3- Referring to previous research Step 4- Explaining differences in findings Step 5- Making overt claims or generalizations Step 6- Exemplifying
	Move 3- Stating limitations of the study (conventional)	Step 1- Limitations about the findings Step 2- Limitations about the methodology Step 3- Limitations about the claims made
	Move 4- Suggesting further research (optional)	

Note: Kanoksilapatham, B. (2003). *A corpus-based investigation of scientific research articles: linking move analysis with multidimensional analysis* (Unpublished Doctoral Dissertation). Georgetown University, Washington.

In a recent study on discussion sections, Yang and Allison (2003) analyzed a corpus of 20 research article discussion/conclusions in the field of applied linguistics, as shown in Table 24. The *commenting on results* move was seen at the highest frequency, so it was classified as obligatory while *reporting results* was quasi-obligatory. Moreover, *reporting results* and *summarizing results* cycles were found less frequently than expected. This model was criticized for categorizing the moves *summarizing the study*, *evaluating the study* and *deductions from the study* as moves of discussion sections because they have communicative functions of the conclusion sections (Toprak, 2011, p. 42).

Table 24

The Yang and Allison's Model (2003)

20 RAs, 1 discipline: Applied linguistics	Discussion	
	Move 1- Background information	
	Move 2- Reporting results	
	Move 3- Summarizing results	
	Move 4- Commenting on results	Step 1- Interpreting results Step 2- Comparing results with literature Step 3- Accounting for results Step 4- Evaluating results
	Move 5- Summarizing the study	
	Move 6- Evaluating the study	Step 1- Indicating limitations Step 2- Indicating significance/advantage Step 3- Evaluating methodology
	Move 6- Deductions from the research	Step 1- Making suggestions Step 2- Recommending further research Step 3- Drawing pedagogic implication

Note: Yang, R., & Allison, D. (2003). Research articles in applied linguistics: moving from results to conclusions. *English for Specific Purposes*, 22(4), 365-385.

Based on the model developed by Yang and Allison (2003), Toprak (2011) developed a new model with modifications and analyzed a corpus of 30 research article discussion/conclusions in the field of applied linguistics. Compared to Yang and Allison's (2003) model, Toprak treated discussion and conclusion sections separately, as shown in Table 25. First, two moves for the discussion sections were identified. The *restatement* move was oriented to provide background information on the present study while *commenting on findings* move aimed to evaluate the findings. On the other hand, three moves were identified for the conclusion section. The analysis indicated that writers tend to evaluate the study with its summary, limitations, suggestions and implications in the conclusion sections of applied linguistic texts.

Table 25

The Toprak's Model for Research Article Discussions and Conclusions (2011)

30 RAs, 1 discipline: Applied linguistics	Discussion	
	Move 1- Restatement	Step 1- Restating purpose Step 2- Restating findings Step3- Restating methodology
	Move 2- Commenting on findings	Step 1- Interpreting findings Step 2- Comparing findings with the literature Step 3- Accounting for findings Step 4- Evaluating findings
	Conclusion	
	Move 1- Summarizing the study	
	Move 2- Evaluating the study	Step 1- Indicating limitation/evaluating methodology Step 2- Indicating significance
	Move 3- Deductions from the research	Step 1- Recommending further research Step 2- Drawing implications

Note: Toprak, E. (2011). *The textual organization of "discussion" and "conclusions" sections of research articles in applied linguistics* (Unpublished Master's Thesis). Uludağ University, Institute of Educational Sciences, Bursa.

Dujisik (2013) adopted Peacock's (2002) model and analyzed a corpus of 50 research article discussions in the field of applied linguistics. In this study, the research articles with only the discussion section were included, and those with a combined result and discussion, discussion and conclusion or discussion and limitations were excluded from the corpus. Cross-disciplinary variations were found in terms of move frequency and move cycles. For example, *information* and *reference to previous research* moves occurred at a lower frequency according to Peacock's (2002) results, while they were found at a very high level in Dujisik's analysis.

Amnuai and Wannaruk (2013) analyzed a corpus of 60 English research article discussions by Thai and international writers in the field of applied linguistics. Based on Yang and Allison's (2003) model, the analysis indicated similarities and differences between international and Thai writers in their frequency of using the moves, move-ordering patterns, and move cyclicity. For example, international writers tend to start with giving background information and end with comments on the results, while Thai writers prefer reporting results first and make deductions and suggestions at the end. Regarding the resemblances, there is no linear move ordering in both corpora.

As for the study of Eveyik-Aydın (2015), she analyzed a corpus of 36 research article discussion/conclusions in the field of applied linguistics to identify the rhetorical structure and lexico-grammatical patterns in quantitative and qualitative research articles. This study

is unique in the sense of comparing research methodological variations in the rhetorical organization of discussion/conclusion sections. Drawing on Yang and Allison's (2003) model for the coding, Eveyik-Aydın, Karabacak and Akyel (2015) proposed a new comprehensive structural model which is highly detailed with six moves, 17 steps and 14 sub-steps, as shown in Table 26. There were different approaches to communicative functions in the new model as well as similar ones. For example, *background information* was an introductory move and had no steps in Yang and Allison's model. On the other hand, in the new model, it was classified into three steps, which included *providing information about methodological procedures*, *theoretical background* and *presentation of the section*. In addition, rhetorical differences were found between quantitative and qualitative research articles. In the quantitative studies, there were obligatory steps *interpreting the results with claims and arguments* and *comparing them to the findings of other studies*, while there were no obligatory steps in the qualitative research article discussions, but some conventional steps, such as *interpreting the results with claims and arguments* and *drawing pedagogic implications with/without reference to literature* were found.

Table 26

The Eveyik-Aydın, Karabacak and Akyel's Model (2015)

36 RAs, 1 discipline: Applied linguistics	Discussion/Conclusion	
	Move 1- Setting background	Step 1- Providing methodological information regarding the study Step 2- Providing conceptual background A- Describing the established knowledge and stating the gaps B- Making generalizations and claims based on the established knowledge Step 3- Making statements about the organization of the information to be presented
	Move 2-Reporting selected results	Step 1- Indicating whether or not results support the hypothesis/expectations Step 2- Providing relevant statistics and/or examples for a specific result Step 3- Giving integrated results to summarize the main findings
	Move 3- Discussing results	Step 1- Interpreting results A) Stating what the results suggest and making claims/arguments based on the findings of the study B) Referring to established knowledge on topic, to other authors' views and/or to the findings of other studies in the literature Step 2- Explaining reasons for results A) Providing reasons for the (un)expected results B) Referring to other authors' explanations and/or research findings in the literature C) Evaluating the explanations provided (by other studies) Step 3- Comparing with results of previous work A) Stating whether or not the results support the findings/claims/hypothesis of other authors B) Giving information about the results of other studies/about other views C) By making comments on the results of other studies Step 4- Evaluating the results
	Move 4- Summarizing the study	Step 1- By reminding what has been done in this study Step 2- By reminding what has been suggested by the study
	Move 5- Evaluating the study	Step 1- Acknowledging limitations Step 2- Indicating the significance/contribution of the study Step 3- Justifying the methodology
	Move 6- Drawing implications	Step 1- Implications for future research A) Stating and justifying the need for future research (by raising questions or pointing to the issues to be considered) B) Making methodological suggestions for future research (by occasionally referring to other authors' views in the literature) Step 2- Pedagogical implications A) Deducted by the author referring to main findings of the study B) Referring to established knowledge or other authors to seek support for the implications to be drawn

Note: Eveyik Aydın, E. (2015). *Moves in discussions: A corpus-based genre analysis of the discussion sections in Applied Linguistics research articles written in English* (Unpublished Doctoral Dissertation). Yeditepe University, Institute of Educational Sciences, İstanbul.

Cotos et al. (2015) analyzed a comprehensive corpus of 900 research article discussion/conclusion sections in 30 disciplines including humanities, social sciences, natural and applied sciences. Four moves were identified, as shown in Table 27. Similar to

the previous models, the *re-establishing the territory* move occurred most frequently (55%) and gives background information about the study with relevant literature and findings. The following *framing the new knowledge* move evaluated the results with reasons, expectations and limitations and was the second most frequent move and occupied 28% of the corpus. The *reshaping the territory* move occurred less than 5% and writers presented evidence to confirm or oppose the findings. Lastly, *establishing additional territory* was assigned to the conclusion section and occurred in 12%. It summarized the significance of the findings and provided concluding remarks and suggestions.

Table 27

The Cotos et al. 's Model for Research Article Discussion/Conclusions (2015)

900 RAs, 30 disciplines: 8 in humanities and social sciences, 22 in natural and applied sciences	Discussion	
	Move 1- Re-establishing the territory	Step 1- Drawing on a theoretical general background Step 2- Drawing on study-specific background Step 3- Highlighting principal findings Step 4- Previewing the discussion 'road map'
	Move 2- Framing the new knowledge	Step 1- Explicating results Step 2- Accounting for results Step 3- Clarifying expectations Step 4- Addressing limitations
	Move 3- Reshaping the territory	Step 1- Supporting with evidence Step 2- Countering with evidence
	Conclusion	
	Move 4- Establishing additional territory	Step 1- Generalizing results Step 2- Claiming the value Step 3- Noting implications Step 4- Proposing directions

Note: Cotos, E., Huffman, S., & Link, S. (2015). Furthering and applying move/step constructs: Technology-driven marshalling of Swalesian genre theory for EAP pedagogy. *Journal of English for Academic Purposes*, 19, 52-72.

In a recent study, Morena and Swales (2018) compiled an open access online corpus named EXEMPRAES and analyzed a corpus of 64 research article discussion/conclusions in English and Spanish in the field of life sciences, healthcare sciences, social sciences and other natural sciences. After a detailed coding and validating procedure, they identified seven moves and 24 steps. The study aimed to strengthen the move analysis methodology, so the procedures they followed in compiling a comparable corpus of RAs, carrying out a structural analysis, segmenting communicative functions, labeling these functions, performing an intra-rater reliability test, concluding the coding scheme and validating the model were highlighted more than the cross-linguistic results of the analysis. After intensive labor, the coding scheme was introduced, as shown in Table 28.

Table 28

The Morena and Swales' Model (2018)

64 RAs, 4 disciplines: Life sciences, healthcare sciences, social sciences and natural sciences	Discussion/Conclusion	
	AF Announcing (function)	SEC Announcing (sub)sections EXT Announcing or referring the reader to external sources MSP Announcing moves, steps or propositional meaning
	BGI Background information	KFS Re-stating key features of the current study RWC Reporting background information with citations POC Providing background information without citations
	SUM Summarizing or restating key results	RES Presenting results neutrally CRES Contrasting with previous research HRES Highlighting results
	COMM Commenting on key results or other features	MEAN Establishing the meaning of results COMP Comparing with previous research EXPL Explaining results or discussing effects PRED Making predictions REACT Reacting to results or other features
	EV Evaluating the current study or other research or practice	LIM Pointing out negative features or limitations of the current study STATE Evaluating the state of knowledge CONTR Stating the contribution of the current study POS Pointing out positive features of the current or proposed study GAD Noticing specific gaps in knowledge or deficiencies in other research or practice
	IMP Drawing implications	REC Making recommendations for future research or practice APP Suggesting the applicability of results or usability of outcomes HYP Hypothesizing for future research
	ELF Elaborating (function)	JUST Justifying what is stated in a neighboring proposition EXEM Exemplifying what has been stated in a previous proposition CLAR Clarifying what has been stated in a previous proposition

Note: Moreno, A. I., & Swales, J. M. (2018). Strengthening move analysis methodology towards bridging the function-form gap. *English for Specific Purposes*, 50, 40–63.

CHAPTER III

METHODOLOGY

This chapter focuses on the methodology employed in the study. It describes the steps that were followed to conduct the current research. First, research data are presented and the procedures for selecting the research articles and journals are clarified. Second, the data analyses including the procedures for coding and inter-rater coding reliability are explained, which is followed by a section that covers the move analysis of the pilot corpus and the main corpus conducted by the researchers. The chapter concludes with a summary of the investigation.

3.1. Data

Since this study aimed to investigate the characteristics of native and non-native researchers in the field of educational sciences in terms of their rhetorical organizations of results sections in a research article genre, the data used in this study consists of the results sections of 120 published RAs that report empirical studies in the field of educational sciences, and they were compiled electronically. The corpus for the main study, ‘EDUCORP’ was comparable corpus which includes L1 English, L2 English and L1 Turkish. In addition, it was specialized and relatively small in size. A number of researchers (Flowerdew & Forest, 2009; Fuertes-Olivera, 2008; Ghadessy et al., 2001) support that “the corpus that includes the texts of the same genre and discipline may produce sufficient data for the purpose of the analysis regardless of their size” (as cited in Eveyik-Aydin, 2015, p. 49).

The following sections explain how the three corpora of the current study were constructed.

3.2. Selecting the Research Articles

This study aimed to investigate the use of rhetorical moves and steps in the result sections of RAs written by native and non-native researchers in the field of educational sciences as well as to explore any cross-cultural variations. To achieve these goals, three corpora namely, L1 English, L2 English and L1 Turkish were used in this study.

The corpus for the main study, EDUCORP was comprised of the results sections of 120 RAs. Those written in L1 English came from the writers working in higher education institutions located in Anglophone countries, and those produced in L2 English and in L1 Turkish were received from the writers working in institutions located in Turkey. During the process of research article selection, the location of the institutions for which the authors work, the research fields of the authors and their Anglophone and Turkish names were taken into consideration.

The research articles were selected through purposive sampling to create homogenous and saturated corpora. Dörnyei (2007) maintains that purposive sampling has “a number of different strategies depending on the research topic and setting” (p. 127). Among these strategies in qualitative research, criterion sampling was followed in order to select the research articles that “meet some specific predetermined criteria” (Dörnyei, 2007, p. 128).

First, the sub-disciplines in the field of educational sciences were determined. The field of educational sciences involves the following sub-disciplines: applied linguistics, computer and instructional technologies education, educational sciences and special education. The sub-disciplines of Turkish education and social sciences education were excluded because there was difficulty in finding RAs written in L2 English by writers working in the institutions in Turkey in these areas and in finding articles written in L1 English by the writers working in higher education institutions located in Anglophone countries. By considering that the rhetorical organization of the RAs in the sub-discipline of mathematics and science education might be different, as it includes computational studies, this discipline was also excluded.

Second, the research methodology of the RAs involved both quantitative and mixed-method studies, and pure qualitative RAs were excluded from this study in order to create a common sampling frame. There are similarities between quantitative and qualitative RAs; nevertheless, a “detailed examination of the findings revealed some differences in terms of occurrences of the moves and the preference of using particular steps” between

quantitative and qualitative RAs in accordance with the overall findings of Dobakhti's (2011) doctoral thesis on the move analysis in the discussion section of RAs in applied linguistics (p. 209). The distribution of RAs by their methods of data analysis in the present study is displayed in Figure 4.

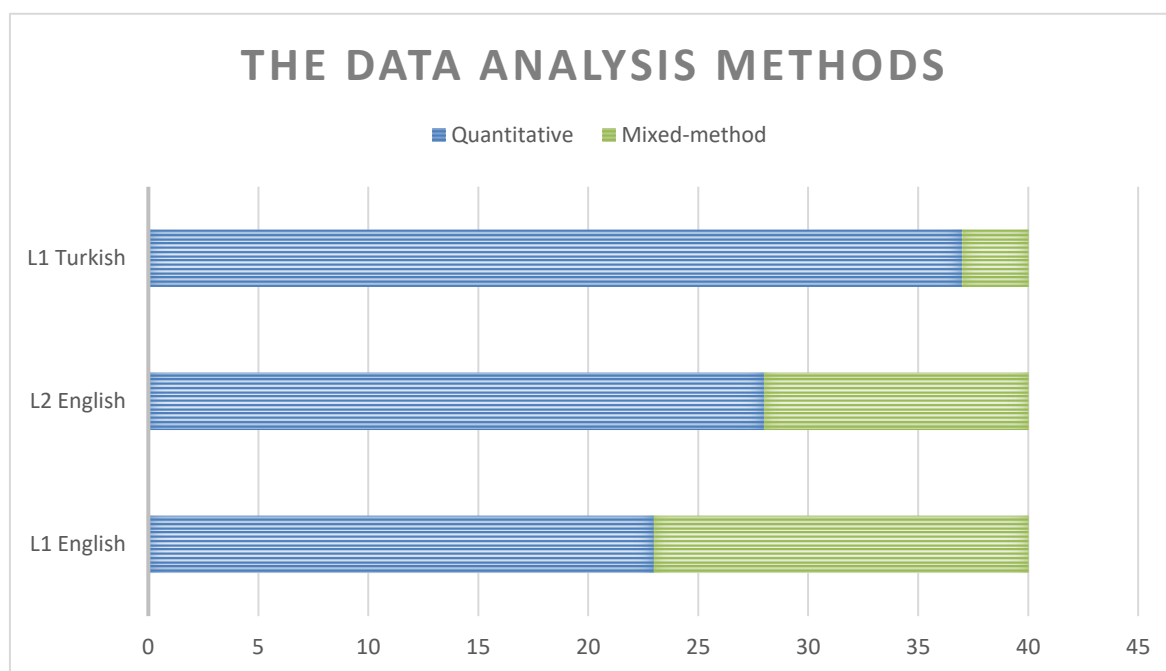


Figure 4. Distribution of RAs by the data analysis methods

Third, the RAs with separate results and discussion sections were selected from electronically accessed journals by considering that combined results and discussion sections might change the use of the move and steps in frequency, sequencing, patterning and cycling. Therefore, the articles with combined methods and results sections and combined results and discussion sections were also excluded, and the articles with separate methods and results sections and separate results and discussion sections were included in the EDUCORP. Nevertheless, it should be noted that the RAs in the selected journals mostly prefer combined discussion and conclusion sections when they have separate results and discussion sections. Discussion and conclusion sections are presented in a combined way especially in L1 Turkish RAs.

Lastly, the articles in the corpus were selected according to criteria based on Sinclair's (2005, as cited in Cotos et al.'s (2015) basic principles for developing linguistic corpora:

- Follows the IMRD (Introduction-Method-Results-Discussion) structure
- Reports on empirical/experimental research
- Published in a high-impact peer-reviewed academic journal

- Published recent to the date of selection
- Written by different authors (p. 54).

3.3. Selecting the Journals

The articles were selected from the major journals in the field of educational sciences with a high impact factor classified in Category A, indexed in Social Sciences Citation Index (SSCI) and Education Resources Information Center (ERIC) (Uysal, 2012). That is, L1 and L2 English RAs were selected from international academic journals indexed in SSCI and ERIC; L1 Turkish research articles were selected from academic journals indexed in SSCI, ERIC and from national academic journals classified in Category A. Since Turkish scholars prefer to publish in English rather than in Turkish in order to address to the international discourse community, it was difficult to find the RAs in accordance with the predetermined criteria. Thus, L1 Turkish data were extended to a four-year publication period in order to standardize the time-frame for the three corpora.

The EDUCORP, the corpus data for the main study, included the publications indexed in SSCI (colored in black), ERIC (colored in blue) and national academic journal publications indexed in Category A (colored in red) between the years of 2014 to 2018. The list of journals for L1 English RAs is seen in Table 29 (See Appendix 1 for the list of L1 English RAs). As shown in Table 29, the L1 English RAs are retrieved from 11 journals indexed in SSCI and 9 journals indexed in ERIC.

Table 29

List of Sub-disciplines and Journals for L1 English RAs in the EDUCORP

Sub-Disciplines				
Journals	Applied Linguistics	Computer and Instructional Technologies Education	Educational Sciences	Special Education
	Applied Linguistics	British Journal of Educational Technology	American Educational Research Journal	British Journal of Special Education
	English for Specific Purposes	Computers & Education	Journal of Educational Psychology	Journal of Learning Disabilities
	Language Learning System	Computers in the Schools	Review of Educational Research	Journal of Special Education
		Journal for Computer Assisted Learning	Journal of Further and Higher Education	Remedial and Special Education
	RELJ Journal	Computer Science Education	Learning Organization	Topics in Early Childhood Special Education

The list of journals for L2 English RAs is presented in Table 30 (See Appendix 2 for the list of L2 English RAs). As shown in Table 30, the L2 English RAs are retrieved from 4 journals indexed in SSCI, 4 journals indexed in ERIC and 2 national journals indexed in Category A.

Table 30

List of Sub-disciplines and Journals for L2 English RAs in the EDUCORP

Journals	Sub-Disciplines			
	Applied Linguistics	Computer and Instructional Technologies Education	Educational Sciences	Special Education
	Education and Science	British Journal of Educational Technology	Education and Science	Education and Science
	Educational Sciences: Theory & Practice	Computers & Education	Educational Sciences: Theory & Practice	Educational Sciences: Theory & Practice
	RELC Journal	Education and Science	TOJET	Journal of Special Education
	TOJET (The Turkish Online Journal of Educational Technology)	Journal for Computer Assisted Learning	İnönü University Journal of the Faculty of Education	TOJET
	Abant İzzet Baysal University Journal of Faculty of Education	Educational Sciences: Theory & Practice		
		TOJET		

The list of journals for L1 Turkish RAs is given in Table 31 (See Appendix 3 for the list of L1 Turkish RAs). As shown in Table 31, the L1 Turkish RAs are retrieved from 6 national journals indexed in Category A.

Table 31

List of Sub-disciplines and Journals for L1 Turkish RAs in the EDUCORP

Journals	Sub-Disciplines			
	Applied Linguistics	Computer and Instructional Technologies Education	Educational Sciences	Special Education
	Education and Science	Education and Science	Education and Science	Education and Science
	Abant İzzet Baysal University Journal of Faculty of Education	Abant İzzet Baysal University Journal of Faculty of Education	Abant İzzet Baysal University Journal of Faculty of Education	Abant İzzet Baysal University Journal of Faculty of Education
	Ankara University Journal of Faculty of Educational Sciences	Ege Journal of Education	Ankara University Journal of Faculty of Educational Sciences	Ankara University Journal of Faculty of Educational Sciences
	İnönü University Journal of the Faculty of Education	İnönü University Journal of the Faculty of Education	Ege Journal of Education	İnönü University Journal of the Faculty of Education
		Ondokuz Mayıs University Journal of Faculty of Education	İnönü University Journal of the Faculty of Education	Ondokuz Mayıs University Journal of Faculty of Education
		Pamukkale University Journal of Education	Ondokuz Mayıs University Journal of Faculty of Education	Pamukkale University Journal of Education
			Pamukkale University Journal of Education	

3.4. Data Analysis

This study can be characterized as a mixed-methods study, based on qualitative and quantitative analyses. First, corpus-based move analysis based on Swales' (1990) tradition in genre analysis was adopted to identify moves and steps in the specific genre (Bhatia, 1993; Flowerdew, 2005; Flowerdew & Forest, 2009; Swales, 1990; Upton & Connor, 2001). It draws on a 'top-down' approach in text analysis, in which researchers interpret the communicative purposes of content at sentence and/or phrase level and identify each move and step type, and thus it is a qualitative investigation in nature (Biber, Connor & Upton, 2007; Upton & Cohen, 2009). In other words, each sentence or phrase in text is annotated with a rhetorical function, and then, it is coded with a move and step type. The analytical steps suggested by Biber et al. (2007, p. 34) are followed in the corpus-based move analysis, as displayed in Table 32. This procedure describes in detail which coding framework was employed and how each unit was coded in accordance with the move analysis.

Table 32

General Steps Often Used to Conduct a Corpus-based Move Analysis

Steps	Procedures
Step 1	Determine rhetorical purposes of the genre
Step 2	Determine rhetorical function of each text segment in its local context; identify the possible move types of the genre.
Step 3	Group functional and/or semantic themes that are either in relative proximity to each other or often occur in similar locations in representative texts. These reflect the specific <i>steps</i> that can be used to realize a broader <i>move</i> .
Step 4	Conduct pilot-coding to test and fine-tune definitions of move purposes.
Step 5	Develop coding protocol with clear definitions and examples of <i>move types</i> and <i>steps</i> .
Step 6	Code full set of texts, with inter-rater reliability check to confirm that there is clear understanding of move definitions and how <i>moves/steps</i> are realized in texts.
Step 7	Add any additional <i>steps</i> and/or <i>moves</i> that are revealed in the full analysis.
Step 8	Revise coding protocol to resolve any discrepancies revealed by the inter-rater reliability check or by newly 'discovered' <i>moves/steps</i> , and re-code problematic areas.
Step 9	Conduct linguistic analysis of move features and/or other corpus-facilitated analyses.
Step 10	Describe corpus of texts in terms of typical and alternate move structures and linguistic characteristics

Note: Biber, D., Connor, U., & Upton, T. (2007). *Discourse on the move: Using corpus analysis to describe discourse structure*. Amsterdam: John Benjamins.

Regarding Step 1, this study adopted the qualitative top-down approach to reveal some cross-disciplinary and cross-linguistic/cultural conventions at macrostructure level, as Biber, Connor and Upton (2007) suggest that it is based on cognitive judgment to determine the rhetorical purposes of the moves and steps by analyzing their functions rather than linguistic features.

As regards Step 2 and Step 3, Cotos et al.'s (2015) framework was adopted to determine the rhetorical function of each segment and identify the moves and steps of the results sections of the RAs in the field of educational sciences.

With respect to Step 4, the pilot-coding was conducted to test the compatibility of the moves and steps in the framework with the sub-disciplines of the educational sciences first manually, and then through Nvivo 12.0, a qualitative analysis software.

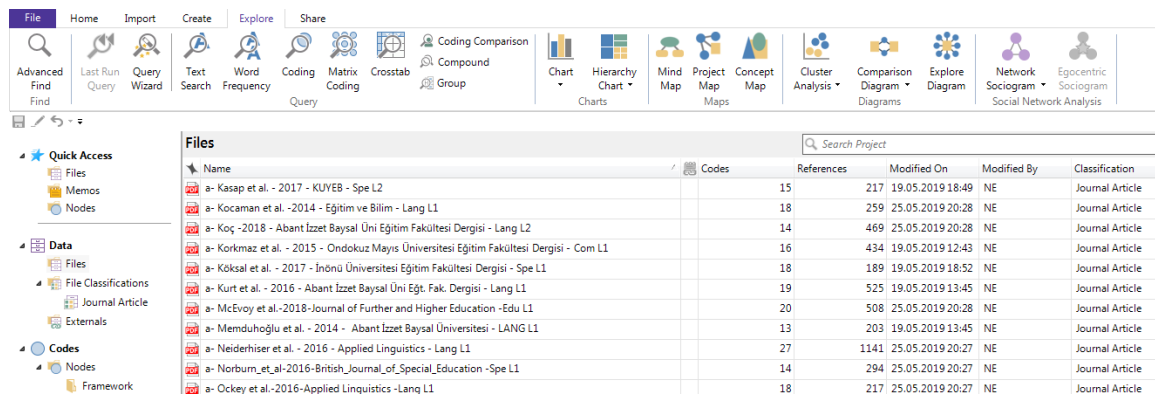
Concerning Step 5, "a coding protocol was developed with clearly defined discourse components as well as guidelines and examples for subsequent annotation training" as Connor, Upton and Kanoksilapatham (2007) recommended (Cotos et al. 2015, p. 54). In the pilot study, the coding protocol specified in the coding framework of Cotos et al. (2015) with the definitions and examples was adopted, and the second rater was trained about the coding by resorting to this coding protocol.

Respecting Step 6, after the second rater independently identified and annotated at sentence-level for moves and at phrase-level for steps, the two raters finally discussed the coding in pairs and reached a consensus about the coding.

In regard to Step 7, the new moves and steps were observed in the results sections of the RAs after the move analysis was completed. In accordance with the findings of the pilot study, the new framework for the results sections of educational science RAs was established. The new moves and steps, which were considered to be necessary, were added to the new framework by consulting to both Cotos et al.'s (2015) and Moreno and Swales' (2018) frameworks, while the moves and steps, which were never used or less needed, were excluded from the new framework.

With reference to Step 8, the coding protocol was revised and renewed to clarify the newly discovered moves and steps in accordance with the findings of the inter-rater coding reliability check (See Appendix 4 for the coding protocol).

As regards Step 9, based on the new framework, the move analysis was conducted at the macro-structure level first manually, and then through Nvivo 12.0, a qualitative analysis software, while the linguistic analysis of the move features at micro-structure level was not conducted in this study. A sample from the corpora in Nvivo 12.0 is shown in Figure 5.



Name	Codes	References	Modified On	Modified By	Classification
a- Kasap et al. - 2017 - KUYEB - Spe L2		15	217 19.05.2019 18:49	NE	Journal Article
a- Kocaman et al. - 2014 - Eğitim ve Bilim - Lang L1		18	259 25.05.2019 20:28	NE	Journal Article
a- Koç - 2018 - Abant İzzet Baysal Üni Eğitim Fakültesi Dergisi - Lang L2		14	469 25.05.2019 20:28	NE	Journal Article
a- Korkmaz et al. - 2015 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Com L1		16	434 19.05.2019 12:43	NE	Journal Article
a- Köksal et al. - 2017 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1		18	189 19.05.2019 18:52	NE	Journal Article
a- Kurt et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L1		19	525 19.05.2019 13:45	NE	Journal Article
a- McEvoy et al.-2018-Journal of Further and Higher Education -Edu L1		20	508 25.05.2019 20:28	NE	Journal Article
a- Memduhoğlu et al. - 2014 - Abant İzzet Baysal Üniversitesi - LANG L1		13	203 19.05.2019 13:45	NE	Journal Article
a- Neiderhiser et al. - 2016 - Applied Linguistics - Lang L1		27	1141 25.05.2019 20:27	NE	Journal Article
a- Norburn et al.-2016-British Journal of Special Education -Spe L1		14	294 25.05.2019 20:27	NE	Journal Article
a- Ockey et al.-2016-Applied Linguistics -Lang L1		18	217 25.05.2019 20:27	NE	Journal Article

Figure 5. A sample from the research articles in Nvivo 12.0

Concerning Step 10, the additions and modifications were introduced to the framework as a result of the main study. The moves and steps identified in the results sections of RAs were manifested. Then, the frequency of rhetorical moves and steps was indicated, and it was investigated whether there were statistically significant differences in the frequency of moves and steps among the results sections of the RAs. For the distribution of normality,

skewness and kurtosis values were analyzed, and Shapiro-Wilk Test of Normality was conducted. Since the data did not follow a normal distribution ($p < 0.05$), a non-parametric Kruskal-Wallis H test was implemented. Then, the move sequences, move patterns and move cycles in the results sections of RAs were displayed. Last, the revised newly established rhetorical framework was introduced.

Second, frequency analysis, a descriptive statistical method, was used in order to investigate the differences of rhetorical functions in the results sections of RAs in the three groups of corpora. In addition to the descriptive analysis, statistical hypothesis testing was used to examine statistical differences. To determine the type of hypothesis testing (parametric or nonparametric), the distribution of the frequency use of each move and step in each group of RAs (i.e., L1 English, L1 Turkish and L2 English) was analyzed. For the distribution of normality, skewness and kurtosis values were examined. When the range of values is between ± 2 , it is interpreted that the distribution is generally close to normal (Hair, Black, Babin, Anderson & Tatham, 2010); however, the values of skewness and kurtosis for each move and step indicated that the distribution was not normal. In order to determine whether the distribution is normal or not, a test of normality was also conducted. Considering that the data in each group is less than 50, Shapiro-Wilk Test of Normality was used (Razali & Wah, 2011) (See Appendix 5 for the findings regarding the normality). Since the data did not follow a normal distribution ($p < 0.05$), a non-parametric Kruskal-Wallis H test was implemented. SPSS 21.0 was used to analyze the data, and $p < 0.05$ significance level was used to interpret the results of statistical tests.

3.5. Pilot Coding

3.5.1. Data

The pilot corpus data included the results sections of 36 published RAs that report empirical studies in the four sub-disciplines in the field of educational sciences.

3.5.2. Selecting the Research Articles

The pilot corpus was comprised of the results sections of 36 RAs, written in L1 English by writers working in higher education institutions located in Anglophone countries, and those written in L2 English and L1 Turkish were received from writers working in higher education institutions located in Turkey.

The following sub-disciplines were included: applied linguistics, computer and instructional technologies education, educational sciences and special education. The sub-disciplines of Turkish education and social sciences education were excluded because it was difficult to find RAs written in L2 English by writers working in higher education institutions in Turkey and written in L1 English by writers working in higher education institutions located in Anglophone countries. By considering that the rhetorical organization of the RAs in the sub-disciplines of mathematics education and science education might be different as they include computational studies, these disciplines were also excluded.

The research methodology of the RAs was restricted to quantitative and mixed-method studies, excluding pure qualitative studies. The distribution of the RAs by the methods of data analysis is displayed in Figure 6.

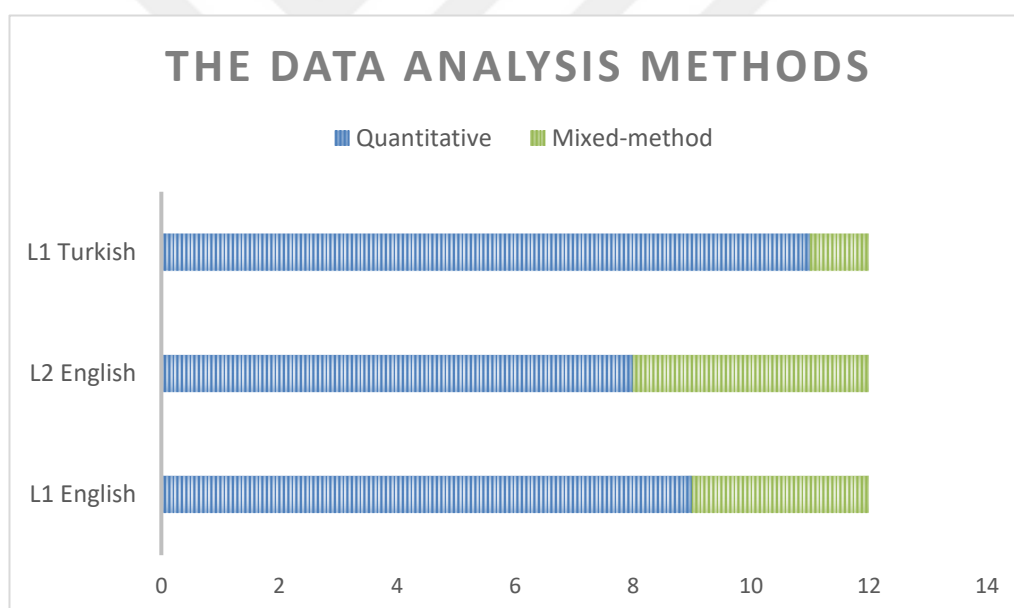


Figure 6. Distribution of RAs by the data analysis methods in the pilot study

At the beginning of the pilot study, 6 RAs in the pilot corpus included the combined results and discussion sections. They were coded and analyzed to see whether they would enhance the creation of a new framework or cause discrepancies. Recognizing that the organization of combined methods and results sections or combined results and discussion sections varied greatly in by frequency and patterning, they were excluded from the pilot corpus. The RAs with separate methods and results sections and separate results and discussion sections were included.

3.5.3. Selecting the Journals

The pilot corpus data included the publications indexed in SSCI (colored in black), ERIC (colored in blue) and national academic journal publications indexed in category A (colored in red) between the years 2015 to 2018. The list of journals for L1 English RAs in the pilot corpus is displayed in Table 33 (See Appendix 6 for the list of L1 English RAs). As shown in Table 33, the L1 English RAs are retrieved from 5 journals indexed in SSCI and 3 journals indexed in ERIC.

Table 33

List of Sub-disciplines and Journals for L1 English RAs in the Pilot Study

Journals	Sub-Disciplines			
	Applied Linguistics	Computer and Instructional Technologies Education	Educational Sciences	Special Education
	English for Specific Purposes	Computers & Education	American Educational Research Journal	British Journal of Special Education
	Language Learning	Journal for Computer Assisted Learning		Journal of Special Education
		Computer Science Education		

The list of journals for L2 English RAs in the pilot corpus is given in Table 34 (See Appendix 7 for the list of L2 English RAs). As shown in Table 34, the L2 English RAs are retrieved from 2 journals indexed in SSCI and 3 journals indexed in ERIC.

Table 34

List of Sub-disciplines and Journals for L2 English RAs in the Pilot Study

Journals	Sub-Disciplines			
	Applied Linguistics	Computer and Instructional Technologies Education	Educational Sciences	Special Education
	İnönü University Journal of the Faculty of Education	British Journal of Educational Technology	TOJET	Educational Sciences: Theory & Practice
	TOJET (The Turkish Online Journal of Educational Technology)	Education and Science		TOJET

The list of journals for L1 Turkish RAs in the pilot corpus is presented in Table 35 (See Appendix 8 for the list of L1 Turkish RAs). As shown in Table 35, the L1 Turkish RAs are retrieved from 1 journals indexed in SSCI and 4 national journals indexed in Category A.

Table 35

List of Sub-disciplines and Journals for L1 Turkish RAs in the Pilot Study

Sub-Disciplines				
Applied Linguistics		Computer and Instructional Technologies Education	Educational Sciences	Special Education
Journals	Education and Science	Abant İzzet Baysal University Journal of Faculty of Education	Education and Science	Education and Science
	Abant İzzet Baysal University Journal of Faculty of Education	İnönü University Journal of the Faculty of Education	Ege Journal of Education	Abant İzzet Baysal University Journal of Faculty of Education
	İnönü University Journal of the Faculty of Education	Pamukkale University Journal of Education		Ege Journal of Education

3.5.4. Data Analysis

As the sub-disciplines of educational sciences include social, natural and applied sciences, a cross-disciplinary framework was required in this research. Considering that Cotos et al.'s (2015) framework was empirically devised, and validated as cross-disciplinary by including 30 disciplines, their move and step framework for the research article genre, which was modeled for the IMRD sections, was implemented for the results sections of the RAs in the pilot study as illustrated in Table 36.

Table 36

Cotos et al. 's (2015) Move Analysis Framework for the Pilot Study

Methods	Results	Discussion/Conclusion
Move 1- Contextualizing the study Step 1- Referencing previous works Step 2- Providing general information Step 3- Identifying the methodological approach Step 4- describing the setting Step 5- introducing the subjects Step 6- rationalizing pre-experiment decisions	Move 1- Approaching the niche Step 1- Providing general orientation Step 2- Restating study specifics Step 3- Justifying study specifics	Move 1- Re-establishing the territory Step 1- drawing on a theoretical general background Step 2- drawing on study-specific background Step 3- highlighting principal findings Step 4- previewing the discussion 'road map'
Move 2- Describing the study Step 1- acquiring the data Step 2- describing the data Step 3- identifying variables Step 4- delineating experimental study procedures Step 5- describing tools/instruments/materials/equipment Step 6- rationalizing experiment decisions Step 7- reporting incrementals	Move 2- Occupying the niche Step 1- reporting specific results Step 2- indicating alternative presentation of results	Move 2- Framing the new knowledge Step 1- explicating results Step 2- accounting for results Step 3- clarifying expectations Step 4- addressing limitations
Move 3- Establishing the credibility Step 1- preparing the data Step 2- describing the data analysis Step 3- rationalizing data processing/analysis	Move 3- Construing the niche Step 1- comparing results Step 2- accounting for results Step 3- explicating results Step 4- clarifying expectations Step 5- acknowledging limitations	Move 3- Reshaping the territory Step 1- supporting with evidence Step 2- countering with evidence
	Move 4- Expanding the niche* Step 1- generalizing results Step 2- claiming the value Step 3- noting implications Step 4- proposing directions	Move 4- Establishing additional territory Step 1- generalizing results Step 2- claiming the value Step 3- noting implications Step 4- proposing directions

* Note: "The inclusion of Move 4 here accommodates for RAs that integrate the discussion in the Results section and have a separate Conclusion. Separate Conclusion sections generally fulfill the communicative goal of Move 4 and exhibit the respective steps."

Note: Cotos, E., Huffman, S., & Link, S. (2015). Furthering and applying move/step constructs: Technology-driven marshalling of Swalesian genre theory for EAP pedagogy. *Journal of English for Academic Purposes*, 19, 52-72.

According to the clear definitions and examples of moves and steps outlined in the coding protocol, the pilot coding was conducted to test the definitions of move and step purposes. Each text segment was first manually annotated at the sentence-level for moves and steps and at the phrase-level for steps. This was done first in the printouts, and then via Nvivo 12.0, a qualitative analysis software, which ensures the annotations are checked twice during the coding process.

3.5.5. Inter-Rater Coding Reliability in the Pilot Study

To ensure reliability, the inter-rater coding analysis was conducted in four phases. First, the second rater was trained by the researcher on how to use the coding framework by Cotos et al. (2015) and how to annotate the moves and steps in the corpus. The two raters practiced coding and discussed their judgments concerning the annotations of moves and steps. Second, the second rater independently identified and annotated at the sentence-level for moves and steps, and at phrase-level for steps in the randomly selected RAs, and then these annotations for moves and steps were implemented to the file defined for the second rater in Nvivo 12.0. Third, the inter-rater coding reliability among the two raters was measured by running a coding comparison query in Nvivo 12.0, and the estimates for Cohen's Kappa coefficient and the percentage agreement were calculated. Last, the two raters evaluated the results of these coefficients and discussed the coding in pairs in order to reach a consensus about the latest coding framework.

This study selected 4 RAs randomly to determine the degree of agreement between the raters because 10% of the total data might be sufficient (Lombard, Synder-Duch & Bracken, 2004, p. 4). This rate was also used in Alotaibi's (2013) study in order to calculate the degree of agreement. To compute the degree of agreement between the raters, this study resorted to *Cohen's kappa (k)* statistic, a common method for calculating agreement estimates (Stemler, 2004). The estimates for Cohen's Kappa coefficient are "more useful than the agreement percentage it is a chance-corrected measure, which takes into account the likelihood that the agreement between coders has occurred by chance" (Moreno & Swales, 2018, p. 55) (See also Nvivo12 help, Orwin, 1994). Besides the Cohen's Kappa coefficient, the percentage agreements were also presented. However, they were not prioritized in the present study because according to Biber et al. (2007), the percentage agreement is a way of simplifying statistics comprised of "the number of agreements per total number of coding decisions, but it does not account for chance agreement among raters" (p. 35).

The minimum and maximum values of Cohen's Kappa coefficients are shown below in Table 37 (See Appendix 9 for all the values of Cohen's Kappa coefficients). The findings revealed that the level of agreement is over 99.6%. Furthermore, the minimum Kappa coefficient is 0.50, while the maximum Kappa coefficient is 0.98.

Table 37

Results of Cohen's Kappa in the Pilot Study

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Dis agreement (%)	A and Not B (%)	B and Not A (%)
M1\M1S1	Açak (2016) İnönü University Journal of the Faculty of Education (SPE_ L1)	0.50	99.69	0.00	99.69	0.31	0.31	0.00
M2\M2S1	Ahlgrim-Delzell (2016) Journal of Special Education (SPE_ L1)	0.98	99.96	0.73	99.23	0.04	0.04	0.00

Per the interpretation of Cohen's Kappa values, below 0.40 is considered 'poor agreement'; 0.40 - 0.75 is 'fair to good agreement'; over 0.75 is 'excellent agreement'. In this pilot study, the findings suggested that Cohen's Kappa coefficients ranged between 0.50 and 0.98, which is between 'fair to good agreement' and 'excellent agreement' according to Nvivo12 help.

3.5.6. Frequency of Moves and Steps

The frequency of moves and steps in the corpus-based move analysis was computed through Nvivo 12.0 in order to see whether or not there is a cross-linguistic/cultural difference among the result sections of RAs regarding the rhetorical moves and steps.

3.5.6.1. Moves and Steps of Methods

Among the moves of methods, M3 "Establishing the credibility" was the most used in L1 English ($f=71$, 34%), L1 Turkish ($f=65$, 31%) and L2 English RAs ($f=73$, 35%). It was observed that these three groups tend to mention the methodological procedures in the results sections. The frequency distribution of the moves of methods is illustrated in Figure 7.

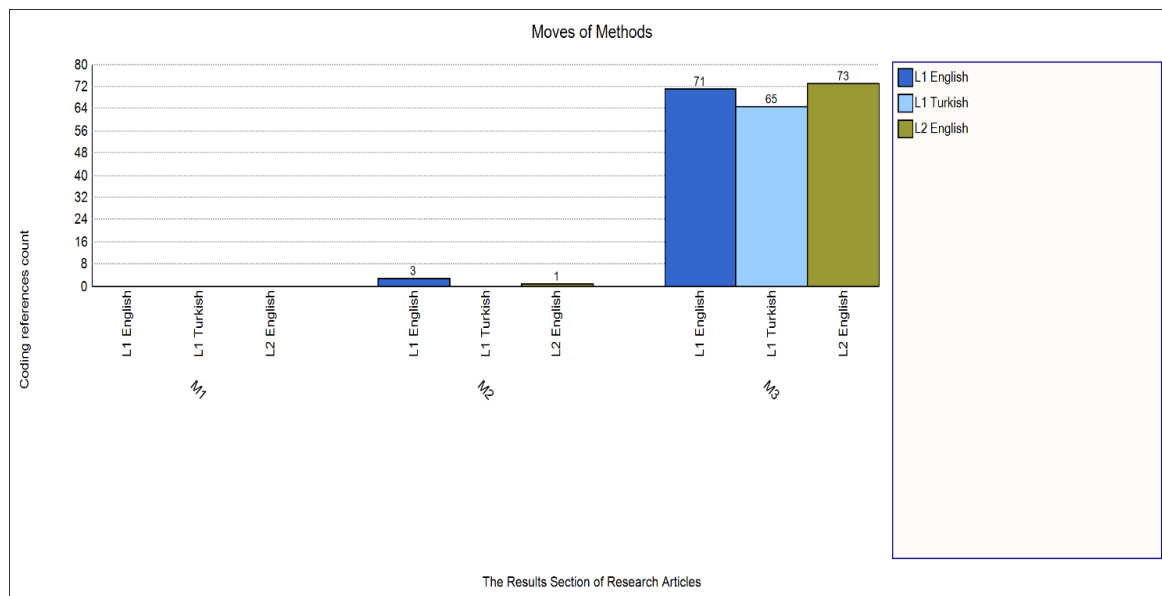


Figure 7. Distribution of moves of methods in the results sections of RAs in the pilot study

Considering the steps of methods, it was seen that M3S2 “Describing the data analysis” was the most commonly used step in L1 English ($f=57$, 34%), L1 Turkish ($f=57$, 34%) and L2 English RAs ($f=55$, 33%). M3S3 “Rationalizing the data processing/analysis” was used more than M3S1 “Preparing the data” in L1 English and L2 English RAs. In M3S3, L2 English ($f=16$, 48%) and L1 English RAs ($f=13$, 39%) rationalized their data analysis more than L1 Turkish RAs ($f=4$, 12%). In addition, in M3S1, L1 Turkish RAs ($f=5$, 63%) gave more information about the data than L1 English ($f=1$, 13%) and L2 English RAs ($f=2$, 25%). Both M2S2 “Describing the data” and M2S4 “Delineating experimental study procedures” were rarely used. M2S2 was deployed by L1 English ($f=2$, 67%) and L2 English ($f=1$, 33%), while M2S4 was used only by L1 English ($f=1$, 100%). The frequency distribution of the steps of methods is given in Figure 8.

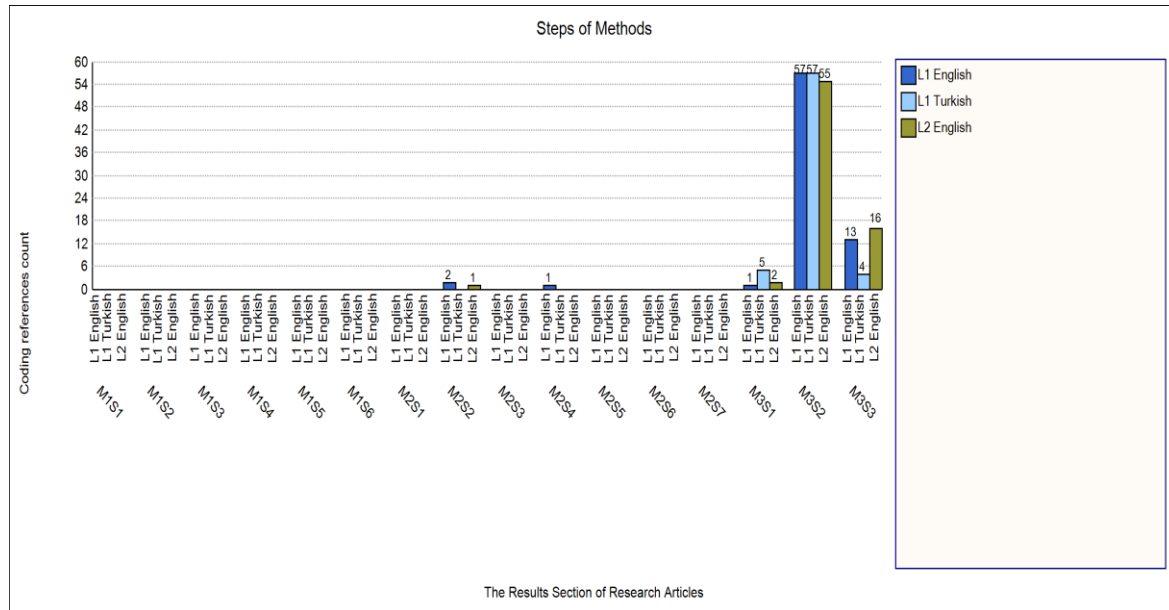


Figure 8. Distribution of steps of methods in the results section of RAs

3.5.6.2. Moves and Steps of Results

Among the moves of results, M2 “Occupying the niche” was the most frequently used in L1 English ($f=468$, 39,53%), L1 Turkish ($f=396$, 33%) and L2 English RAs ($f=320$, 27%). It was observed that the three categories preferred to report specific results and indicated an alternative presentation of results in the results section most frequently. Then, M3 “Construing the niche” was preferred most while reporting in L1 English ($f=164$, 55%), L1 Turkish ($f=77$, 26%) and L2 English RAs ($f=57$, 19%), respectively. It was noticed that M1 “Providing general information” was less used in three groups L1 Turkish ($f=30$, 43%), L2 English ($f=21$, 30%) and L1 English ($f=19$, 27,14%) as compared to the other moves. The frequency distribution of the moves of results is shown in Figure 9.

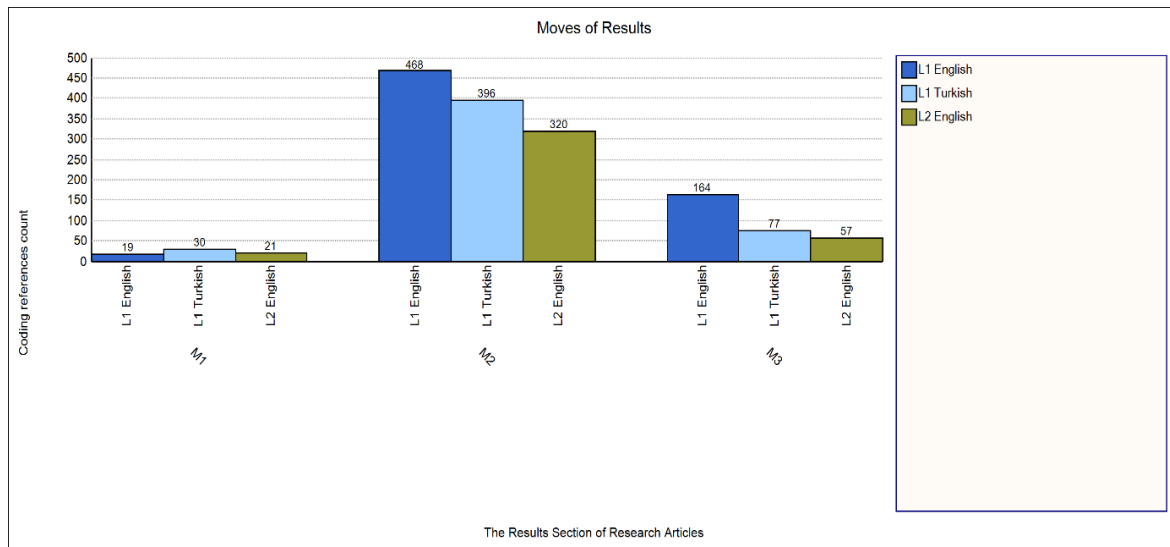


Figure 9. Distribution of moves of results in the results section by languages

Among the three steps, M1S1 “Providing general orientation” is the most commonly used by L1 Turkish ($f=27$, 61%) and L1 English RAs ($f=10$, 23%). This suggests that RAs in L1 tend to give organizational information. On the other hand, L2 English RAs ($f=14$, 52%) tend to use M1S2 “Restating study specifics” more than RAs in L1 English ($f=9$, 33%) and L1 Turkish ($f=4$, 15%). Last, M1S3 “Justifying study specifics” was not seen in three groups.

It was noted that M2S2 “Indicating alternative presentation of results” was resorted to more in L1 English ($f=297$, 42%), L1 Turkish RAs ($f=205$, 29%) and L2 English ($f=197$, 28%) than M2S1 “Reporting specific results.” L1 Turkish RAs ($f=191$, 39%) resorted to M2S1 “Reporting specific results” at the highest level, then L1 English ($f=172$, 35%) and lastly L2 English ($f=124$, 25%).

It was observed that M3S1 “Comparing results” was used the most in all the categories L1 English ($f=88$, 51%), L1 Turkish ($f=54$, 31%) and L2 English RAs ($f=30$, 17%). M3S2 “Accounting for results” was used more in L1 English ($f=23$, 48%) than L1 Turkish ($f=14$, 29%) and L2 English ($f=11$, 23%). Moreover, M3S3 “Explicating results” was comparatively used in L1 English ($f=22$, 52%), L2 English ($f=15$, 36%) and L1 Turkish ($f=5$, 10%) more than M3S4 “Clarifying expectations” in L1 English ($f=13$, 68%), L1 Turkish ($f=4$, 21%) and L2 English ($f=2$, 11%), respectively. M3S5 “Acknowledging limitations” was used only in L1 English ($f=18$, 100%). The frequency distribution of the steps of results is illustrated in Figure 10.

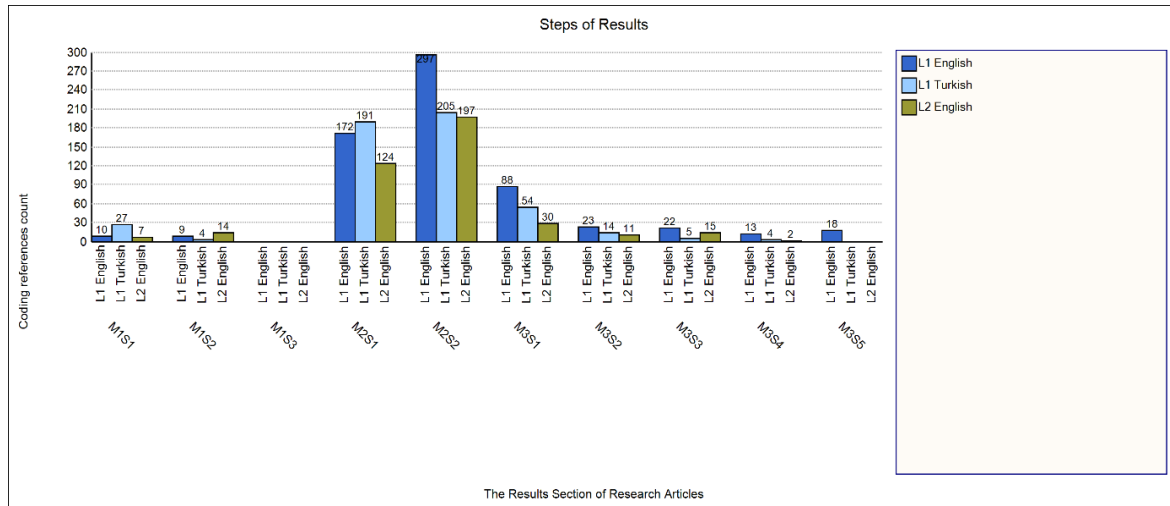


Figure 10. Distribution of steps of results in the results section of RAs

3.5.6.3. Moves and Steps of Discussion

Among the moves of the discussion, M1 “Reestablishing the territory” was used most in L1 Turkish ($f=28$, 80%), and then L2 English ($f=4$, 11%) and L1 English ($f=3$, 9%) followed. Also, M3 “Reshaping the territory” was often observed in L2 English ($f=16$, 59%), L1 Turkish ($f=7$, 26%) and L1 English ($f=4$, 15%), respectively. M4 “Establishing additional territory” was used only in L1 Turkish ($f=3$, 100%), and M2 “Framing the new knowledge” was never seen. The frequency distribution of the moves of discussion is presented in Figure 11.

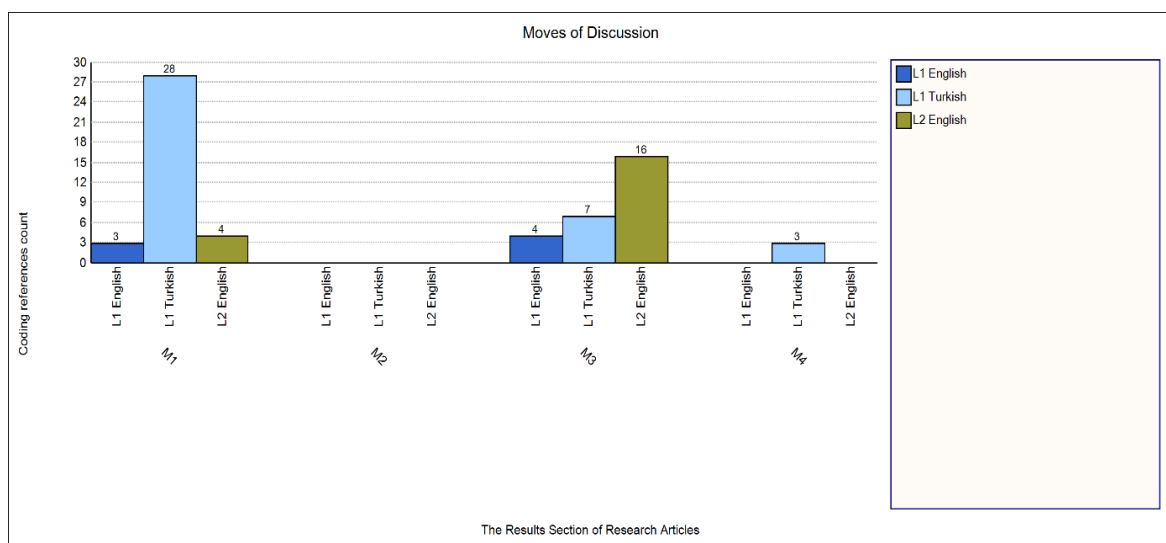


Figure 11. Distribution of moves of discussion in the results section of RAs

Among the steps of discussion, M1S2 “Drawing on study-specific background” was used only in L1 Turkish ($f=17$, 100%). The second most employed step was M3S1 “Supporting with evidence” in L2 English ($f=16$, 59%), L1 Turkish ($f=7$, 26%) and L1 English ($f=4$, 15%), respectively. Then, it was observed that M1S1 “Drawing on a theoretical general background” was consistently used in L1 Turkish ($f=11$, 73%), L1 English ($f=3$, 20%) and L2 English ($f=1$, 7%). M1S3 “Highlighting principal findings” was only used in L2 English ($f=3$, 100%), and M4S3 “Noting implications” was only deployed in L1 Turkish ($f=3$, 100%). The frequency distribution of the steps of discussion is seen in Figure 12.

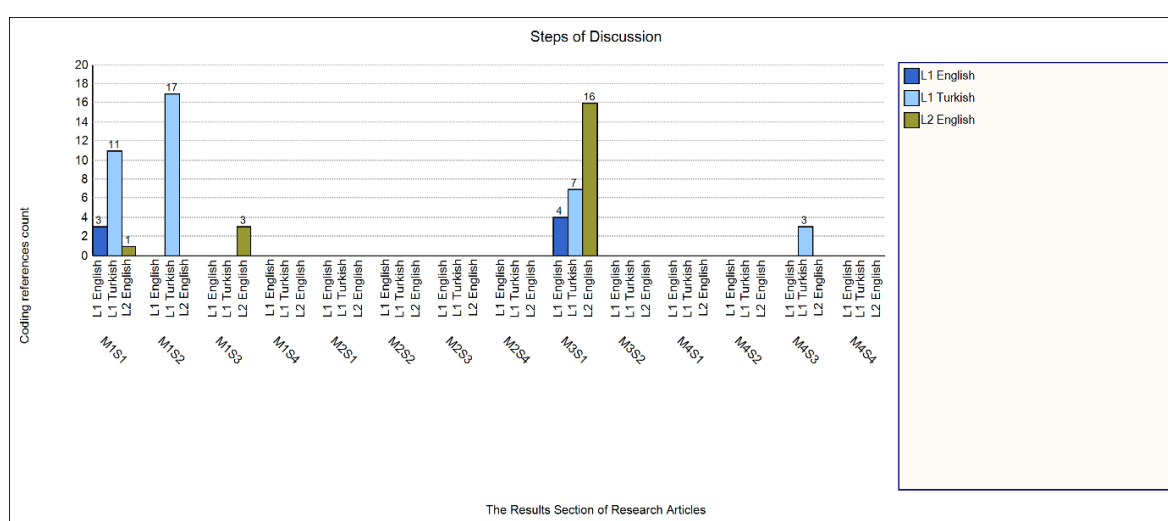


Figure 12. Distribution of steps of discussion in the results section of RAs

3.5.7. Patterns of Moves

In this section, the possible patterns of moves and steps of RAs in the three corpora were investigated. However, there was a difficulty in forming patterns as the RAs resorted to the moves and steps not only from the results sections, but also from the methods and discussion sections in accordance with Cotos et al.’s (2015) framework. This situation caused some confusion in forming move patterns. Specifically, the number of coding at the step level was not manageable. A sample of the move and step patterning in one research article can be seen below in Table 38.

Table 38

A Sample of Move and Step Patterning

Move Patterning	
Move Level	M1-M2-M3-M1-M3-M3(Method)-M2-M3-M3(Discussion)-M3-M2-M3-M1(Discussion)-M3-M3(Met)-M2-M3-M3(Method)-M2-M3-M2-M3-M2-M3-M2-M3-M2-M3-M3(Method)-M3-M2-M3(Method)-M3-M2-M3-M2-M3
Step Level	M1S1-M2S1-MS1-M3S5-M1S2-M3S1-M3S4-M3S2(Method)-M2S2-M3S1-M3S2-M3S1-M3S4-M3S1(Discussion)-M2S2-M2S1-M2S2-M2S1-M3S3-M3S1-M1S1(Discussion)-M3S1-M3S2-M3S1-M3S2(Method)-M2S2-M2S1-M3S1-M3S2(Method)-M2S2-M3S1-M3S3-M3S1-M2S2-M3S1-M2S2-MS1-M2S2-M3S1-M2S1-M3S1-MES2(Method)-M3S1-M2S2-M3S2(Method)-M3S1-M2S2-M2S1-M3S3-M3S2-M2S2-M3S1-M3S3 (COM L1 ENG8)

In this regard, the number of labels for moves was reduced into a manageable coding framework from six to four to be able to discover the pattern used in the RAs (Moreno & Swales, 2018). Among the four moves, Move 1 “Preparing the study” included the moves and steps introducing the study in the results section, which is Move 1 “Approaching the niche” in the results section of Cotos et al.’s framework. *Move 2 “Describing the study”* included the moves and steps related to the methodology, which is Move 2 “Describing the study” and Move 3 “Establishing credibility” in the methods section of Cotos et al.’s framework. *Move 3 “Reporting and commenting on the results”* included the moves and steps reporting results in different ways, which is Move 2 “Occupying the niche” and Move 3 “Construing the niche” in the results section of Cotos et al.’s framework. *Move 4 “Establishing the study”* included the moves and steps related to the discussion, which is Move 1 “Re-establishing the territory” and Move 3 “Reshaping the territory” in the discussion section of Cotos et al.’s framework.

As a result of these modifications, the most frequently used seven move patterns in the pilot study were M2-M3 ($f=19$, 16%), M3-M2-M3 ($f=19$, 16%), M1-M3 ($f=9$, 8%), M1-M3-M2-M3 ($f=6$, 5%), M3 ($f=5$, 4%), M1-M2-M3 ($f=5$, 4%) and M3-M2 ($f=4$, 3%), respectively (See Appendix 10 for the frequency of the whole move patterns in the pilot study). The distribution of move patterns is seen in Figure 13.

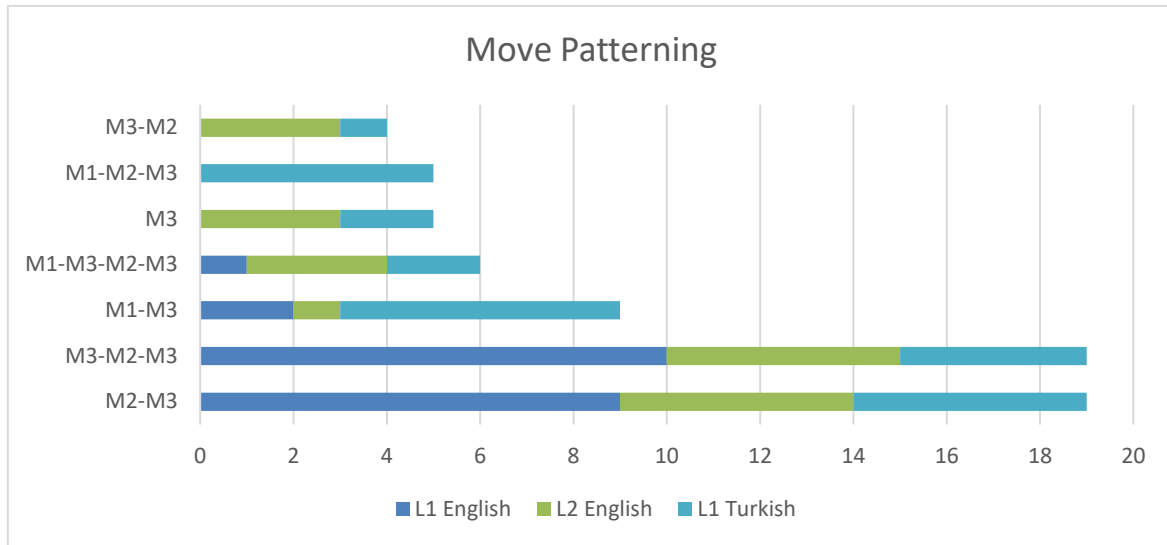


Figure 13. Distribution of move patterns in the pilot study

3.6. The Main Study

3.6.1. Additional Moves and Steps

Considering the necessary and unnecessary moves and steps in accordance with the results of the pilot study, some moves and steps were included with no change as they are. However, some of them were excluded, and some newly coined moves and steps were added to the model. In the results sections of RAs, the moves and steps of methods and discussion sections were also observed. For the discussion section, Moreno and Swales' (2018) move and step framework, a more recent tool and also a model for the discussion sections, was consulted. Along with the contributions from Cotos et al.'s (2015) framework and Moreno and Swales' (2018) framework, the results of the pilot study were taken into consideration, and a new framework was created for the results sections of RAs in the field of Educational Sciences. The newly-coined moves and steps and the moves and steps which were included from the methods, results and discussion sections of Cotos et al.'s (2015) framework and the discussion sections of Moreno and Swales' (2018) framework were explained below alternately. Moreno and Swales' (2018) move and step framework is presented below in Table 39.

Table 39

Moreno and Swales' Framework for Discussion/Conclusion Sections for the EDUCORP (2018)

64 RAs, 4 disciplines: Life sciences, healthcare sciences, social sciences and natural sciences	Discussion/Conclusion	
	AF Announcing (function)	SEC Announcing (sub)sections EXT Announcing or referring the reader to external sources MSP Announcing moves, steps or propositional meaning
	BGI Background information	KFS Re-stating key features of the current study RWC Reporting background information with citations POC Providing background information with citations
	SUM Summarizing or restating key results	RES Presenting results neutrally CRES Contrasting with previous research HRES Highlighting results
	COMM Commenting on key results or other features	MEAN Establishing the meaning of results COMP Comparing with previous research EXPL Explaining results or discussing effects PRED Making predictions REACT Reacting to results or other features
	EV Evaluating the current study or other research or practice	LIM Pointing out negative features or limitations of the current study STATE Evaluating the state of knowledge CONTR Stating the contribution of the current study POS Pointing out positive features of the current or proposed study GAD Noticing specific gaps in knowledge or deficiencies in other research or practice
	IMP Drawing implications	REC Making recommendations for future research or practice APP Suggesting the applicability of results or usability of outcomes HYP Hypothesizing for future research
	ELF Elaborating (function)	JUST Justifying what is stated in a neighboring proposition EXEM Exemplifying what has been stated in a previous proposition CLAR Clarifying what has been stated in a previous proposition

Note: Moreno, A. I., & Swales, J. M. (2018). Strengthening move analysis methodology towards Bridging the function-form gap. *English for Specific Purposes*, 50, 40–63

To begin with, the moves and steps from the methods sections of Cotos et al.'s (2015) framework were often observed in the results section of RAs. In accordance with the findings of the pilot study, what is of importance is Move 3 (Methods) “Establishing credibility study” to the Move 2 in the new framework as M2S1 “Preparing the data”, M2S2 “Describing the data analysis” and M2S3 “Rationalizing the data processing/analysis,” respectively.

(1) “Before modeling the lipreading results, *correlations were computed* using participants’ PPVT, TONI, QSIN, and individual mean proportion correct lipreading scores.” (LING_L1_ENG7)

In addition, it was noticed that some studies criticized their methodology rather than just rationalize their data analysis. Considering this function of criticizing their methodology, Move 3 Step 3 (Methods) “Rationalizing the data processing/analysis” was modified to *M2S3 “Rationalizing and/or Criticizing the data processing and/or analysis.”*

(2) “*Ancak, sürekli olarak öğretmenleri....*” (SPE_L1_TUR13)

Second, the most often used moves and steps from the results sections of Cotos et al.’s (2015) framework were added to the new model. Move 1 “Approaching the niche” was frequently used; that’s why *M1S1 “Providing general orientation”* was included; Move 1 Step 2 “Restating study specifics” was changed to *M1S2 “Stating study specifics”*; Move 1 Step 3 “Justifying study specifics” was excluded as it was not a frequent observation in the data. Nevertheless, in the results sections certain moves and steps were still missing. For example, it was difficult to annotate some text segments in its local context as their rhetorical function was not assigned in the framework. Referring to the table and/or figure was often seen in the results section of RAs. In the pilot study, when there was a reference to the table and/or figure, they were coded to Move 2 Step 2 “Indicating alternative presentation of results” as Cotos et al. (2015) suggest in the coding protocol. However, considering the explicit and frequent use of this function in RAs, a new step *M3S2 “Referring to table and/or figure”* was added.

(3) “*Refer to Table 2.*” (COM_L1_ENG2)

The examples below showed that authors provided their personal comments on the results. Therefore, a new step *M3S7 “Giving personal comments on results”* was included.

(4) “*The results are interesting.*” (COM_L1_ENG3)

(5) “*Therefore, we feel confident in the results for our full analytic sample.*” (EDU_L1_ENG6)

Having presented the results, the authors tend to summarize all of the results, rather than explain specific results, towards the end of the results section. It was difficult for the coders to annotate this rhetorical function. That’s why a new step *M3S8 “Summarizing the results”* was added to the framework.

(6) “*In conclusion, the In-Service IEP Development Training Program is found to be effective at increasing teachers’ perceptions about their IEP-related competencies.*” (SPE_L2_ENG11)

Then, Move 3 Step 2 “Accounting for results” was excluded from the new framework. Instead, *M3S4 “Explicating and/or Evaluating the results”* was substituted.

Last, the moves and steps from the discussion sections of Cotos et al.’s (2015) framework that were consistently used were determined, and they were compared with the moves and steps in Moreno and Swales’ (2018) framework. Then, the moves and steps in Moreno and Swales’ (2018) framework were consulted. For example, the steps in Move 1 “Reestablishing the territory” in the discussion sections of Cotos et al.’s (2015) framework were frequently found in the results section of the RAs. The last step Move 1 Step 4 “Previewing the discussion ‘road map’” was excluded from the new framework because it was not observed in the analysis. Therefore, the steps Move 1 Step 1 “Drawing on a theoretical general background” was moved to the new framework and renamed as *M4S1 “Providing theoretical and/or background information;”* Move 1 Step 2 “Drawing on study-specific background” was renamed as *M4S2 “Drawing on study specific background.”* Move 1 Step 3 “Highlighting principal findings” was added to the framework as a new step *M3S8 “Summarizing the results and/or Highlighting the principal findings”* similar to Morena and Swales’ (2018) framework.

(7) “Şencan’a göre bilimsel içerikli...” (COM_L1_TUR1)

(8) “İlgili alan yazına göre...” (COM_L1_TUR1)

The steps of Move 3 in the discussion sections of Cotos et al.’s (2015) framework also emerged in the results sections of RAs. Therefore, the step Move 3 Step 1 “Supporting with evidence” was placed in the results section as *M4S3 “Establishing the meaning of results with evidence.”*

(9) “For example, *Pellicer-Sanchez and Schmitt (2010)* found that learners recognized the form of 30% of target words met one time.” (LING_L1_ENG9)

(10) “*Pintrich and DeGroot (1990)* argued that self-oriented individuals used cognitive strategies in a more active manner.” (COM_L2_ENG3)

Another step of Move 3 in the discussion sections of Cotos et al.’s (2015) framework was also noticed in the results section of RAs. The step Move 3 Step 2 “Countering with evidence” was placed as *M4S3 “Establishing the meaning of results with evidence.”*

(11) “However, *Pajares and Kranzler (1995)* claimed that self-controlled students use their cognitive skills more actively as they use self-control mechanisms.” (COM_L2_ENG3)

Also, it was often found that some studies tended to rationalize their results. However, the step regarding this function was lacking. As is visible in the example below, considering that the authors draw on theoretical background, it was annotated as *M4SI* “*Providing theoretical and/or background information*” instead of naming as a separate step rationalizing results.

(12)“For the assumption of independence of errors to be met, *Durbin-Watson values* should be between 1.00 and 3.00 in all of the regression analyses.” (SPE_L2_ENG12)

3.6.2. Inter-Rater Coding Reliability in the Main Study

Similar to the inter-rater coding reliability in the pilot study, the inter-rater coding analysis in the main study was also conducted in four phases in order to ensure reliability. First, the second rater was trained on how to use the coding protocol prepared by the researcher (See Appendix 4 for the coding protocol) and how to annotate the moves and steps in the corpus. The two raters practiced coding and discussed their judgments concerning the annotations of moves and steps. Second, the second rater independently identified and annotated at the sentence-level for moves and steps, and at phrase-level for steps in the randomly selected RAs, and then these annotations for moves and steps were implemented to the file defined for the second rater in Nvivo 12.0. Third, the inter-rater coding reliability among the two raters was measured by running a coding comparison query in Nvivo 12.0, and the estimates for Cohen’s Kappa coefficient and the percentage agreement were calculated. Last, the two raters evaluated the results of these coefficients and discussed the coding in pairs in order to reach a consensus about the latest coding framework.

Gwet (2010) states that the number of samples for computing the inter-rater reliability among the raters changes according to the number of raters and subjects which are coded (p. 159). For example, in a study with two raters if 0.10 error margin is tolerated, at least 100 subjects are needed, however, if 0.30 error margin is tolerated, it might be achieved with only 11 subjects. Therefore, this study selected 12 RAs randomly in order to determine the degree of agreement between the raters because 10% of the total data might be sufficient (Lombard, Synder-Duch & Bracken, 2004, p. 4).

In order to compute the degree of agreement between the raters, this study resorted to Cohen’s kappa (k) statistic, a common method for calculating agreement estimates

(Stemler, 2004). The estimates for Cohen's Kappa coefficient is "more useful than the agreement percentage it is a chance-corrected measure, which takes into account the likelihood that the agreement between coders has occurred by chance" (Moreno & Swales, 2018, p. 55) (See also Nvivo12 help, Orwin, 1994). Besides the Cohen's Kappa coefficient, the percentage agreements were also presented. However, they were not prioritized in the present study because according to Biber et al. (2007), the percentage agreement is a way of simplifying statistics comprised of "the number of agreements per total number of coding decisions, but it does not account for chance agreement among raters" (p. 35).

The minimum and maximum values of Cohen's Kappa coefficients are shown below in Table 41 (See Appendix 11 for all the values of Cohen's Kappa coefficients in the main study). The findings revealed that the level of agreement is over 98.8%. Furthermore, the minimum Kappa coefficient is 0.49, while the maximum Kappa coefficient is 0.99.

Table 40

Results of Cohen's Kappa in the EDUCORP

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Dis agreement (%)	A and Not B (%)	B and Not A (%)
M3\M3S3	Coşkun (2016) Abant İzzet Baysal University Journal of Faculty of Education (LING_ L2)	0.49	98.88	0.00	98.88	1.12	0.76	0,37
M4\M4S1	İzci et al. (2013) İnönü University Journal of the Faculty of Education (LING_ L1)	0.99	100.00	0.96	99.04	0.00	0.00	0.00

In accordance with the interpretation of Cohen's Kappa values, below 0.40 is considered 'poor agreement'; 0.40 - 0.75 is 'fair to good agreement'; over 0.75 is 'excellent agreement'. In this pilot study, the findings suggested that Cohen's Kappa coefficients ranged between 0.49 and 0.99, which is between 'fair to good agreement' and 'excellent agreement' according to Nvivo12 help.

3.6.3. The New Framework for Results Sections

As a result of the pilot study, the newly established move and step framework to be used in the main study can be seen below in Table 41 and Figure 14. In the new framework, the number of labels for moves was reduced from six to four in order to have a more manageable coding framework. Move 1 “Preparing the study” focused on introducing the study and its objectives; Move 2 “Describing the study” focused on giving methodological aspects of the study; Move 3 “Reporting and commenting on the results” focused on giving results in different ways; Move 4 “Establishing the study” focused on discussing the results of the study. 16 steps were identified with related to these moves.

Table 41

The New Framework for Move Analysis of Results Sections Used in the Main Study

36 RAs (Pilot study), 1 discipline: Educational sciences	Results		
	Code	Communicative function	
	M1	Move 1-	Step 1- Providing general orientation
	M1S1	Preparing the	Step 2- Stating study specifics
	M1S2	Study	
	M2	Move 2-	Step 1- Preparing the data
	M2S1	Describing the	Step 2- Describing the data analysis
	M2S2	Study	Step 3- Rationalizing and/or Criticizing data
	M2S3		processing and/or analysis
	M3	Move 3-	Step 1- Reporting results
	M3S1	Reporting and	Step 2- Referring to table and/or figure
	M3S2	Commenting	Step 3- Comparing results
	M3S3	on the Results	Step 4- Explicating and/or Evaluating results
	M3S4		Step 5- Clarifying expectations
	M3S5		Step 6- Acknowledging limitations
	M3S6		Step 7- Giving personal comments on results
	M3S7		Step 8- Summarizing results and/or Highlighting
	M3S8		principal findings
	M4	Move 4-	Step 1- Providing theoretical and/or background
	M4S1	Establishing	information
	M4S2	the Study	Step 2- Comparing with previous research
	M4S3		Step 3- Establishing the meaning of results with evidence

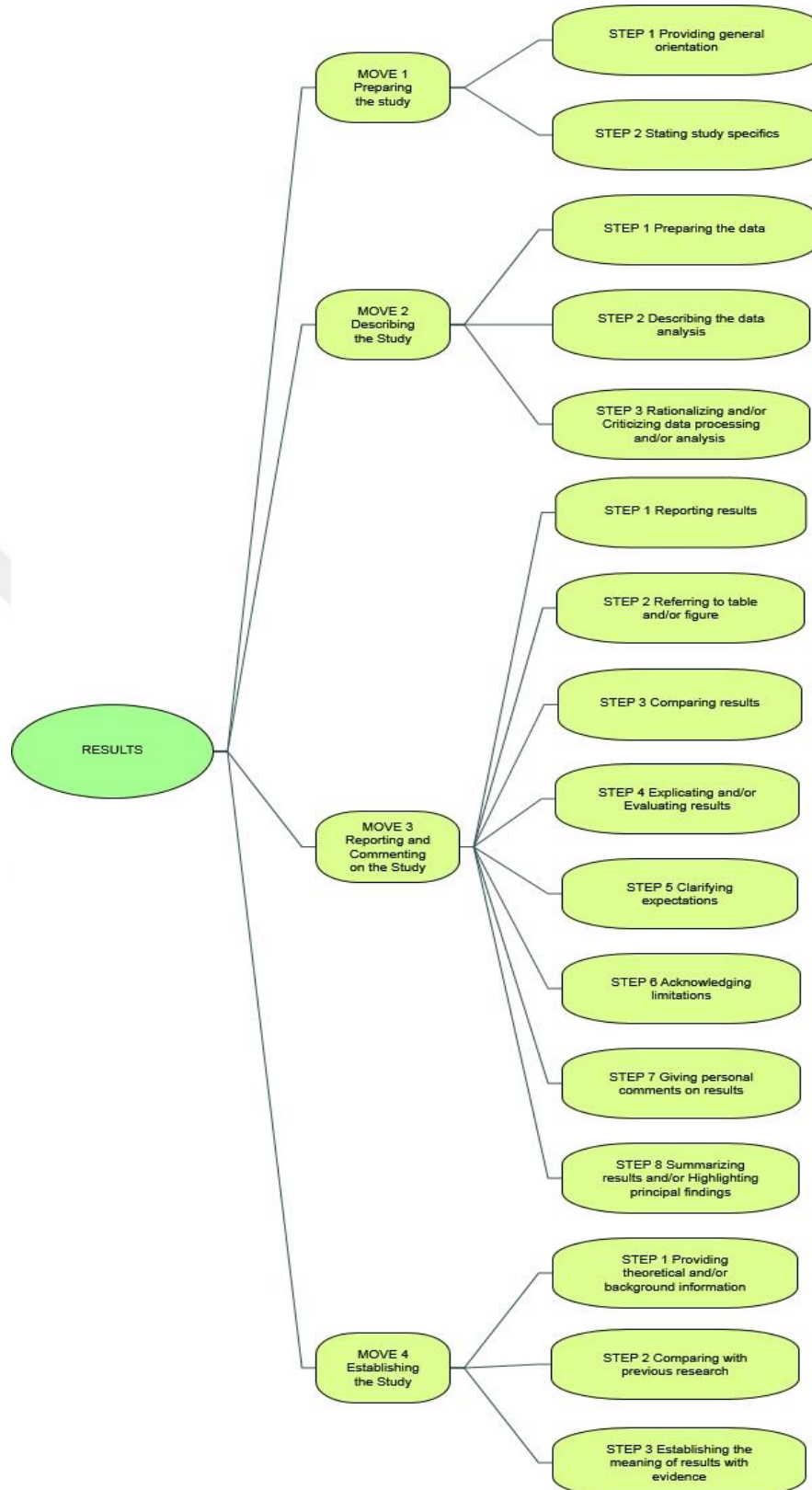


Figure 14. The mind map of the new framework for move analysis of results sections used in the main study



CHAPTER IV

RESULTS

This chapter first introduces the moves and steps used in the results sections of L1 English, L1 Turkish and L2 English RAs in the field of educational sciences in accordance with the new framework and exemplifies the moves and steps in the EDUCORP. After the description of these moves and steps, it reports the results of the move analyses in the sense of frequency by comparison and contrast in the three corpora. Lastly, it reports the results of the analyses of the moves structures in the sense of move sequencing, move patterning and move cycling.

4.1. Moves and Steps Identified

In the present study, the new framework established as a result of the pilot study in the results sections of the 36 RAs published in the field of educational sciences was consulted, as shown above in See Table 40 and Figure 14. After the move analysis of the results sections of the 120 RAs published in the field of educational sciences was conducted in the main study, the move and step structure analysis identified 4 rhetorical moves (M1, M2, M3, M4) with 17 steps (M1S1, M1S2, M2S1, M2S2, M2S3, M3S1, M3S2, M3S3, M3S4, M3S5, M3S6, M3S7, M3S8, M3S9, M4S1, M4S2, M4S3). In order to classify the communicative functions of the 6252 sentences within the EDUCORP, the identified moves and steps were reported below. In the discussion chapter, the new rhetorical model will be suggested in accordance with the findings of these moves and steps identified in the main study.

Move 1 (M1) – Preparing the study

This move was formed out of necessity after the pilot study was conducted, so it was included in the main study. It was composed of two steps that aimed to provide general information about the study and the research objectives.

Move 1 Step 1 (M1S1) – Providing general orientation

This step was included from Cotos et al.'s (2015) move and step framework for the results sections of RAs in which it was called Move 1 Step 1 “Providing general orientation.” This step was used to introduce the study or give brief information to the readers about how the flow of the results section would be. The following excerpts from three corpora illustrate the use of M1S1:

(13) “*In what follows, we will generally only discuss the correlates with university attendance since almost none of the indices – whether entered into the model separately or jointly – have any meaningful relationship to college attendance.*” (EDU_L1_ENG3)

(14) “*Bu bölümde araştırmaya ilişkin bulgular, her iki ankette yer alan maddelerin sırası esas alınarak verilmiştir.*” (EDU_L1_TUR5)

(15) “*In this section, the questions which were tried to be answered within the scope of the study are presented parallel to the purpose statements.*” (EDU_L2_ENG2)

Move 1 Step 2 (M1S2) – Stating study specifics

This step was included from Cotos et al.'s (2015) move and step framework for the results sections of RAs by renaming Move 1 Step 2 “Restating study specifics” as “Stating study specifics.” Moreover, Move 1 Step 3 “Justifying study specifics” in Cotos et al.'s (2015) move and step framework for the results sections of RAs was excluded in the main study considering that it had not been observed in the pilot study. This step was used to briefly remind the readers of their research questions before reporting results. The following excerpts from three corpora illustrate the use of M1S2:

(16) “*Our third research question queried the extent to which logistic regression models and classification analyses (see below) executed with Cohort A replicated with a new sample.*” (SPE_L1_ENG1)

(17) “*Araştırmanın birinci problemi “Eğitsel yazılım (DENIS) ve bilgisayar oyunları ortamında öğrenen 6. Sınıf öğrencilerinin kelime öğrenme başarıları arasında anlamlı bir farklılık var mıdır?” şeklinde ifade edilmiştir.*” (LING_L1_TUR5)

(18)“*The first question of the research aims to determine whether there is a meaningful difference between the AST pre-test – post-test points’ averages of the students in primary school 7th and technology lesson, for whom blended learning, social media-supported learning and face-to-face learning were applied.*” (COM_L2_ENG1)

Move 2 (M2) – Describing the study

This move was included from Cotos et al.’s (2015) move and step framework for the methods sections of RAs in which it was called Move 3 “Establishing the credibility.” It is renamed by considering Move 2 “Describing the study” in Cotos et al.’s (2015) move and step framework for the methods sections of RAs. It is worth noting that this move was often observed in the results sections of RAs in the main study. It was composed of three steps and aimed to provide methodological information that had already been mentioned in the previous sections of RAs by preparing the data, describing the data analysis and giving rationales for the data analysis.

Move 2 Step 1 (M2S1) Preparing the data

This step was included from Cotos et al.’s (2015) move and step framework for the methods sections of RAs in which it was called Move 3 Step 1 “Preparing the data.” It aimed to describe the data and identify variables in the study before introducing the data analysis. The following excerpts from three corpora illustrate the use of M2S1:

(19)“Of the 33 *students* who volunteered to *participate* in the survey and focus groups, 17 were F2F students and 16 were remote students.” (COM_L1_ENG3)

(20)“Çalışmada *katılımcıların* yaş ortalaması, 19.2 ve ortanca değerinin de 19 olduğu görülmüştür.” (LING_L1_TUR1)

(21)“In this context, 32 *studies* (7 articles, 19 Master’s theses and 6 doctoral theses) that revealed arithmetic means and standard deviations on the use of CSE were *accessed for use* in the meta-analysis.” (COM_L2_ENG2)

Move 2 Step 2 (M2S2) Describing the data analysis

This step was added from Cotos et al.’s (2015) move and step framework for the methods sections of RAs in which it was called Move 3 Step 2 “Describing the data analysis.” It is derived from the fact that the RA authors intend to remind readers of the methodology of the study before presenting the results. It was used to point out some details of the data analysis. The following excerpts from three corpora illustrate the use of M2S2:

(22)“To establish whether improvements were significant, marks *were analyzed using* the non-parametric Wilcoxon signed-rank *test*.” (LING_L1_ENG10)

(23)“Bu işlemin ardından Kruskal Wallis-H sonrası belirlenen anlamlı farklılığın hangi gruplardan kaynaklandığını belirlemek üzere tamamlayıcı karşılaştırma *tekniklerine geçilmiştir*.” (SPE_L1_TUR1)

(24)“The Tukey HSD *test* as a post hoc technique based on the homogeneity of variances *was carried out*.” (COM_L2_ENG1)

Move 2 Step 3 (M2S3) Rationalizing and/or Criticizing data processing and/or analysis

This step was extended from Cotos et al.’s (2015) move and step framework for the methods sections of RAs in which it was called Move 3 Step 3 “Rationalizing data processing and/or analysis.” It provides rationales to the readers about the data analysis procedures. However, considering the authors also tend to criticize their data analysis as well as rationalize it, “criticizing” was added to the name of this step. The following excerpts from three corpora illustrate the use of M2S3:

(25)“We removed cases with one or more variable means 3 standard deviations above or below each overall variable mean (*Vijendra & Shivani, 2014*), which included 18 (1.9%) univariate outliers.” (EDU_L1_ENG4)

(26)“Bunun için ölçme aracında eksik veriler, ters maddeler, veri setinin normalliği, maddeler arasındaki ilişkiler örneklem sayısı ve örneklem uygunluğu KMO and Bartlett’s sphericity testi dikkate alınarak kontrol edilmiştir (*Büyüköztürk, 2010; Field, 2009; Tabachnick ve Fidell, 2007*).” (EDU_L1_TUR2)

(27)“Before running the hierarchical regression analysis, the required assumptions of multicollinearity, normality of errors, homoscedasticity, independence of errors, and influential observations suggested by *Field (2009) and Hair, Black, Babin, and Anderson (2010)* were checked and validated for three analysis separately.” (EDU_L2_ENG4)

Move 3 (M3) – Reporting and commenting on the results

This move was formed by combining two separate moves, Move 2 “Occupying the niche” and Move 3 “Construing the niche” in Cotos et al.’s (2015) move and step framework for the results sections of RAs, and in a similar way it was seen in two separate moves Move 2 “Reporting results” and Move 3 “Commenting on results” in Yang and Allison’s (2003) move and step framework for the results sections of RAs. One of the reasons for combining these two separate moves is to make the move and step framework more

understandable and practical, and another reason is to make it more manageable for move sequencing, patterning and cycling. It was composed of eight steps, and by means of the variety of steps the authors could report and interpret results in a wide range of ways.

Move 3 Step 1 (M3S1) – Reporting results

This step included reporting both general and specific findings in quantitative and qualitative studies. In previous studies, this step was categorized as Move 2 Step 1 “Reporting specific results” and Move 2 Step 2 “Indicating alternative presentation of results” in Cotos et al.’s (2015) move and step framework for the results sections of RAs. The following excerpts from the three corpora illustrate the use of M3S1:

(28) “One third of the parents *reported that* their child had previously been diagnosed by ADHD; but reported prior diagnosis of ADHD was correlated only with three writing skills.” (SPE_L1_ENG2)

(29) “Araştırmaya katılan öğretmenlerin örgütsel vatandaşlık davranışları (AO=3.74, S=.59) orta düzeyin üzerindedir.” (EDU_L1_TUR1)

(30) “*Findings showed that* Selin, Meral, and Nisa could write SS with 11%, 22%, and 22% accuracy, respectively, during the pretest, and they could write them with 100% accuracy during the posttest.” (SPE_L2_ENG1)

(31) “*Meral said*, “We had problems outside, now no more,” Nisa said, “My child is more confident now, I enjoy this.” (SPE_L2_ENG1)

Move 3 Step 2 (M3S2) – Referring to table and/or figure

This step was formed out of necessity after the researcher and the second inter-coder conferred during the pilot study, so it was included in the main study. It was used when the RA authors aimed to report the results by referring to the tables and figures. The following excerpts from three corpora illustrate the use of M3S2:

(32) “These similar patterns *are illustrated* by the locations of the mentor points (means) for each condition *in Figure 2*, where points closer together have more similar patterns of co-occurrence than points farther apart.” (COM_L1_ENG1)

(33) “Araştırmanın ikinci araştırma sorusu olan; “Özel gereksinimli bireylerin babalarının psikolojik dayanıklılıkları ve ERKA çocuklarının engel türüne göre farklılaşmakta mıdır?” için yapılan Kruskal Wallis Testi Sonucu *Tablo 3’te verilmiştir.*” (SPE_L1_TUR1)

(34) “*Figure 1 shows* the findings from the probe, intervention, and maintenance sessions; *Figure 2 shows* the findings from the generalization sessions.” (SPE_L2_ENG7)

Move 3 Step 3 (M3S3) – Comparing results

This step was included from Cotos et al.'s (2015) move and step framework for the results sections of RAs in which it was called Move 3 Step 1 “Comparing results.” In previous studies, this step was seen as “Comparing results with previous studies” (Nwogu 1997; Yang & Allison 2003). In contrast to the results of previous studies, this step aimed to compare the results within the study. The following excerpts illustrate the use of M3S3:

(35) “*In contrast to* supervisory and training support where there were no significant gender differences in responses, a significantly greater proportion of male research students (44%) did not feel a peer mentor would benefit their research experience *when compared to* female students (16%; $p = 0.02$).” (EDU_L1_ENG10)

(36) “Tablo 4 dikkate alındığında e-öğrenme ortamını kullanmaya başlamadan önce yapılan *öntest ile* öğrenim süreci tamamlandıktan sonra yapılan *sontest arasında* öğrenme stillerinin dağılımlarında *farklılıklar olduğu görülmektedir.*” (COM_L1_TUR10)

(37) “The US students found their lecturers’ instruction, rapport, and assessment ($=6.59$ $S=1.10$; $=6.80$ $S=1.15$; $=8.13$ $S=0.00$) *more effective compared to* the Turkish group ($=6.10$, $S=1.49$; $=5.86$, $S=1.60$; $=6.44$, $S=1.66$).” (LING_L2_ENG10)

Move 3 Step 4 (M3S4) – Explicating and/or Evaluating results

This step was included from Cotos et al.'s (2015) move and step framework for the results sections of RAs in which it was called Move 3 Step 3 “Explicating results,” and its name was extended from Yang and Allison’s (2003) move and step framework for the results sections of RAs in which it was called Move 3 Step 3 “Evaluating results.” It was seen that the RA authors in the EDUCORP used this step to clarify and interpret the results after reporting the results precisely. The following excerpts from three corpora illustrate the use of M3S4:

(38) “The highest score for both groups was on similarity to artists, *which may indicate that* middle school students are open to a range of future possibilities or that even computer-inclined girls see technology as an artistic medium.” (COM_L1_ENG8)

(39) “*Bu sonuçlara göre* deney grubunda uygulanan ÖTBB tekniğine dayalı öğretimin, öğrencilerin İngilizce dersine yönelik tutumlarında olumlu yönde etkisinin olduğunu *söylemek mümkündür.*” (LING_L1_TUR4)

(40) “*In the light of these findings, it can be concluded that the presenting new words in semantic sets had a beneficial effect on EFL learners’ recognition and production of the target words.*” (LING_L2_ENG7)

Move 3 Step 5 (M3S5) – Clarifying expectations

This step was included from Cotos et al.’s (2015) move and step framework for the results sections of RAs in which it was called Move 3 Step 4 “Clarifying expectations.” Its aim is to show the author’s expectations regarding the results of the study. The following excerpts from three corpora illustrate the use of M3S5:

(41) “*Hypothesis 1a and 2a respectively stated that students would predict that they would experience lower NA and higher PA when allowed to multitask with media during homework completion.*” (COM_L1_ENG5)

(42) “*Elde edilen değerlerden χ^2 /sd değerinin 3 veya altında olması beklenmektedir.*” (COM_L1_TUR4)

(43) “When these items are omitted and analyses redone, an increase in TIFs and a decrease in SEFs may occur.” (EDU_L2_ENG5)

Move 3 Step 6 (M3S6) – Acknowledging limitations

This step was included from Cotos et al.’s (2015) move and step framework for the results sections of RAs in which it was called Move 3 Step 5 “Acknowledging limitations.” The RA authors in the EDUCORP aimed to acknowledge the limitations of the results. The following excerpts from three corpora illustrate the use of M3S6:

(44) “So, although there were differences in self-efficacy between high-performing and underperforming students, *the questionnaire used did not make it possible* to attribute possible causes of these differences to a particular factor, although it was possible to attribute the possible ‘causes’ to a set of issues identified in Table 3.” (EDU_L1_ENG2)

(45) There is no reference.

(46) “However, as *the negative case analysis of the data on doing research indicated*, some participants were not accustomed to doing research, but the format of the lesson forced them to do it.” (COM_L2_ENG4)

Move 3 Step 7 (M3S7) – Giving personal comments on results

This step was formed out of necessity after the researcher and the second inter-rater conferred during the pilot study. In the previous studies, there is no similar step related to

authors' comments. The step "Giving personal comments on results" was seen when the RA authors commented on the results. The following excerpts from three corpora illustrate the use of M3S7:

(47) "Our review of his article showed, *to our surprise*, that he did not use imperatives in his writing." (LING_L1_ENG7)

(48) "Altı hafta süren dil partnerliği sonunda öğretmen adaylarının farklı kültürler hakkında bilgilerinin artması ya da yanlış bilgilerini düzeltmesi *doğal bir sonuç olarak karşımıza çıkmaktadır*." (LING_L1_TUR10)

(49) "*It was surprising that* the lower scorers also had a positive attitude towards the learning experience." (COM_L2_ENG4)

Move 3 Step 8 (M3S8) – Summarizing results and/or Highlighting principal findings

This step was formed out of necessity after the researcher and the second inter-coder conferred during the pilot study. This step was used when the RA authors aimed to summarize the results and emphasize the main findings. The following excerpts from the three corpora illustrate the use of M3S8:

(50) "*In summary*, the MICUSP physics papers show that students use imperatives to guide readers through the steps of their argument." (LING_L1_ENG7)

(51) "*Sonuç olarak* öğretmen-öğrenci ilişki ölçeğinin doğrulayıcı yapı geçerliği sağlanmıştır." (EDU_L1_TUR9)

(52) "*In general*, the test results are satisfactory and verifies the usability of the application for the students who need special education." (SPE_L2_ENG5)

Move 3 Step 9 (M3S9) – Giving suggestions for further studies

This step was created as a new step after the main study was conducted. That's why, it could be included in the suggested new model after the main study. This step was used when the authors gave recommendations on further research with regard to the results. A similar step was introduced in Kanoksilapatham's (2003) framework as Move 4 Step 4 "Suggested further studies" and in Yang and Allison's (2003) framework as Move 6 Step 1 "Recommending further research." However, this step was seen in only one RA in the EDUCORP. The following excerpt from one corpus illustrate the use of M3S9:

(53) "*More research is needed* to understand the career paths of students espousing weak interest in these careers." (COM_L1_ENG8)

Move 4 (M4) – Establishing the study

This move was created out of necessity after the researcher and the second rater conferred during the pilot study. It was composed of three steps, and the authors aimed to discuss the results of their study with theoretical background, previous studies and establish the meaning with evidence.

Move 4 Step 1 (M4S1) – Providing a theoretical and/or background information

This step was included from Cotos et al.'s (2015) move and step framework for the discussion sections of RAs in which it was called Move 1 Step 1 “Drawing on a theoretical general background” and Moreno and Swales’ (2018) move and step framework for the discussion sections of RAs in which it was called Move 2 “Background information.” It is worth noting that these rhetorical functions were observed in the pilot study and the main study. This step aimed to provide a conceptual background for the results of the study. The following excerpts from the three corpora illustrate the use of M4S1:

(54) “These are particularly important because *we know that* doing well on the PISA reading score is an important correlate of entry into university (*Finnie and Mueller 2008a, 2008b, 2009*).” (EDU_L1_ENG3)

(55) “Bununla birlikte, *Kolb*, büyüme ve gelişme teorisiyle öğrenme stilleri ve bağımsız öğrenme arasında bir bağ olduğunu *ifade etmiştir*.” (LING_L1_TUR1)

(56) “*Considering the validation* of the homoscedasticity assumption, the points need to be randomly and uniformly dispersed throughout the plot (*Field, 2009*).” (EDU_L2_ENG4)

Move 4 Step 2 (M4S2) – Comparing with previous research

This step was included from Moreno and Swales’ (2018) move and step framework for the discussion sections of RAs in which it was called Move 4 Step 2 “Comparing with previous research.” In Cotos et al.'s (2015) move and step framework for the discussion sections of RAs, there is a similar step Move 1 Step 2 “Drawing on study-specific background.” It is worth noting that these rhetorical functions were observed in the pilot study and the main study. It aims to compare the findings of the study with the findings of the previous studies. The following excerpts from the three corpora illustrate the use of M4S2:

(57) “*This result lines up with those from prior* (qualitative) studies that find that many principals use information on the test performance of teachers’ students when making

hiring decisions and assigning transferring teachers (Cannata et al., 2017; CohenVogel, 2011; Goldring et al., 2014).” (EDU_L1_ENG7)

(58)“*Alanyazında bazı çalışmaların sonuçları da, bu bulgulara paralel biçimde, üniversite öğrencilerinin kendi öğrenme süreçlerini yönlendirmek, izlemek ve değerlendirebilmek gibi becerilerde yeterli olmadıklarını (Sert, 2006), öğrenme aktivitelerinin ve değerlendirme sürecinin de öğretmenler tarafından yapılması gerektiğine inandıklarını, ayrıca öğrenme sürecinde sorumluluk alma becerilerinin yeterli düzeyde gelişmemiş olduğunu göstermiştir.*” (LING_L1_TUR1)

(59)“The most interesting finding is related to the category of Web 2.0 based activities including collaborative and self-publishing technologies *that are often cited* as having positive impacts on language learning (Golonka et al., 2014).” (LING_L2_ENG9)

Move 4 Step 3 (M4S3) – Establishing the meaning of results with evidence

This step was included from Moreno and Swales’ (2018) move and step framework for the discussion sections of RAs in which it was called Move 4 Step 1 “Establishing the meaning of results.” Moreover, in Cotos et al.’s (2015) move and step framework for the discussion sections of RAs, there are two similar steps, Move 3 Step 1 “Supporting with evidence” and Move 3 Step 2 “Countering with evidence.” It aims to indicate the significance of the study with evidence. The following excerpts from the three corpora illustrate the use of M4S3:

(60)“*This supports the conclusion that a detailed narrative style is used by novices, whose purpose in writing the diary includes providing a full enough account to enable going back to guide themselves in the future; through use of obligation modals they remind themselves of important requirements for and cautions concerning doing tasks.*” (LING_L1_ENG9)

(61)“*Bu veriler “Bilinçli farkındalık temelli bilişsel terapi programına katılan öğrencilerin Duygu Düzenleme Güçlükleri Ölçeği son test puan ortalamaları ön test puan ortalamalarından anlamlı düzeyde düşük olacaktır” şeklindeki 1 numaralı denenceyi destekler niteliktedir.*” (EDU_L1_TUR6)

(62)“*Overall, the result of qualitative analysis support that the use of blended learning has a positive effect on student engagement and motivation to read.*” (LING_L2_ENG5)

4.2. Frequency of Moves and Steps

4.2.1. The Moves and Steps of Results

Figure 15 shows the frequency use of the four rhetorical moves in the results sections of RAs in the EDUCORP. Among the moves of the results sections, in the three groups of RAs, Move 3 “Reporting and commenting on the results” was the most frequently used; Move 2 “Describing the study” was the second most frequently used move; the last two moves; Move 1 “Preparing the study” and Move 4 “Establishing the study” were used least frequently though at similar rates by the groups of RAs.

In L1 English RAs, the most frequent move was Move 3 “Reporting and commenting on the results” ($f=1957$, 40%); Move 2 “Describing the study” was the second most frequently used move ($f=445$, 42%); Move 4 “Establishing the study” followed Move 2 ($f=77$, 44%); and Move 1 “Preparing the study” occurred the least ($f=45$, 29%).

Similarly, in L1 Turkish RAs, the most frequent move was Move 3 “Reporting and commenting on the results” ($f=1397$, 29%); Move 2 “Describing the study” was the second most frequently used move ($f=307$, 29%); Move 4 “Establishing the study” followed Move 2 ($f=55$, 31%); and Move 1 “Preparing the study” occurred the least ($f=51$, 33%).

In L2 English RAs, the most frequent move was Move 3 “Reporting and commenting on the results” ($f=1498$, 31%); Move 2 “Describing the study” was the second most frequently used move ($f=317$, 30%). As distinct from L1 English and L1 Turkish RAs, initially Move 1 “Preparing the study” was seen ($f=59$, 38%), and then Move 4 “Establishing the study” followed ($f=44$, 25%).

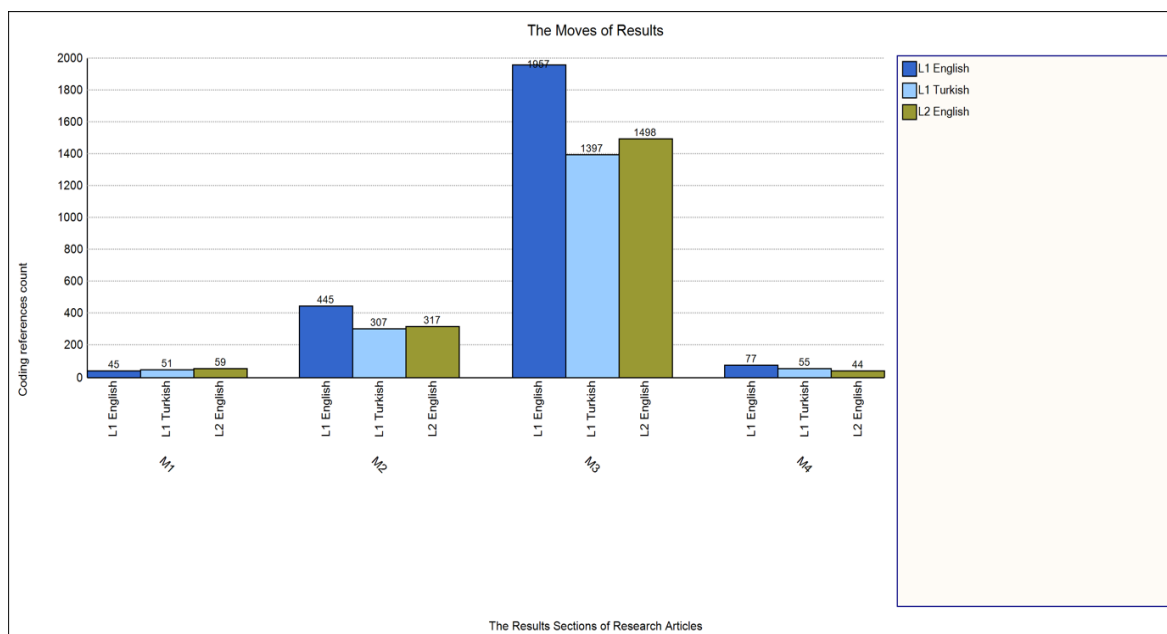


Figure 15. Distribution of all the moves

In Table 42, the findings regarding the frequency use of the moves M1, M2, M3 and M4 were given in accordance with the comparison of three groups of corpora. The Kruskal-Wallis H test showed that there was no statistically significant difference in the frequency use of M1 ($\chi^2=1.33$; $p=.515>0.05$), M3 ($\chi^2=4.12$; $p=.128>0.05$) and M4 ($\chi^2=5.22$; $p=.074>.05$) among the three groups (L1 English, L1 Turkish and L2 English RAs), while there was a statistically significant difference in the frequency use of M2 ($\chi^2=6.70$; $p=.035<.05$) among the three groups (L1 English, L1 Turkish and L2 English RAs). Dunn's nonparametric multiple comparison (post-hoc) test was conducted in order to understand the source of this difference. The data showed that the frequency use of M2 was found to be statistically higher in L1 English RAs than L1 Turkish and L2 English RAs ($p<.05$).

Table 42

Results of the Moves in accordance with Kruskal-Wallis H Test

	Group	N	Mean Rank	df	Chi-Square	<i>p</i>	Post Hoc
M1	L1_ENG	40	55.79	2	1.33	.515	
	L1_TUR	40	63.90				
	L2_ENG	40	61.81				
M2	L1_ENG	40	72.08	2	6.70	.035*	1>3 1>2
	L1_TUR	40	54.56				
	L2_ENG	40	54.86				
M3	L1_ENG	40	69.60	2	4.12	.128	
	L1_TUR	40	56.30				
	L2_ENG	40	55.60				
M4	L1_ENG	40	68.86	2	5.22	.074	
	L1_TUR	40	55.86				
	L2_ENG	40	56.78				

Note: * $p < .05$; Criteria; 1: L1_ENG, 2: L1_TUR, 3: L2_ENG

Regarding the moves Move 2, Move 3 and Move 4, the findings suggest that L1 English RAs written by the authors working in institutions from Anglophone countries tend to describe the study, report and comment on the results and establish the study more frequently than L1 Turkish and L2 English RAs written by the authors working at institutions in Turkey.

With regard to the Move 2, the findings suggest that authors from Anglophone countries tend to have significantly more rhetorical functions specifically in describing the study by giving information about methodological procedures as compared to L1 Turkish and L2 English RAs written by the authors working in institutions in Turkey.

As regards Move 3, the findings suggest that L1 English RAs written by authors from Anglophone countries tend to report and comment on the results through a wide range of communicative functions of steps more than L1 Turkish and L2 English RAs written by authors working at institutions in Turkey.

As for the Move 4, in a similar vein, the findings suggest that L1 English RAs written by the authors from Anglophone countries tend to establish the study by discussing the results by referring to theoretical background, previous studies and evidence compared to L1 Turkish and L2 English RAs written by the authors working at institutions in Turkey.

Regarding the Move 1, on the other hand, L1 Turkish and L2 English RAs written by the authors from Turkey tend lay groundwork for the study by introducing the flow of the section and specifics about the study at a higher level compared to L1 English RAs written by the authors from Anglophone countries. L1 Turkish and L2 English RAs written by

authors from Turkey show similarities in the frequency use of preparing the study, describing the study, reporting and commenting on the results and establishing the study, that is, in all four rhetorical moves.

When the frequency use of moves in the three groups of corpora is compared, the findings indicate that Move 3 “Reporting and commenting on the results” was most often the preferred move, and then Move 2 “Describing the study”, Move 4 “Establishing the study” and Move 1 “Preparing the study” followed.

Figure 16 shows the frequency use of sixteen steps in the results sections of RAs in the EDUCORP. Considering the steps of results, it was seen that Move 3 Step 1 “Reporting results” was the most used in the three groups of RAs, L1 English ($f=1096$, 40%), L2 English RAs ($f=945$, 34%) and L1 Turkish ($f=707$, 26%). However, the other steps were used variably by the three groups.

In L1 English RAs, Move 3 Step 3 “Comparing results” ($f=321$, 42%), Move 2 Step 2 “Describing the data analysis” ($f=250$, 37%), Move 3 Step 4 “Explicating and/or Evaluating results” ($f=221$, 47%), Move 3 Step 2 “Referring to table and/or figure” ($f=172$, 26%), Move 2 Step 3 “Rationalizing and/or Criticizing data processing and/or analysis” ($f=138$, 50%), Move 3 Step 8 “Summarizing results and/or Highlighting principal findings” ($f=62$, 62%), Move 2 Step 1 “Describing the data analysis” ($f=57$, 48%), Move 3 Step 5 “Clarifying expectations” ($f=47$, 87%), Move 4 Step 2 “Comparing with previous research” ($f=36$, 53%), Move 1 Step 1 “Providing general orientation” ($f=28$, 32%), Move 3 Step 7 “Giving personal comments on results” ($f=24$, 80%), Move 4 Step 1 “Providing a theoretical and/or background information” ($f=23$, 28%), Move 4 Step 3 “Establishing the meaning of results with evidence” ($f=19$, 70%), Move 1 Step 2 “Stating study specifics” and Move 3 Step 6 “Acknowledging limitations” ($f=17$, 25%) followed respectively.

In L1 Turkish RAs, Move 3 Step 2 “Referring to table and/or figure” was used mostly after M3S1 ($f=328$, 26%). Then, Move 2 Step 2 “Describing data analysis” ($f=217$, 32%), Move 3 Step 3 “Comparing results” followed ($f=214$, 28%), Move 3 Step 4 “Explicating and/or Evaluating results” ($f=141$, 30%), Move 2 Step 3 “Rationalizing and/or Criticizing data processing and/or analysis” ($f=60$, 22%), Move 1 Step 1 “Providing general orientation” ($f=34$, 39%), Move 2 Step 1 “Preparing the data” ($f=30$, 25%), Move 4 Step 1 “Providing a theoretical and/or background information” ($f=28$, 34%), Move 4 Step 2 “Comparing with previous research” ($f=23$, 34%), Move 1 Step 2 “Stating study specifics” ($f=17$, 25%),

Move 3 Step 8 “Summarizing results and/or Highlighting principal findings” ($f=7$, 7%), Move 3 Step 5 “Clarifying expectations” ($f=4$, 7%) and Move 4 Step 3 “Establishing the meaning of results with evidence” ($f=4$, 15%) were seen respectively. Move 3 Step 6 “Acknowledging limitations” never occurred.

In L2 English RAs, Move 3 Step 3 “Comparing results” ($f=234$, 30%), Move 2 Step 2 “Describing the data analysis” ($f=205$, 31%), Move 3 Step 2 “Referring to table and/or figure” ($f=168$, 25%), Move 3 Step 4 “Explicating and/or Evaluating results” ($f=113$, 24%), Move 2 Step 3 “Rationalizing and/or Criticizing data processing and/or analysis” ($f=80$, 29%), Move 1 Step 2 “Stating study specifics” ($f=33$, 49%), Move 2 Step 1 “Preparing the data” ($f=32$, 27%), Move 3 Step 8 “Summarizing results and/or Highlighting principal findings” ($f=31$, 31%), and Move 4 Step 1 “Providing a theoretical and/or background information” ($f=31$, 38%), Move 1 Step 1 “Providing general orientation” ($f=26$, 30%), Move 4 Step 2 “Comparing with previous research” ($f=9$, 13%), Move 3 Step 7 “Giving personal comments on results” ($f=5$, 17%), Move 4 Step 3 “Establishing the meaning of results with evidence” ($f=4$, 15%), Move 3 Step 5 “Clarifying expectations” ($f=3$, 6%) and Move 3 Step 6 “Acknowledging limitations” ($f=1$, 6%) were used respectively.

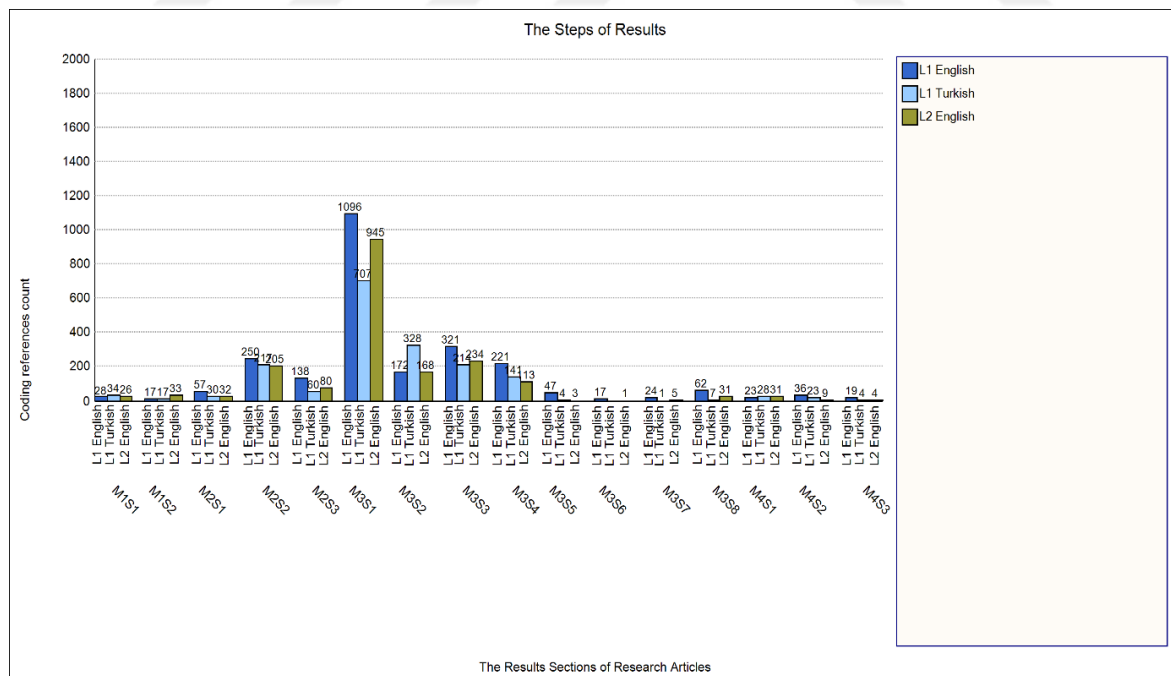


Figure 16. Distribution of all the steps

The findings of the steps will be analyzed below in detail.

4.2.2. Move 1 and the Steps

Figure 17 shows the frequency use of Move 1 in the results sections of the RAs in EDUCORP. Among the four moves of results, Move 1 “Preparing the study” was used by the three groups of RAs at various rates. It was observed that L2 English ($f=59$, 38%) and L1 Turkish RAs ($f=51$, 33%) would rather introduce the study before reporting results more than L1 English RAs ($f=45$, 29%).

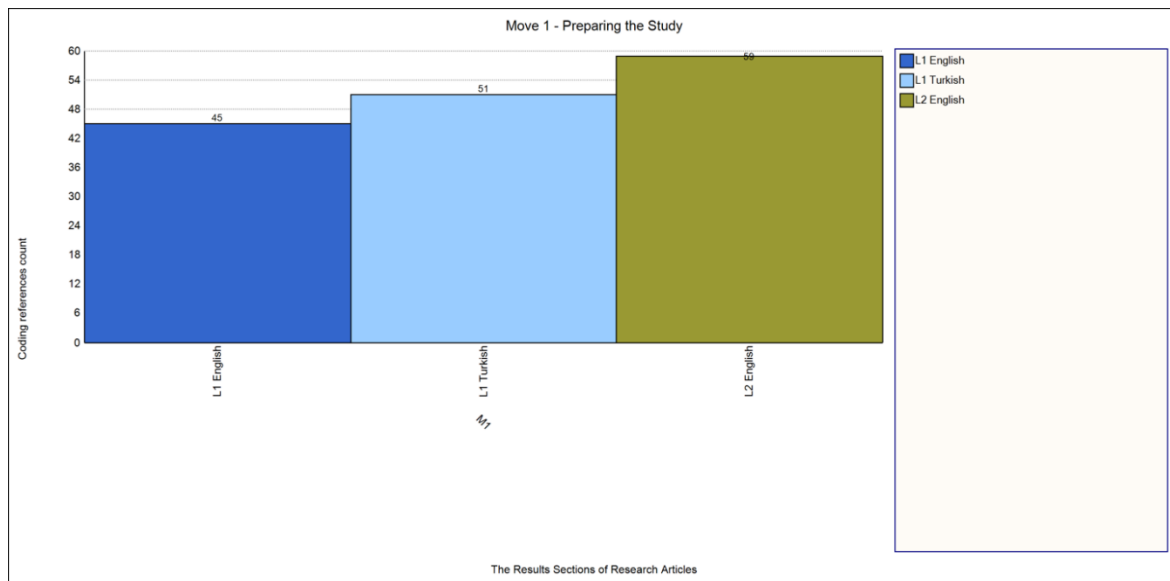


Figure 17. Distribution of Move 1

Regarding Move 1, the findings suggest that L2 English RAs written by authors from Turkey tend to prepare the study by giving general information and writing study specifics more than L1 Turkish and L1 English RAs written by authors from Anglophone countries.

Figure 18 shows the frequency use of Move 1 and its steps in the results sections of RAs in EDUCORP. It was seen that Move 1 Step 1 “Providing general orientation” was preferred more in L1 Turkish RAs ($f=34$, 39%) than in L1 English ($f=28$, 32%) and L2 English RAs ($f=26$, 30%). It was seen that L1 Turkish RAs introduce the study or mention briefly the flow of the results section. Move 1 Step 2 “Stating study specifics” was used twice as often in L2 English RAs ($f=33$, 49%) compared to L1 English ($f=17$, 25%) and L1 Turkish RAs ($f=17$, 25%).

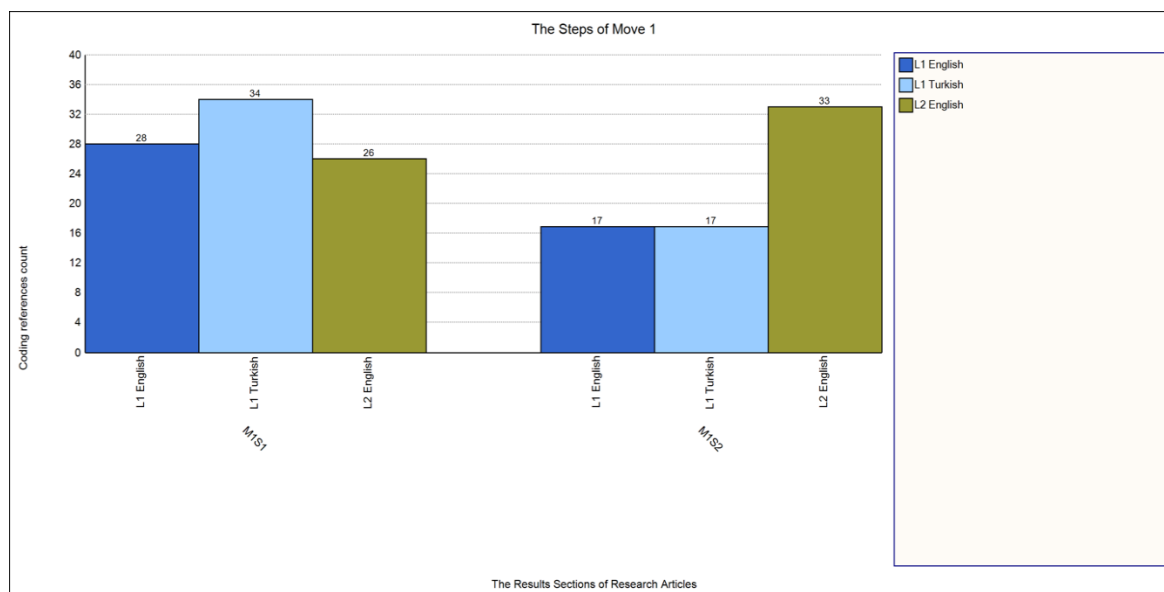


Figure 18. Distribution of the steps of Move 1

In Table 43, the findings regarding the frequency use of the steps Move 1 Step 1 and Move 1 Step 2 are given in accordance with the comparison of the three corpora. As seen in Table 1, M1S1 is higher in L1 Turkish RAs than L1 English and L2 English RAs; however, the Kruskal-Wallis H test showed that there was no statistically significant difference in the frequency use of M1S1 ($\chi^2=5.37$; $p=0.068>0.05$) among the three groups of corpora. Similarly, there was no statistically significant difference in the frequency use of M1S2 ($\chi^2=3.85$; $p=0.146>0.05$) among the three groups of corpora. The findings suggested that the frequency use of the steps, Move 1 Step 1 and Move 1 Step 2 are generally similar in the three groups (L1 English, L1 Turkish and L2 English RAs).

Table 43

Results of the Steps of Move 1 in accordance with Kruskal-Wallis H Test

	Group	N	Mean Rank	df	Chi-Square (χ^2)	<i>p</i>	Post Hoc
M1S1	L1_ENG	40	54.49	2	5.37	.068	---
	L1_TUR	40	69.53				
	L2_ENG	40	57.49				
M1S2	L1_ENG	40	59.80	2	3.85	.146	---
	L1_TUR	40	55.09				
	L2_ENG	40	66.61				

With regard to the Move 1 Step 1, the findings suggest that L1 Turkish RAs written by the authors from Turkey are inclined to provide general orientation comparatively at a higher

level than L2 English RAs written by authors from Turkey and L1 English RAs written by authors from Anglophone countries.

As regards the Move 1 Step 2, it is seen that L2 English RAs written by authors from Turkey tend to remind their readers of the research questions at a higher level than L1 Turkish RAs written by the authors from Turkey and L1 English RAs written by the authors from Anglophone countries.

4.2.3. Move 2 and Steps

Figure 19 shows the frequency use of Move 2 in the results sections of RAs in EDUCORP. Among the four moves of results, Move 2 “Describing the study” was used more frequently in L1 English RAs ($f=445$, 42%) than L2 English ($f=317$, 30%) and L1 Turkish RAs ($f=307$, 29%). The results indicate that L1 English RAs prefer to give information about the methodology of the study when compared to L2 English and L1 Turkish RAs.

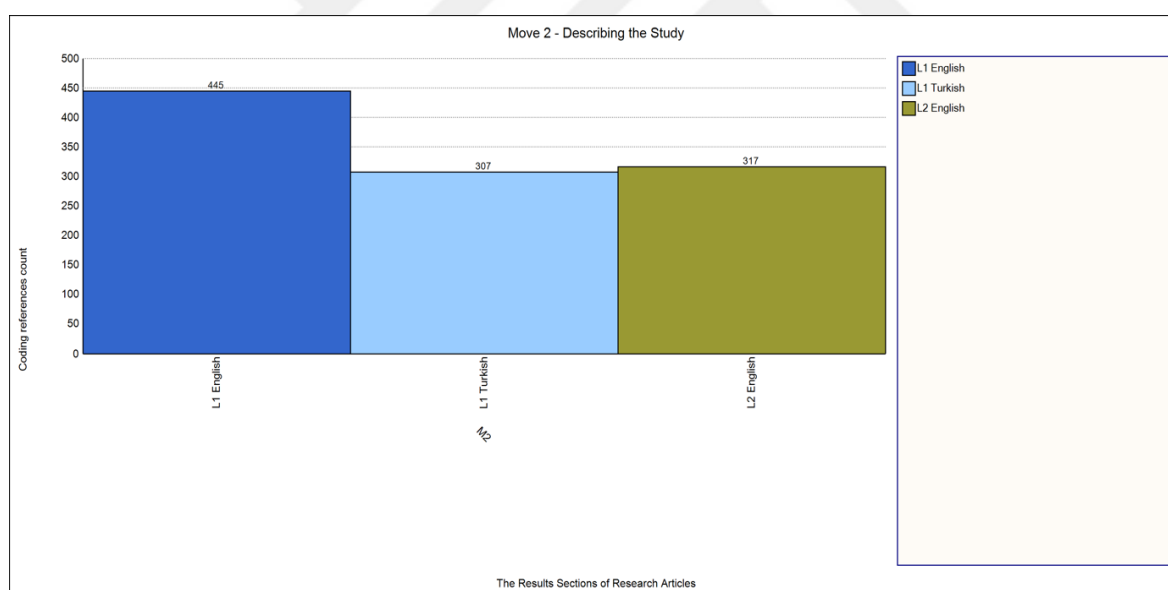


Figure 19. Distribution of Move 2

Regarding the Move 2, the findings suggest that L1 English RAs written by authors from Anglophone countries tend to give information about methodological procedures of the study when compared to L2 English and L1 Turkish RAs written by the authors from Turkey.

Figure 20 shows the frequency use of the steps of Move 2 in the results sections of RAs in EDUCORP. Move 2 Step 1 “Preparing the data” was more frequently used in L1 English

RAs ($f=57$, 48%) than in L2 English ($f=32$, 27%) and L1 Turkish RAs ($f=30$, 25%). Similarly, Move 2 Step 2 “Describing the data analysis” was preferred more in L1 English RAs ($f=250$, 37%) than L1 Turkish ($f=217$, 32%) and L2 English RAs ($f=205$, 31%). Move 2 Step 3 “Rationalizing and/or Criticizing data processing and/or analysis” was seen in L1 English RAs at a more significant rate ($f=138$, 50%) than in L2 English ($f=80$, 29%) and L1 Turkish RAs ($f=60$, 22%).

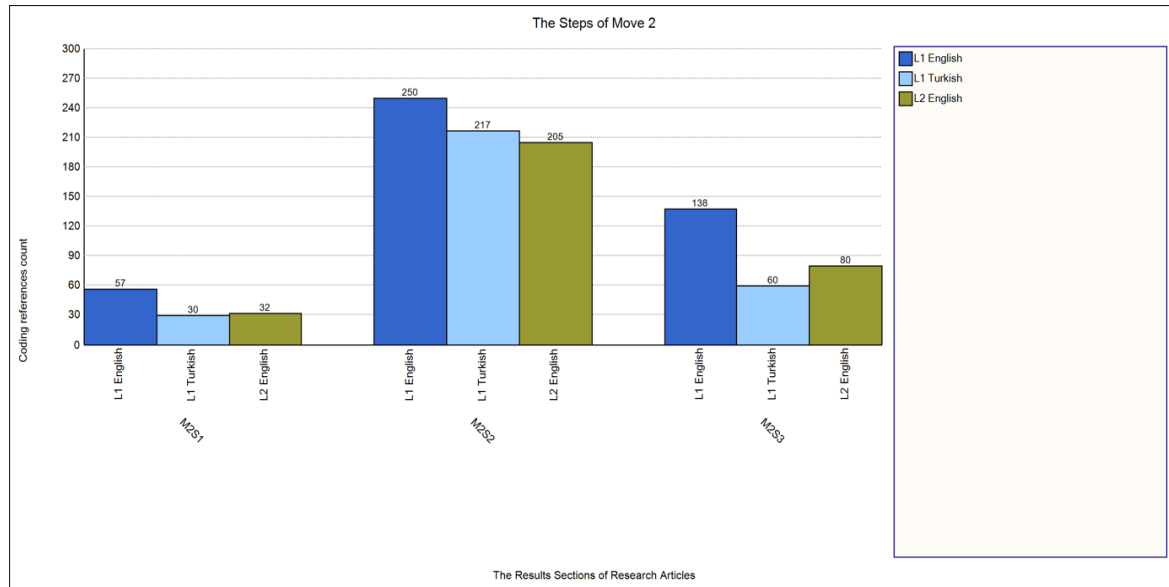


Figure 20. Distribution of the steps of Move 2

In Table 44, the findings regarding the frequency of the use of the steps Move 2 Step 1, Move 2 Step 2 and Move 2 Step 3 were given in accordance with the comparison of the three corpora. According to the findings obtained, these steps seemed to be higher in L1 English RAs; however, the Kruskal-Wallis H test showed that there was no statistically significant difference in the frequency use of Move 2 Step 1 ($\chi^2=4.08$; $p=0.130>.05$), Move 2 Step 2 ($\chi^2=2.82$; $p=.244>0.05$) and Move 2 Step 3 ($\chi^2=3.93$; $p=.140>.05$). In general, the findings suggested that the frequency use of the steps Move 2 Step 1, Move 2 Step 2 and Move 2 Step 3 are similar in the three groups (L1 English, L1 Turkish and L2 English RAs).

Table 44

Results of the Steps of Move 2 in accordance with Kruskal-Wallis H Test

	Group	N	Mean Rank	df	Chi-Square (χ^2)	<i>p</i>	Post Hoc
M2S1	L1_ENG	40	66.51	2	4.08	.130	---
	L1_TUR	40	60.09				
	L2_ENG	40	54.90				
M2S2	L1_ENG	40	67.80	2	2.82	.244	---
	L1_TUR	40	58.21				
	L2_ENG	40	55.49				
M2S3	L1_ENG	40	67.96	2	3.93	.140	---
	L1_TUR	40	53.60				
	L2_ENG	40	59.94				

Regarding the Move 2 Step 1, the findings suggest that L1 English RAs written by authors from Anglophone countries are inclined to mention the data before reporting their results more than L1 Turkish and L2 English RAs written by the authors from Turkey. When L1 Turkish and L2 English RAs are compared, it is seen that they are similar in the frequency of the use of this step.

Respecting the Move 2 Step 2, in a similar vein, the findings suggest that L1 English RAs written by authors from Anglophone countries tend to give information about the data analysis before reporting their results more than L1 Turkish and L2 English RAs written by the authors from Turkey. When L1 Turkish and L2 English RAs are compared, it is seen that they are similar in the frequency of the use of this step.

As for the Move 2 Step 3, the findings suggest that L1 English RAs written by authors from Anglophone countries tend to rationalize or criticize their data analysis before reporting their results at a higher level compared to L1 Turkish and L2 English RAs written by the authors from Turkey. However, when L1 Turkish and L2 English RAs are compared, L1 Turkish RAs written by authors from Turkey rationalize and criticizing their data analysis less.

4.2.4. Move 3 and Steps

Figure 21 shows the frequency of the use of Move 3 in the results sections of RAs in the EDUCORP. Among the four moves of results, Move 3 “Reporting and commenting on the results” was more often seen in L1 English RAs ($f=1957$, 40%) than L2 English ($f=1498$, 31%) and L1 Turkish RAs ($f=1397$, 29%). This indicates that L1 English RAs tend to consider reporting and interpreting results important at a significant rate.

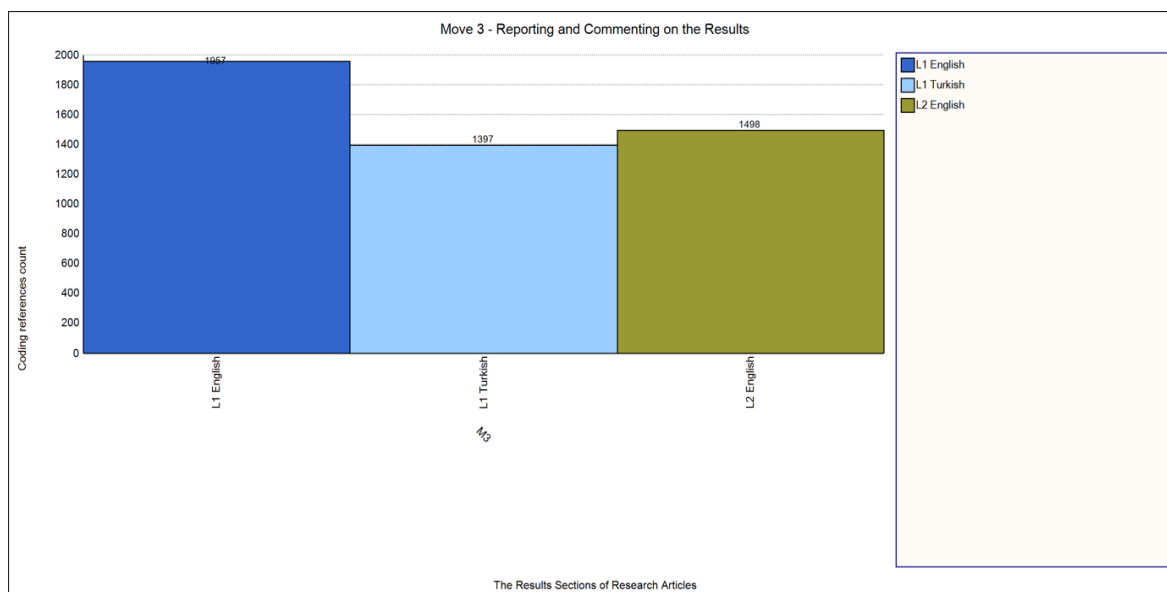


Figure 21. Distribution of Move 3

Regarding Move 3, the findings suggest that L1 English RAs written by the authors from Anglophone countries are inclined to report and comment on their results more than L2 English and L1 Turkish RAs written by the authors from Turkey. When L2 English and L1 Turkish RAs are compared, it is seen that L2 English RAs written by the authors from Turkey tend to present the results more than L1 Turkish RAs written by the authors from Turkey in number.

Figure 22 shows the frequency use of the steps of Move 3 in the results sections of RAs in the EDUCORP. Move 3 Step 1 “Reporting results” was the most frequently used move out of all the steps. L1 English RAs ($f=1096$, 40%) used at a higher rate compared to L2 English ($f=945$, 34%) and L1 Turkish RAs ($f=707$, 26%). Move 3 Step 2 “Referring to table and/or figure” was used at a significantly higher in L1 Turkish RAs ($f=328$, 49%) than L1 English ($f=172$, 26%) and L2 English RAs ($f=168$, 25%). Move 3 Step 3 “Comparing results” were used more in L1 English RAs ($f=321$, 42%) than L2 English ($f=234$, 30%) and L1 Turkish RAs ($f=214$, 28%). Move 3 Step 4 “Explicating and/or Evaluating results” was seen at a higher rate in L1 English RAs ($f=221$, 47%) than L1 Turkish ($f=141$, 30%) and L2 English RAs ($f=113$, 24%). Move 3 Step 5 “Clarifying expectations” was seen at a higher rate in L1 English RAs ($f=47$, 87%) than L1 Turkish ($f=4$, 7%) and L2 English RAs ($f=3$, 6%). Move 3 Step 6 “Acknowledging limitations” occurred 17 times in L1 English RAs ($f=17$, 94%) and once in L2 English RAs ($f=1$, 6%) while it was not found in L1 Turkish RAs ($f=0$, 0%). Move 3 Step 7 “Giving personal

comments on results” was used more at a significant rate in L1 English RAs ($f=24$, 80%) than L2 English ($f=5$, 17%) and L1 Turkish RAs ($f=1$, 3%). Move 3 Step 8 “Summarizing results and/or Highlighting principal findings” were more used in L1 English RAs ($f=62$, 34%) than L2 English ($f=31$, 31%) and L1 Turkish RAs ($f=7$, 7%).

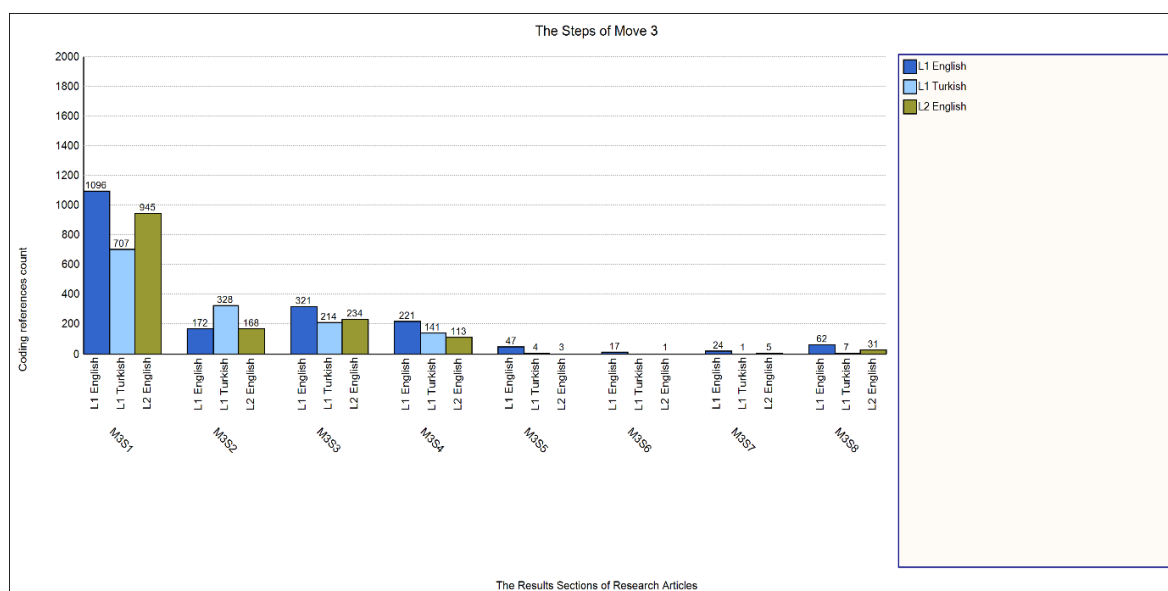


Figure 22. Distribution of the steps of Move 3

In Table 45, the findings regarding the frequency use of the steps Move 3 Step 1, Move 3 Step 2, Move 3 Step 3, Move 3 Step 4, Move 3 Step 5, Move 3 Step 6, Move 3 Step 7 and Move 3 Step 8 were given in accordance with the comparison of three groups of corpora. The findings of the Kruskal-Wallis H test showed that there was no statistically significant difference in the frequency use of Move 3 Step 1 ($\chi^2=4.28$; $p=.117>.05$) among the three groups (L1 English, L1 Turkish and L2 English RAs).

According to the Kruskal-Wallis H test, it is indicated that there was a statistically significant difference among the three groups in the frequency use of Move 3 Step 2 ($\chi^2=9.53$; $p=.008<.05$). Dunn’s nonparametric multiple comparison (post-hoc) test was conducted in order to understand the source of this difference. The data showed that the frequency use of Move 3 Step 2 was found to be statistically higher in L1 Turkish RAs compared to L1 English and L2 English RAs ($p<.05$).

The results of Kruskal-Wallis H test showed that there was a statistically significant difference in the frequency use of Move 3 Step 3 ($\chi^2=6.59$; $p=.037<.05$) among the three groups (L1 English, L1 Turkish and L2 English RAs). Dunn’s nonparametric multiple

comparison (post-hoc) test was conducted in order to understand the source of this difference. The data showed that the frequency use of Move 3 Step 3 was found to be statistically higher in L1 English RAs than L1 Turkish RAs ($p<.05$).

In accordance with the Kruskal-Wallis H test, it is indicated that there was a statistically significant difference in the frequency use of Move 3 Step 4 ($\chi^2=12.73$; $p=.002<.05$) among three groups (L1 English, L1 Turkish and L2 English RAs). Dunn's nonparametric multiple comparison (post-hoc) test was conducted in order to understand the source of this difference. The data showed that the frequency use of Move 3 Step 4 was found to be statistically higher in L1 English RAs than L1 Turkish and L2 English RAs ($p<.05$).

The Kruskal-Wallis H test showed that there was a statistically significant difference in the frequency use of M3S5 ($\chi^2=11.50$; $p=.003<.05$) among three groups (L1 English, L1 Turkish and L2 English RAs). Dunn's nonparametric multiple comparison (post-hoc) test was conducted in order to understand the source of this difference. The data showed that the frequency use of Move 3 Step 5 was found to be statistically higher in L1 English RAs than L1 Turkish and L2 English RAs ($p<.05$).

The results of the Kruskal-Wallis H test showed that there was a statistically significant difference in the frequency use of Move 3 Step 6 ($\chi^2=11.49$; $p=.003<.05$) among the three groups (L1 English, L1 Turkish and L2 English RAs). Dunn's nonparametric multiple comparison (post-hoc) test was conducted in order to understand the source of this difference. The data showed that the frequency use of Move 3 Step 6 was found to be statistically higher in L1 English RAs than L1 Turkish and L2 English RAs ($p<.05$).

According to the Kruskal-Wallis H test, there was a statistically significant difference in the frequency use of Move 3 Step 7 ($\chi^2=12.64$; $p=.002<.05$) among the three groups (L1 English, L1 Turkish and L2 English RAs). Dunn's nonparametric multiple comparison (post-hoc) test was conducted in order to understand the source of this difference. The data showed that the frequency use of Move 3 Step 7 was found to be statistically higher in L1 English RAs than L1 Turkish and L2 English RAs ($p<.05$).

The Kruskal-Wallis H test showed that there was a statistically significant difference in the frequency use of Move 3 Step 8 ($\chi^2=10.17$; $p=.006<.05$) among the three groups (L1 English, L1 Turkish and L2 English RAs). Dunn's nonparametric multiple comparison (post-hoc) test was conducted in order to understand the source of this difference. The data

showed that the frequency use of Move 3 Step 8 was found to be statistically higher in L1 English RAs than L1 Turkish and L2 English RAs ($p<.05$).

Table 45

Results of the Steps of Move 3 in accordance with Kruskal-Wallis H Test

	Group	N	Mean Rank	df	Chi-Square	p	Post Hoc
M3S1	L1_ENG	40	69.13	2	4.28	.117	---
	L1_TUR	40	53.20				
	L2_ENG	40	59.18				
M3S2	L1_ENG	40	55.31	2	9.53	.008*	2>1 2>3
	L1_TUR	40	74.16				
	L2_ENG	40	52.03				
M3S3	L1_ENG	40	71.15	2	6.59	.037*	1>2
	L1_TUR	40	51.48				
	L2_ENG	40	58.88				
M3S4	L1_ENG	40	76.16	2	1.73	.002*	1>2 1>3
	L1_TUR	40	54.24				
	L2_ENG	40	51.10				
M3S5	L1_ENG	40	69.46	2	11.50	.003*	1>2 1>3
	L1_TUR	40	56.70				
	L2_ENG	40	55.34				
M3S6	L1_ENG	40	67.03	2	11.49	.003*	1>2 1>3
	L1_TUR	40	56.50				
	L2_ENG	40	57.98				
M3S7	L1_ENG	40	69.06	2	12.64	.002*	1>2 1>3
	L1_TUR	40	55.43				
	L2_ENG	40	57.01				
M3S8	L1_ENG	40	70.91	2	10.17	.006*	1>2 1>3
	L1_TUR	40	53.59				
	L2_ENG	40	57.00				

Note: * $p<.05$; Criteria; 1: L1_ENG, 2: L1_TUR, 3: L2_ENG

With respect to the steps of Move 3, the findings suggest that L1 English RAs written by authors from Anglophone countries are inclined to have a higher level of reporting the results, comparing the results, explicating and evaluating the results, clarifying the expectations, acknowledging the limitations, giving personal comments and summarizing the results, except for referring to the table and figure, than L2 English and L1 Turkish RAs written by authors from Turkey.

Concerning the Move 3 Step 1, the findings suggest that L1 English RAs written by authors from Anglophone countries are inclined to report results at a higher level, and when L2 English and L1 Turkish RAs written by the authors from Turkey are compared it is seen that L1 Turkish RAs written by the authors from Turkey tend to report their results less frequently than L2 English RAs written by authors from Turkey.

Regarding the Move 3 Step 2, the findings suggest that L1 Turkish RAs written by authors from Turkey tend to refer to the tables and figures significantly more than L1 English RAs written by authors from Anglophone countries and L2 English RAs written by authors from Turkey. On the other hand, L1 English RAs written by authors from Anglophone countries and L2 English RAs written by authors from Turkey have a similarity in the frequency use of referring to the tables and figures while reporting their results.

With respect to Move 3 and Step 3, the findings suggest that L1 English RAs written by authors from Anglophone countries are inclined to compare the results with the other results within the study at a higher level. On the other hand, L2 English and L1 Turkish RAs written by authors from Turkey are similar in the frequency of the use of comparing results.

As for Move 3 and Step 4, the findings suggest that L1 English RAs written by authors from Anglophone countries are inclined to explicate and evaluate the results at a significantly higher level, and when L2 English and L1 Turkish RAs written by authors from Turkey are compared, it is seen that L2 English RAs written by authors from Turkey tend to clarify and interpret their results more than L1 Turkish RAs written by authors from Turkey. Besides, it is worth noting that the three groups of RAs tend to resort to explicating and evaluating results less frequently when compared to the first three steps which are reporting the results, referring to the table and figure and comparing the results.

As regards the Move 3 and Step 5, the findings suggest that L1 English RAs written by authors from Anglophone countries tend to state their expectations related to the results of the study significantly more frequently than L1 Turkish and L2 English RAs written by authors from Turkey. On the other hand, it is worth noting that both L1 Turkish and L2 English RAs written by authors from Turkey rarely expressed their predictions.

Concerning the Move 3 and Step 6, the findings suggest that L1 English RAs written by authors from Anglophone countries tend to state their limitations related to the results of the study significantly more than L1 Turkish and L2 English RAs written by authors from Turkey. On the other hand, it is worth noting that L2 English RAs written by authors from Turkey rarely express their predictions, and in a similar vein, L1 Turkish RAs written by authors from Turkey never acknowledged their limitations.

Respecting the Move 3 and Step 7, the findings suggest that L1 English RAs written by authors from Anglophone countries tend to give personal comments significantly more than L1 Turkish and L2 English RAs written by authors from Turkey.

With regard to the Move 3 and Step 8, the findings suggest that L1 English RAs written by authors from Anglophone countries tend to summarize the results and highlight the principal results significantly more than L1 Turkish and L2 English RAs written by authors from Turkey. When L2 English and L1 Turkish RAs written by authors from Turkey are compared, it is seen that L2 English RAs written by authors from Turkey tend to summarize and highlight the main results more than L1 Turkish RAs. Moreover, L1 Turkish RAs written by authors from Turkey hardly summarized and highlighted the principal findings.

4.2.5. Move 4 and Steps

Figure 23 shows the frequency use of Move 4 in the results sections of the RAs in EDUCORP. Among the four moves of the results section, Move 4 “Establishing the study” was used more often in L1 English RAs ($f=77$, 44%) than L1 Turkish ($f=55$, 31%) and L2 English RAs ($f=44$, 25%). This result indicates that L1 English RAs discuss the results and establish the meaning in relation to the background information, previous research and evidence.

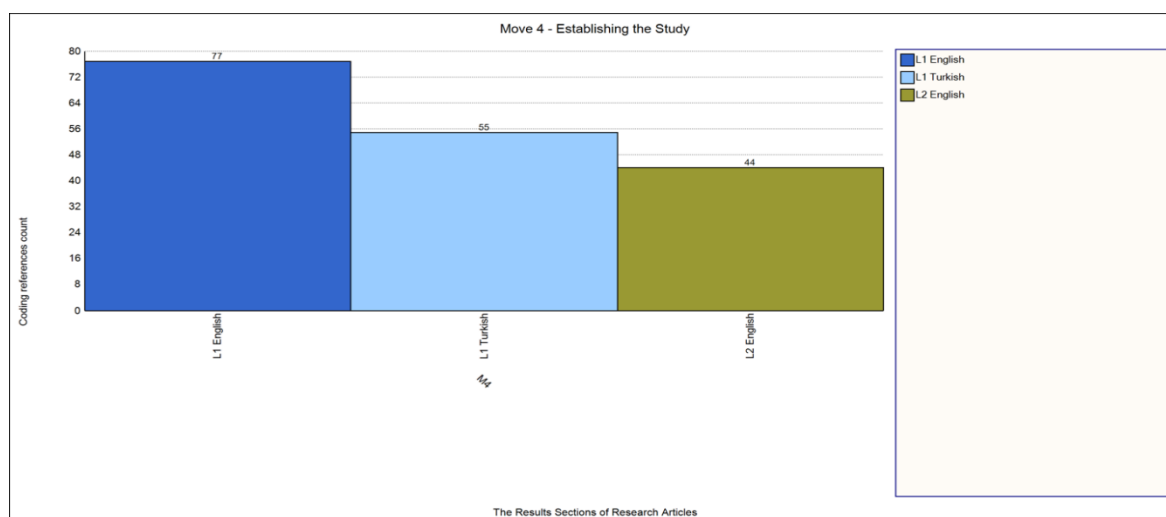


Figure 23. Distribution of Move 4

Regarding the Move 4, the findings suggest that L1 English RAs written by authors from Anglophone countries are inclined to discuss the results by referring to the background information, previous studies and evidence more than L1 Turkish and L2 English RAs written by authors from Turkey. When L1 Turkish and L2 English RAs are compared, it is seen that L1 Turkish RAs written by authors from Turkey tend to review their results more than L2 English RAs written by authors from Turkey in the sense of frequency use.

Figure 24 shows the frequency of the use of the steps of Move 4 in the results sections of RAs in the EDUCORP. Move 4 Step 1 “Providing a theoretical and/or background information” was used most in L2 English RAs ($f=31$, 38%). Then, L1 Turkish ($f=28$, 34%) and L1 English RAs ($f=23$, 28%) followed. Move 4 Step 2 “Comparing with previous research” was more frequently used in L1 English RAs ($f=36$, 53%) than L1 Turkish ($f=23$, 34%) and L2 English RAs ($f=9$, 13%). Move 4 Step 3 “Establishing the meaning of results with evidence” was seen at a significantly higher rate in L1 English RAs ($f=19$, 70%) than L1 Turkish ($f=4$, 15%) and L2 English RAs ($f=4$, 15%).

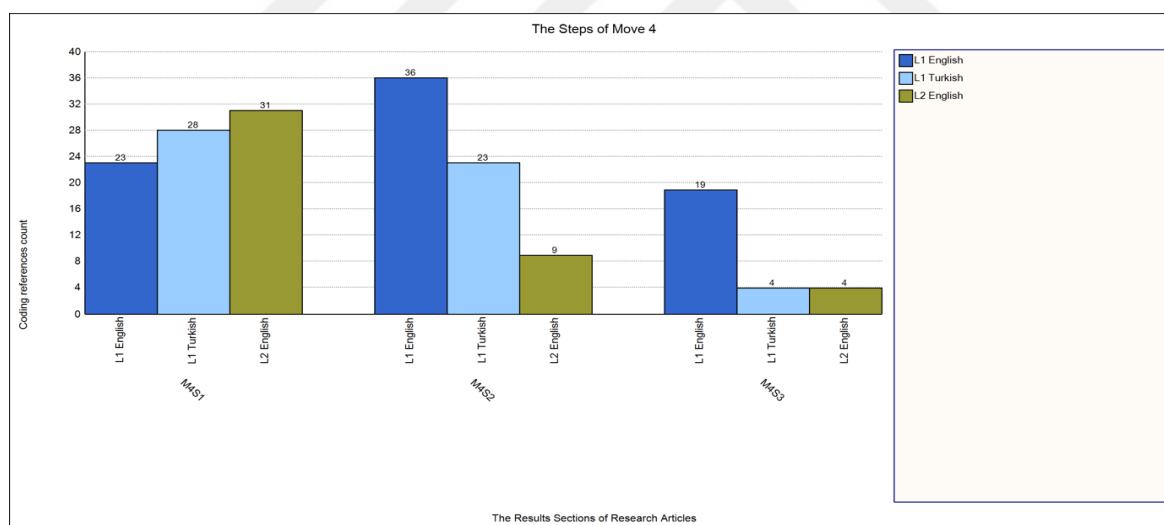


Figure 24. Distribution of the steps of Move 4

In Table 46, the findings regarding the frequency of the use of the steps M4S1, M4S2 and M4S3 were given in accordance with the comparison of the three groups of corpora. According to the findings, the frequency of the use of these three steps was higher in L1 English RAs than L1 Turkish and L2 English RAs. The Kruskal-Wallis H test showed that there was no statistically significant difference in the frequency use of Move 4 Step 1 ($\chi^2=0.76$; $p=0.681>.05$) and Move 4 Step 3 ($\chi^2=1.93$; $p=.380>0.05$) among the three groups (L1 English, L1 Turkish and L2 English RAs), while there was a statistically significant

difference in the frequency of the use of Move 4 Step 2 ($\chi^2=12.09$; $p=.002<.05$) among the three groups (L1 English, L1 Turkish and L2 English RAs). Dunn's nonparametric multiple comparison (post-hoc) test was conducted in order to understand the source of this difference. The data showed that the frequency of the use of Move 3 Step 7 was found to be statistically higher in L1 English RAs than L1 Turkish and L2 English RAs ($p<.05$).

Table 46

Results of the Steps of Move 4 in accordance with Kruskal-Wallis H Test

	Group	N	Mean Rank	df	Chi-Square	p	Post Hoc
M4S1	L1_ENG	40	63.10	2	0.76	.681	---
	L1_TUR	40	59.33				
	L2_ENG	40	59.08				
M4S2	L1_ENG	40	70.81	2	12.09	.002*	1>2 1>3
	L1_TUR	40	54.75				
	L2_ENG	40	55.94				
M4S3	L1_ENG	40	63.75	2	1.93	.380	---
	L1_TUR	40	58.88				
	L2_ENG	40	58.88				

Note: * $p<.05$; Criteria; 1: L1_ENG, 2: L1_TUR, 3: L2_ENG

With regard to the Move 4 Step 1, the findings suggest that L2 English RAs written by the authors from Turkey tend to provide theoretical background information more than L1 Turkish RAs written by authors from Turkey and L1 English RAs written by authors from Anglophone countries. Although L1 English RAs written by authors from Anglophone countries often have higher levels in other move and step rhetorical functions, it is interesting to note that L1 English RAs written by authors from Anglophone countries tend to consult to background information less than both L2 English and L1 Turkish RAs written by the authors from Turkey.

As regards the Move 4 Step 2, the findings suggest that L1 English RAs written by authors from Anglophone countries tend to compare their results with the results of the previous studies significantly more than L1 Turkish and L2 English RAs written by authors from Turkey. When L1 Turkish and L2 English RAs written by authors from Turkey are compared, L2 English RAs written by authors from Turkey seem to resort to comparisons with the results of the previous studies more, and moreover, L1 Turkish RAs written by authors from Turkey rarely made such comparisons.

With reference to the Move 4 Step 3, the findings suggest that L1 English RAs written by the authors from Anglophone countries tend to establish the meaning of the results with

evidence more than L1 Turkish and L2 English RAs written by authors from Turkey. Both L1 Turkish and L2 English RAs written by authors from Turkey hardly indicated the significance of the findings with evidence.

4.3. Move Structures

4.3.1. Move Sequencing

A move sequence refers to the number of moves used in the results sections of RAs. For example; in the EDUCORP 1-sequence is M3, 2-sequence is M1-M3, and 3-sequence is M1-M2-M3 (See Appendix 12 for all of the move sequences in the EDUCORP). When all of the sequences in the three corpora were analyzed, the findings indicated that there are 16 types of sequences in three corpora, which include 1-sequence, 2-sequence, 3-sequence, 4-sequence, 5-sequence, 6-sequence, 7-sequence, 8-sequence, 9-sequence, 10-sequence, 12-sequence, 15-sequence, 16-sequence, 19-sequence, 21-sequence and 27-sequence. In L1 English RAs there are 14 types of sequences; in L2 English RAs there are 11 types of sequences; in L1 Turkish RAs there are 9 types of sequences. Regarding the number of sequences, the findings suggest that L1 English RAs written by authors from Anglophone countries benefit from a wide range of types of move sequences more than L2 English and L1 Turkish RAs written by authors from Turkey.

As a result of the frequency analysis among 16 types of sequences, two categories were observed. Low-grade move sequences are composed of one to eight moves which are relatively shortened and uncomplicated. Supposing that each four-move sequence might repeat at least twice in move sequencing, the number of low-grade move sequences was extended to eight-sequence. High-grade move sequences are composed of nine to twenty-seven moves that are relatively lengthy and complicated.

The findings in Table 47 indicate that low-grade move sequences were used in L1 Turkish RAs ($f=38$, 36%) and L2 English RAs ($f=37$, 35%) more than L1 English RAs, ($f=31$, 29%), respectively.

Table 47

List of Low-Grade Move Sequences

Low-grade move sequences	L1 English (f)	L2 English (f)	L1 Turkish (f)
1- sequence	0	3	2
2- sequence	8	9	16
3- sequence	8	8	9
4- sequence	4	2	4
5- sequence	5	6	5
6- sequence	2	3	0
7- sequence	3	4	1
8- sequence	1	2	1
TOTAL (f)	31	37	38
%	29%	35%	36%

the distribution of low-grade move sequences is shown in Figure 25. Regarding the use of low-grade move sequences within the three groups of RAs, the findings suggest that L1 Turkish and L2 English RAs written by authors from Turkey tend to use brief and uncomplicated move sequences more frequently than L1 English RAs written by authors from Anglophone countries.

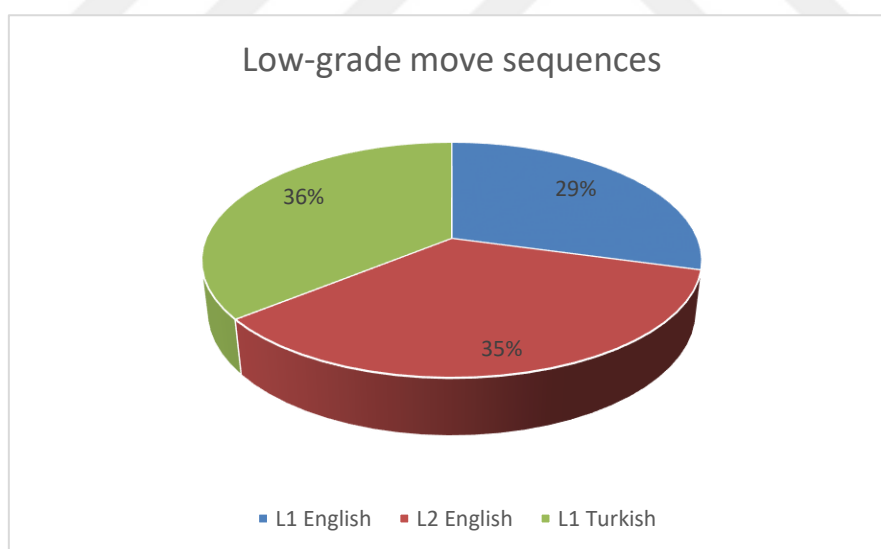


Figure 25. Distribution of low-grade move sequences

The findings in Table 48 indicate that high-grade move sequences were used in L1 English RAs ($f=9$, 69%) more than L2 English RAs ($f=3$, 23%) and L1 Turkish RAs, ($f=2$, 15%), respectively.

Table 48

List of High-Grade Move Sequences

High-grade move sequences	(f) L1 English	(f) L2 English	(f) L1 Turkish
9- sequence			
10- sequence	3	0	1
12- sequence	1	1	0
15- sequence	1	0	0
16- sequence	1	1	1
19- sequence	0	1	0
21- sequence	1	0	0
27- sequence	1	0	0
TOTAL (f)	9	3	2
%	69%	23%	15%

The distribution of high-grade move sequences is shown in Figure 26. Regarding the use of high-grade move sequences within the RAs, the findings suggest that L1 English RAs written by authors from Anglophone countries tend to use lengthy and complicated move sequences more frequently than L1 Turkish and L2 English RAs written by authors from Turkey.

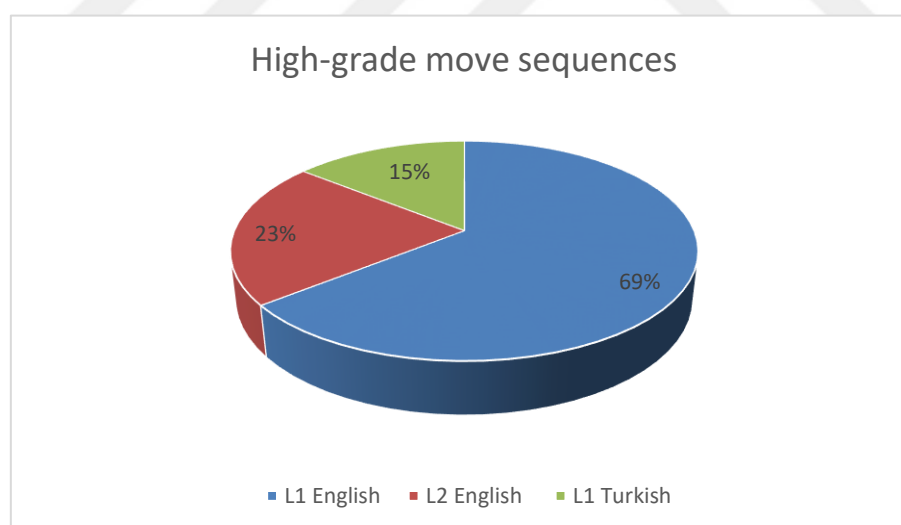


Figure 26. Distribution of high-grade move sequences

4.3.2. Move Patterning

A move pattern refers to the composition of moves in which the RAs are structured. In the sense of move patterns, the moves in the results sections of RAs were investigated, and it was found that there are 55 types of move patterns in the three corpora. In L1 English RAs, there are 27 types of move patterns; in L2 English RAs, there are 26 types of move

patterns; in L1 Turkish RAs, there are 18 types of move patterns. Regarding the types of move patterns, the findings suggest that L1 English RAs written by authors from Anglophone countries and L2 English RAs written by authors from Turkey benefited from a wide range of types of move patterns more than L1 Turkish RAs written by authors from Turkey.

Table 49 presents the most frequently used 6 move patterns out of 55 types of move patterns. They are listed as M3-M2-M3 ($f=16$, 13%), M1-M3-M2-M3 ($f=16$, 13%), M1-M3 ($f=13$, 11%), M1-M2-M3 ($f=7$, 6%), M1-M3-M2-M3 ($f=5$, 4%), and M3 ($f=5$, 4%), respectively.

Table 49
The Most Frequently Used Move Patterns

Move Patterns		L1 English	L2 English	L1 Turkish	f Total	% Total
Pattern I	M1-M2-M3	0	3	4	7	6%
Pattern II	M1-M3	1	3	9	13	11%
Pattern III	M1-M3-M2-M3	1	1	3	5	4%
Pattern IV	M2-M3	5	5	6	16	13%
Pattern V	M3	0	3	2	5	4%
Pattern VI	M3-M2-M3	8	4	4	16	13%

Figure 27 shows the distribution of Pattern I in the results sections of RAs in the EDUCORP. The percentage frequency of Pattern I (M1-M2-M3) was 57% in L1 Turkish RAs and 43% in L2 English RAs, while L1 English RAs had no reference.

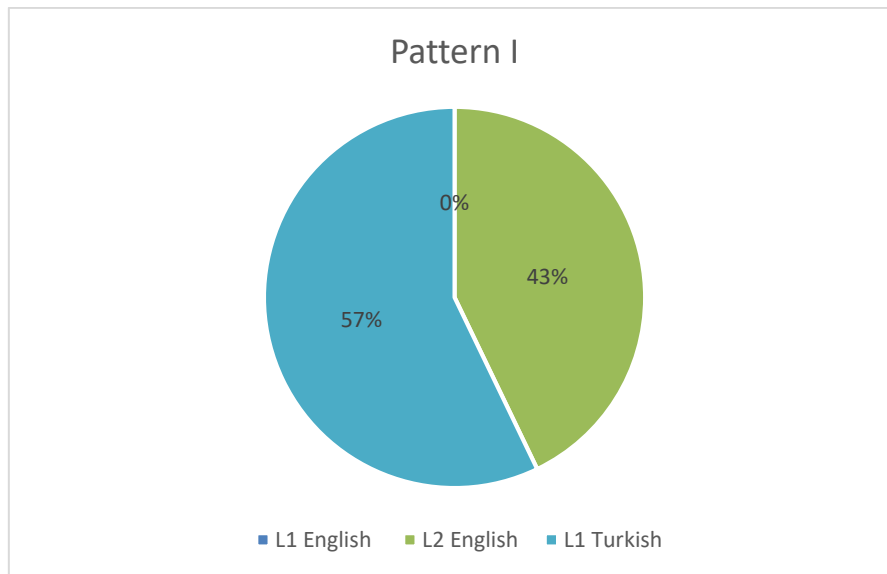


Figure 27. Distribution of Pattern I

With regard to Pattern I, the findings suggest that L1 Turkish and L2 English RAs written by authors from Turkey tend to first prepare the study (M1) for readers before describing the methodological procedures (M2) and reporting results (M3), while L1 English RAs written by the authors from Anglophone countries do not prefer to introduce the study (M2) in the results sections of RAs.

As seen in Figure 28, the distribution of Pattern II in the results sections of the RAs in EDUCORP indicates that the percentage frequency of Pattern II (M1-M3) was 69% in L1 English RAs, 23% in L2 English RAs and 8% in L1 Turkish RAs.

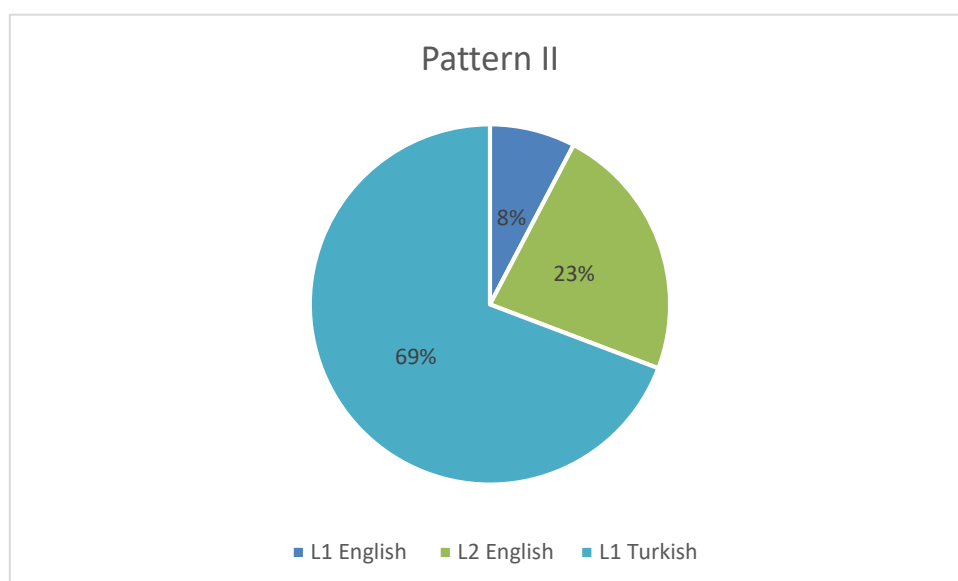


Figure 28. Distribution of Pattern II

Regarding Pattern II, the findings suggest that L1 Turkish RAs written by authors from Turkey tend to first prepare the study (M1) for readers before reporting the results (M3) more than L2 English RAs written by the authors from Turkey and L1 English RAs written by authors from Anglophone countries. On the other hand, L1 English RAs written by authors from Anglophone countries are not inclined to introduce the study (M1) in the results sections of RAs compared to L1 Turkish and L2 English RAs written by authors from Turkey.

Figure 29 shows the distribution of Pattern III in the results sections of the RAs in EDUCORP. The percentage frequency of Pattern III (M1-M3-M2-M3) was 60% in L1 English RAs and 20% in L2 English RAs and 20% in L1 Turkish RAs.

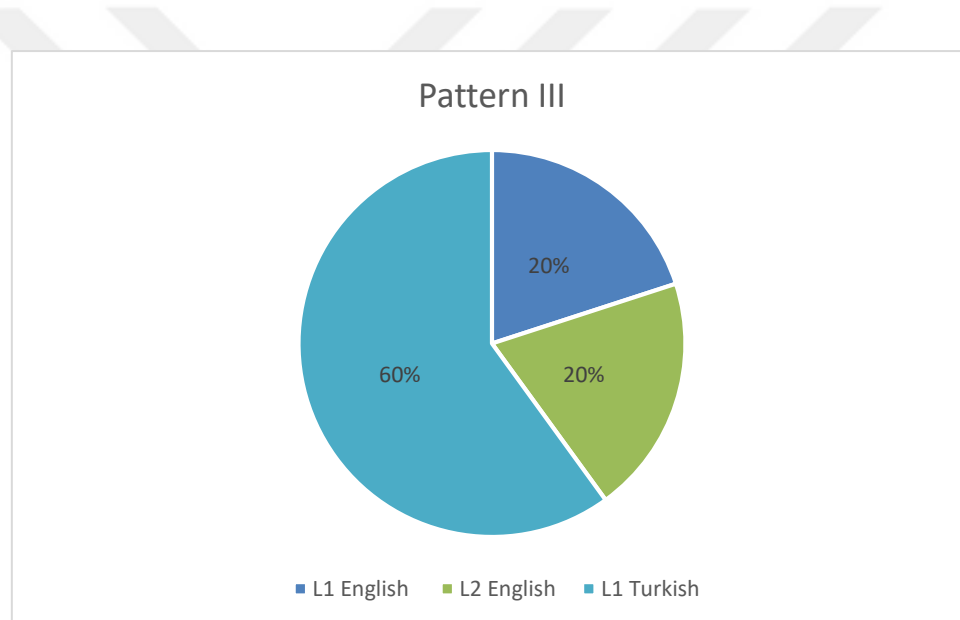


Figure 29. Distribution of Pattern III

As regards Pattern III, the findings suggest that L1 Turkish RAs written by authors from Turkey tend to first prepare the study (M1) for readers before reporting the results (M3), describing methodological procedures (M2), and last reporting the results (M3) more than L2 English RAs written by authors from Turkey and L1 English RAs written by authors from Anglophone countries.

As seen in Figure 30, the distribution of Pattern IV in the results sections of RAs in the EDUCORP indicates that the percentage frequency of Pattern IV (M2-M3) was 38% in L1 Turkish RAs, 31% in L2 English RAs and 31% in L1 English RAs.

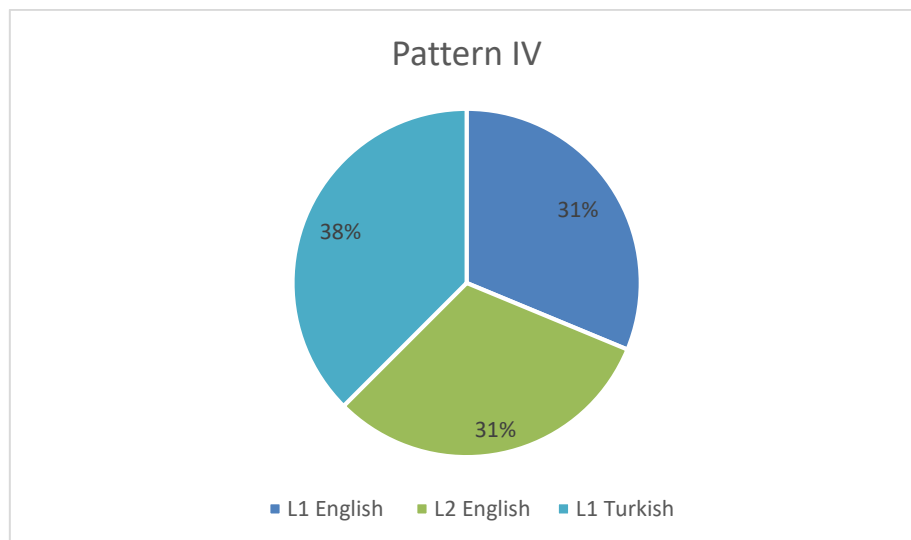


Figure 30. Distribution of Pattern IV

With regard to Pattern IV, the findings suggest that three groups of RAs tend to describe the methodological procedures (M2) and then report the results (M3).

Figure 31 shows the distribution of Pattern V in the results sections of the RAs in EDUCORP. The percentage frequency of Pattern V (M3) was 60% in L2 English RAs and 40% in L1 English RAs while L1 Turkish RAs had no reference.

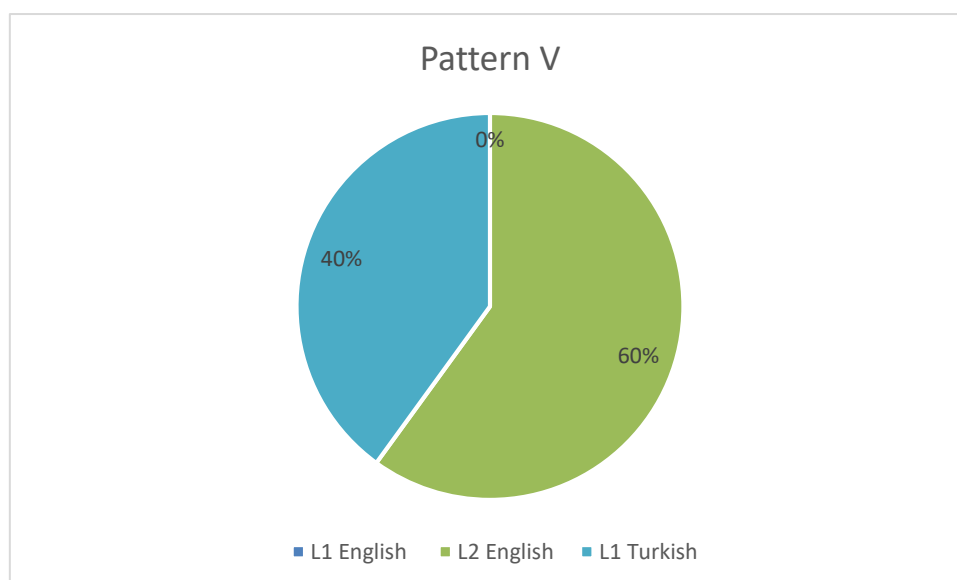


Figure 31. Distribution of Pattern V

Concerning Pattern V, the findings suggest that L2 English and L1 Turkish RAs written by authors from Turkey tend to only report and comment on results (M3) more than L1 English RAs written by the authors from Anglophone countries. On the other hand, L1

English RAs written by authors from Anglophone countries do not prefer to merely report and comment on results.

As seen in Figure 32, the distribution of Pattern VI in the results sections of the RAs in EDUCORP indicates that the percentage frequency of Pattern VI (M3-M2-M3) was 50% in L1 English RAs, 25% in L2 English RAs and 25% in L1 Turkish RAs.

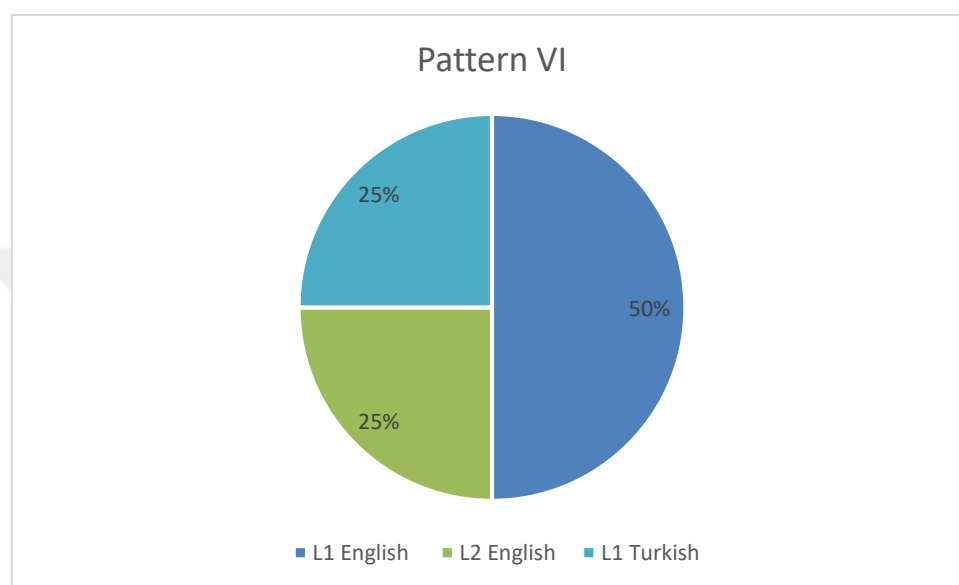


Figure 32. Distribution of Pattern VI

Regarding Pattern VI, the findings suggest that L1 English RAs written by authors from Anglophone countries tend to report the results (M3), describe the methodological procedures (M2), and lastly report the results (M3) more than L1 Turkish and L2 English RAs written by the authors from Turkey.

4.3.3. Move Cycling

A move cycle refers to recurring move sequences and move patterns. In the sense of move sequences and move patterns, move cycling in the results sections of RAs in the three corpora were investigated. To exemplify how the move cycling is explored, Table 50 presents a sample of move patterns (See Appendix 13 for the whole list of move cycles). The move sequences in the three corpora were analyzed to understand how the most frequently move patterns and move sequences cycled.

Table 50

A Sample of Move Cycling

Move Sequences	Move Patterns	L1 English	L2 English	L1 Turkish	<i>f</i> Total
M1-M2-M3	Pattern I	0	3	4	7
M1-M2-M3-M1-M3	Pattern I - Pattern II	0	2	0	2
M1-M2-M3-M4-M3	Pattern I - M4 - Pattern V	0	0	1	1

Table 51 presents the frequency of move cycling with regard to the most frequently used 6 move patterns. They are listed as Pattern IV (M2-M3) ($f=51$, 43%), Pattern VI (M3-M2-M3) ($f=40$, 33%), Pattern II (M1-M3) ($f=36$, 30%), Pattern V (M3) ($f=35$, 29%), Pattern I (M1-M2-M3) ($f=32$, 27%), and Pattern III (M1-M3-M2-M3) ($f=17$, 14%), respectively.

Table 51

Cycling of Move Patterns

		Move Cycling				
Move Patterns		L1 English	L2 English	L1 Turkish	<i>f</i> Total	% Total
Pattern I	M1-M2-M3	3	17	12	32	27%
Pattern II	M1-M3	15	10	11	36	30%
Pattern III	M1-M3-M2-M3	7	6	4	17	14%
Pattern IV	M2-M3	22	17	12	51	43%
Pattern V	M3	14	13	8	35	29%
Pattern VI	M3-M2-M3	24	9	7	40	33%

Figure 33 shows the distribution of move cycling among move patterns. It is seen that move cycling of Pattern I was 69% in L1 English RAs, which is less frequent than L2 English and L1 Turkish RAs. On the other hand, the move cycling of Pattern I in both L2 English and L1 Turkish RAs are 53% and 38%, respectively. In contrast to the findings in move patterns, it is seen that the percentage of Pattern II in move cycling increased considerably in L1 English (42%) and moderately in L2 English RAs (28%). Similarly, the percentage of Pattern III in move cycling also increased considerably in L1 English (41%) and moderately in L2 English RAs (35%). The percentage of Pattern IV in move cycling increased in L1 English (43%) and decreased in L1 Turkish RAs (24%). Interestingly, L1 English RAs did not have Pattern V in move patterning; the frequency percentage is the highest in move cycling (40%). Last, similar to the findings in move patterning Pattern VI was more frequently seen in L1 English RAs.

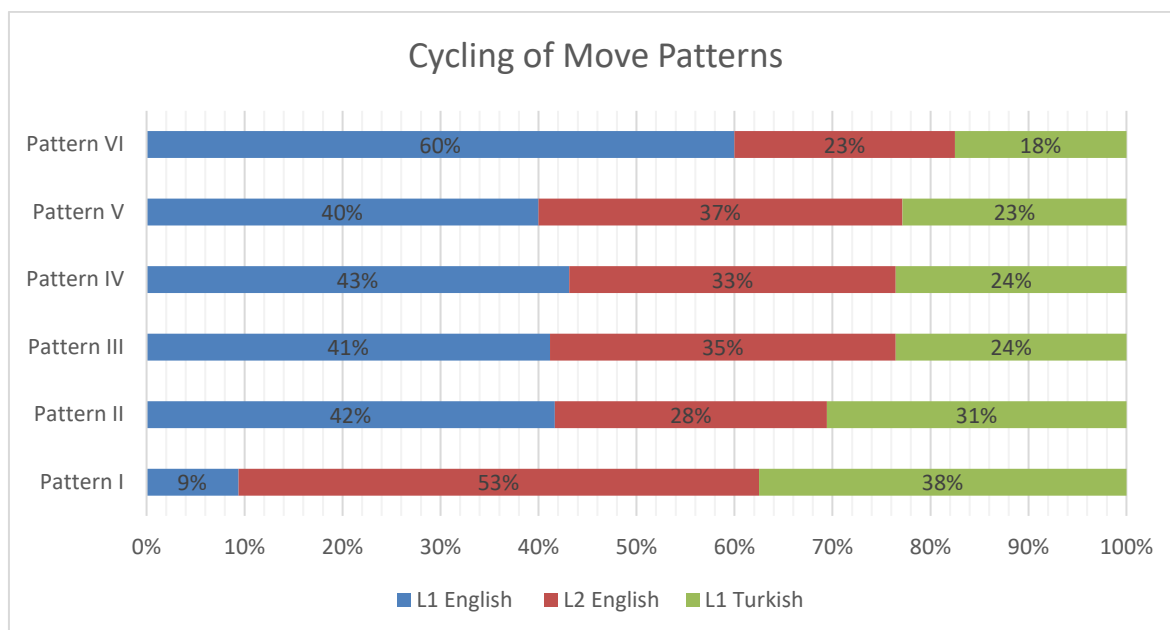


Figure 33. Distribution of cycling of move patterns

Regarding the move cycling of the most frequently observed move patterns, the findings of Pattern I suggest that L2 English and L1 Turkish RAs preferred to prepare the study by providing general orientation and/or research objectives similar to the findings in move patterning. Another similarity was that L1 English RAs preferred Pattern VI more frequently by means of first reporting and commenting on the results, then describing methodological procedures and last reporting and commenting on the results. This suggests that L1 English RAs are not interested in introducing the study, while L2 English and L1 Turkish RAs preferred to prepare the study. In contrast to the findings in move patterning, L1 English RAs had a considerable increase of Pattern II, Pattern III, Pattern IV and Pattern V in move cycling. These results indicate that L1 English RAs prefer to use these move patterns repeatedly in lengthy move sequences rather than using them individually.

Table 52 presents the frequency of move cycling with regard to the remaining move sequences. They are listed as M4 ($f=48$, 62%), M2-M4 ($f=14$, 18%), M2 ($f=9$, 12%), M1-M1-M4 ($f=2$, 3%), M1-M1-M4 ($f=2$, 3%), M1 ($f=1$, 1%) and M1-M2-M4 ($f=1$, 1%), respectively.

Table 52

Cycling of Move Sequences

Moves Sequences	Frequency of Move Cycling			<i>f</i> Total	% Total
	L1 English	L2 English	L1 Turkish		
M1	0	1	0	1	1%
M2	3	4	2	9	12%
M4	28	10	10	48	62%
M2-M4	6	7	1	14	18%
M1-M2-M4	0	1	0	1	1%
M4-M1-M4	2	0	0	2	3%
M4-M2-M4	0	0	2	2	3%

Figure 34 shows the distribution of move cycling among the remaining move sequences. It is seen that M4 cycled as a separate 1-move sequence at the highest rate. It was seen at 58% in L1 English RAs, 21% in L2 English RAs and 21% in L1 Turkish RAs. Then, the 2-move sequence (M2-M4) was frequently seen in L2 English (50%) and L1 English RAs (43%). M2 cycled as a separate 1-move sequence relatively less in three corpora than M4 and M2-M4 move sequences. Moreover, the other move sequences M4-M1-M4 (3%), M4-M2-M4 (3%), M1-M2-M4 (1%) and M1(1%) hardly cycled.

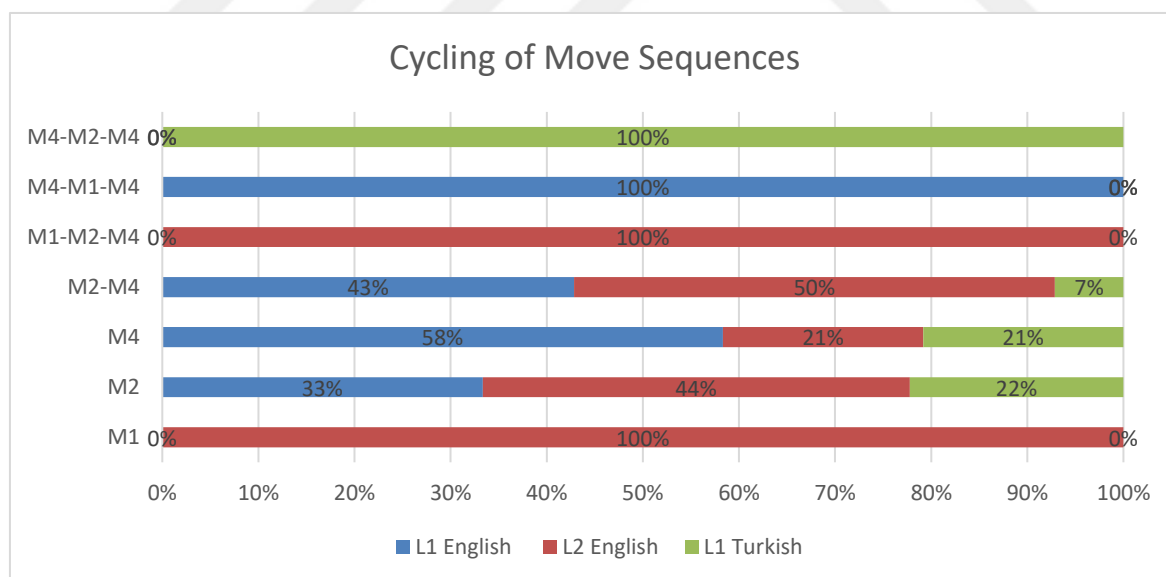


Figure 34. Distribution of cycling of move sequences

Regarding the cycling of the remaining move sequences, the recurring presence of M4 suggests that L1 English RAs preferred to establish the study with theoretical information, previous research and evidence more frequently than L2 English and L1 Turkish RAs. Another move sequence that frequently reappeared was that M2-M4. The findings suggest

that both L1 English and L2 English RAs preferred to describe the methodological procedures and then establish the study more frequently than L1 Turkish RAs. It was interesting to find the sequences of these two irrelevant moves consecutively. The final frequently cycled move sequence was M2, which almost cycled equally in the three corpora. The findings suggest that the authors occasionally provide information related to methodology when necessary. The findings of the other remaining move sequences indicate that M1, M2 and M4 are not fundamental components of results sections; therefore, they hardly cycled. For example, the repeated use of M1 as a separate move, and also the other 3-move sequences might not be often needed.



CHAPTER V

DISCUSSION

This chapter highlights the interpretation of the findings in relation to the research questions proposed in this study. First, a common rhetorical organization is suggested for the results sections of RAs in the field of educational sciences. Second, the types of moves and steps observed in the results sections and their rhetorical functions are described. Third, their frequencies in the three corpora are compared and contrasted. Last, the cross-linguistic/cultural influence on the rhetorical structures of research article results sections are addressed in terms of move sequencing, move patterning and move cycling.

5.1. The Suggested New Rhetorical Model

The first focus of this research is the emergence of a new rhetorical organization for the results sections of L1 English, L2 English and L1 Turkish RAs in educational sciences. Based on Cotos et al.'s (2015) framework for the methods and results sections, and Morena and Swales' (2018) framework for the discussion sections, this recent rhetorical organization is presented in consideration of the requirements of the field of educational sciences and the findings of the move analysis. The findings of the present research suggest that the common rhetorical structure of the research article results in the field of educational sciences are as follows in Table 53.

Table 53

The Suggested New Rhetorical Model for The Results Section of RAs

120 RAs (main study, 36 RAs (pilot study), 1 discipline: Educational sciences	Results		
	Code	Communicative function	
	M1	Move 1-	Step 1- Providing general orientation
	M1S1	Preparing the Study	Step 2- Stating study specifics
	M1S2		
	M2	Move 2- Describing	Step 1- Preparing the data
	M2S1	the Study	Step 2- Describing the data analysis
	M2S2		Step 3- Rationalizing and/or Criticizing data
	M2S3		processing and/or analysis
	M3	Move 3- Reporting	Step 1- Reporting results
	M3S1	and Commenting on	Step 2- Reporting results by referring to table
	M3S2	the Results	and/or figure
	M3S3		Step 3- Comparing results within the study
	M3S4		Step 4- Explicating and/or Interpreting results
	M3S5		Step 5- Clarifying expectations of results
	M3S6		Step 6- Acknowledging limitations of results
	M3S7		Step 7- Giving personal comments on results
	M3S8		Step 8- Summarizing results and/or Highlighting
	M3S9		principal findings
			Step 9- Giving suggestions for further studies
	M4	Move 4-	Step 1- Providing theoretical and/or background
	M4S1	Establishing the	information
	M4S2	Study	Step 2- Comparing and/or Contrasting with
	M4S3		previous research
			Step 3- Establishing the meaning of results with
			evidence and/or reference and/or implication

In this model, two levels of textual organization which involves both move and step rather than one level of organization which involves only move are employed as observed in the recent rhetorical models. According to Yang and Allison (2003), it is necessary to use two levels because they help “distinguish the communicative purposes from the rhetorical techniques realizing the purposes” (p. 376). Similarly, in the current study the framework is composed of four moves and seventeen steps, and these moves and steps retain the communicative purposes of the results sections.

The findings of the move analysis in the field of educational sciences suggested the new rhetorical model which is identified with four moves and seventeen steps. These four moves refer to the four sections of RAs, namely IMRD as shown in Figure 35. Move 1 “Preparing the study” introduces the study and its objectives; Move 2 “Describing the study” provides methodological aspects of the study; Move 3 “Reporting and commenting on the results” provide results in different ways; Move 4 “Establishing the study” discuss the results of the study.

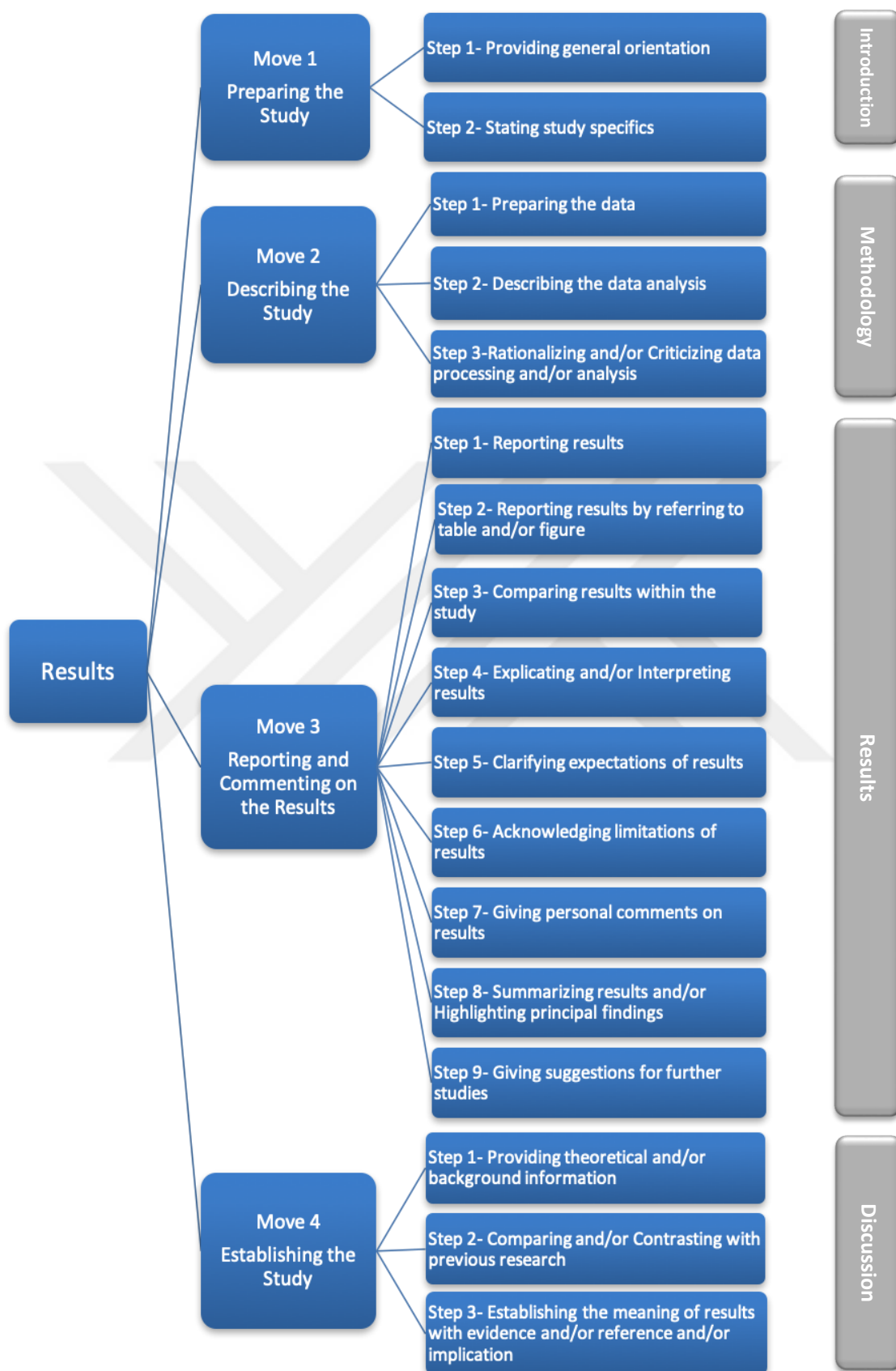


Figure 35. The mind map of the suggested new rhetorical model for RA results

Considering Swales' (1990) hypothesis, which argues that disciplinary variation in the rhetorical organization of research article results is highly probable, this study limited the discipline to educational sciences in contrast to the Cotos et al.'s (2015) preference for a wide range of disciplines and aimed to reach a common framework to be referred in the field of educational sciences. Moreover, the sub-disciplines of this field were purposively selected by excluding computational studies such as mathematics education and science education in order to avoid probable disciplinary variations in the rhetorical move pattern of results. The findings of a study by Melander et al. (1997) support the way the present study selected the disciplines. They compiled a corpus of 30 RA abstracts from the three different linguistic backgrounds (i.e. American scholars writing in English, Swedish scholars writing in English and Swedish scholars writing in Swedish) and in the three different fields (i.e. biology, medicine and linguistics) in order to understand whether the variation in the rhetorical move pattern of abstracts was derived from the discipline or language backgrounds. According to Alotaibi (2013), it was rather associated with the discipline.

On the other hand, Samraj (2018) provided support for cross-linguistic differences with regard to the variations in the move patterns. Similarly, in the current study there appear to be some variations among the three corpora from different linguistic backgrounds even though they share common characteristics. For example, it was mainly found that M2 (describing the study) and M3 (resulting and commenting on the results) are obligatory, while M1 (preparing the study) and M4 (establishing the study) are optional for the three corpora. However, in the sense of the steps the findings suggest that L2 English and L1 Turkish RAs are lack of employing a wide range of steps concerning M3 in contrast to L1 English RAs, which are constructed with a great variety of moves and steps at high levels. Moreover, the variation is even observed between the authors from Turkey in L1 Turkish and L2 English RAs. For example, the steps M3S5 (clarifying expectations of results), M3S6 (acknowledging limitations of results), M3S7 (giving personal comments on results), M3S8 (summarizing results and/or highlighting principal findings) and M4S3 (establishing the meaning of results with evidence and/or reference and/or implication) are optional for L1 Turkish RAs, while the steps M3S5 (clarifying expectations of results), M3S6 (acknowledging limitations of results), M3S7 (giving personal comments on results), M4S2 (comparing and/or contrasting with previous research) and M4S3 (establishing the meaning of results with evidence and/or reference and/or implication) are

optional for L2 English RAs. Therefore, it should be noted that the suggested new rhetorical model includes all the rhetorical functions identified in the three groups of corpora, and these rhetorical moves and steps might be used at variable levels in each group of corpora.

To conclude, it should also be highlighted that rhetorical needs might change in accordance with time because genres evolve within a few decades (Swales & Najdar, 1987) and are “inherently dynamic rhetorical structures that can be manipulated according to the conditions of use” (Berkenkotter & Huckin, 1995, pp. 3-4). Therefore, the findings of the present study might vary in time.

5.2. The Identified Moves and Steps

The second research question is concerned with the moves and step identified in the results sections of L1 English, L2 English and L1 Turkish RAs in the field of educational sciences. The findings of the analysis indicated that four moves and sixteen relevant steps emerged, which will be discussed in detail below.

Move 1 (M1) – Preparing the study

This move involves introducing the study by providing general information and stating the research objectives. In earlier rhetorical organizations for research article results, there are two ways namely (1) presenting results and (2) commenting on results as described in Weissburg and Buker's (1990) model and Nwogu's (1997) model. In a similar vein, Thompson's (1993) model lacked an introductory move that describes the study in brief. However, the common point with these models is that they analyzed the research article results in the field of hard sciences (e.g., biochemistry and medical sciences). The first model in which this preparatory move was included as *metacontextual categories* was in the field of soft sciences. (e.g., sociology, see Brett, 1994). In the following studies in hard sciences (e.g., medical sciences, see William, 1999), computer sciences (Posteguillo, 1999), biochemistry (Kanoksilapatham, 2003) the moves *pointer*, *structure of section*, *procedural* and *hypothesis restated* were included separately. However, each research article does not tend to use all of these moves similar to the findings of the present study. Therefore, in subsequent studies, the models (e.g., Yang & Allison, 2003; Cotos et al., 2015) included one move for this function such as *preparatory information* or *approaching the niche*, respectively. For example, Cotos et al.'s (2015) model preferred to collect all

these communicative functions under one heading, and then supplement this move with steps *providing general orientation*, *restating study specifics*, and *justifying study specifics*. Likewise, the present study suggests collecting the functions of these steps under one move and naming it *preparing the study*.

Move 1 Step 1 (M1S1) – Providing general orientation

This step involves providing general information about the study and the structure of the results sections. Most of the RAs in the EDUCORP started the results sections with this step to remind readers of the study and introduce the flow of their section. In the previous studies, Brett's (1994) model became a pioneer to include this step in the field of sociology as *structure of sections*. Then, using Brett's model, William (1999) and Posteguillo (1999) also included similar steps *pointer* and *structure of section* into their own models in medical and computer sciences, respectively. Interestingly, the following models of Kanoksilapatham (2003) and Yang and Allison (2003) lacked a step introducing the study and describing the structure of section until Cotos et al.'s (2015) study which embodied a wide variety of disciplines. The findings of the present study also support Cotos et al.'s (2015) model in the sense that the beginning of the results sections in the field of educational sciences provide guiding information to readers about the study and the organization of the section.

Move 1 Step 2 (M1S2) – Stating study specifics

This step involves stating research questions and hypotheses. Even though the research questions of the study have been stated in the previous sections of research articles, it was observed that a number of authors tend to restate research questions and hypotheses in order to establish a link between their questions and findings before reporting their results. In the previous models, it has been documented that Nwogu's (1997) model included only a step *restating research questions*, while Brett's (1994) and Posteguillo's (1999) models involved only *hypothesis restated*. However, Kanoksilapatham (2003) held these two steps in her model as *research questions* and *hypotheses restated*. As different from these models, it is seen that Cotos et al. (2015) incorporated these two functions in one step and presented a general identification term *restating study specifics*. In addition, they introduced a remarkably distinct step *justifying study specifics* which none of the models included earlier. However, the findings of the present study suggested that the communicative functions in the field of educational sciences are not parallel to those of the

Cotos et al.'s (2015) model in the sense of *justifying study specifics*. Therefore, the present study suggests the inclusion of solely stating study specifics in this particular field rather than including *justifying study specifics*.

Move 2 (M2) – Describing the study

This move involves providing methodological procedures and information. The finding of the present study is a stark contrast to those of Yang and Allison (2003) and Cotos et al. (2015) in which no moves or steps related to methodology and procedure in the results sections of research articles were found. According to the framework of Cotos et al. (2015), it is considered that the results sections would mainly deal with reporting and commenting on findings. Therefore, based on Cotos et al.'s (2015) framework, the present study found somewhat surprising that authors tend to provide information about methodological procedures and justify their methodological selections before or while they report their results. On the other hand, in the previous models, Brett (1994), William (1999) and Posteguillo (1999) included moves as *procedural* in their models in order to provide information about methodological procedures. As different from those, Thompson (1993) included a move *justifications for methodological selections* rather than describing methodological procedures. After a decade, justifications for methodological procedures move started to be incorporated into the recent models. For example, Kanoksilapatham (2003) included two separate moves *procedural statement* and *methodological justification*. In a similar vein, the findings of the current study indicated that these two moves need to be taken into consideration. However, as they might be optional for the authors, the present study suggested a move *describing the study* and three steps related to methodological procedures.

Move 2 Step 1 (M2S1) – Preparing the data

This step involves describing the data and identifying the variables. On review of the literature, no relevant moves or steps were found in the results sections of the previous models with regard to the description of data or variables. Rather, the earlier rhetorical organizations were oriented more towards describing data analysis or justifying methodological procedures. Surprisingly, this specific function concerning methodology was found in the results sections of research articles in the field of educational sciences. This step was identified in the methods section of Cotos et al.'s (2015) framework and was added as a step to the results sections of RAs in the educational sciences.

Move 2 Step 2 (M2S2) – Describing the data analysis

This step involves providing information about the data analysis before the results were presented. This step was first realized as a move *procedural* in Brett's (1994) model. Then, William (1999) and Posteguillo (1999) also included this move into their adapted models from Brett (1994). Similarly, Nwogu (1997) suggested to start the results sections with the step *restating data analysis procedures*, and also Kanoksilapatham (2003) included a step as *procedures*. Considering that the field of applied linguistics might share some similarities with the field of educational sciences, Yang and Allison's (2003) model was examined, and no moves or steps describing data analysis were detected. However, the present study found the use of this step at a higher rate as indicated in the results chapter and suggests its involvement as a step into the model.

Move 2 Step 3 (M2S3) – Rationalizing and/or Criticizing data processing and/or analysis

This step involves providing justifications for and/or criticisms of the data analysis. In the previous studies, merely Thompson (1993) and Kanoksilapatham (2003) included moves *justifications for methodological selections* and *methodological justification* in the results sections. The findings of the present study corroborate the findings of the previous work in the field of biochemistry. Similarly, the authors in the field of educational sciences would explain the reasons for their methodological selections in order to persuade their readers. This move was understandably realized in the methods sections of Cotos et al.'s (2015) framework as a step *rationalizing data processing/analysis* due to the nature of the methodology section. However, as different from the previous studies, this study found that the authors in the results sections criticized the data processing/analysis as well as they rationalized, and none of the models have included criticisms of their methodology so far. Considering the presence of both communicative functions, this study incorporated these functions as one step.

Move 3 (M3) – Reporting and Commenting on the Results

This move involves presenting and interpreting results, that is, it is the fundamental component of the results sections. In the earlier studies, this move was mainly considered to be separate moves as *presentation* and *comment categories* (Brett, 1994), *reporting results* and *commenting on results* (Nwogu, 1997; Yang & Allison, 2003), *statement of results* and *commentary statement* (Kanoksilapatham, 2003) and *occupying the niche* and *construing the niche* (Cotos et al., 2015). Under the heading of these moves, the relevant

steps were included. On the other hand, some of the previous studies (Posteguillo, 1999; Thompson, 1993; William, 1999) presented all of these moves and steps as a list of separate moves such as *statement of finding*, *substantiation of finding*, *non-validation of finding*, *explanation of finding* and *interpretation of finding* because they did not use a two-level of textual organization (i.e., move and step). Similar to the latter model, the findings of the current study showed that reporting results and commenting on results functions are intertwined and follow each other in an alternating or sequential pattern as Weissburg and Buker (1990) argued. Thus, they were merged in one move as *reporting and commenting on results*, and the relevant functions were realized through a list of steps.

Move 3 Step 1 (M3S1) – Reporting results

This step involves presenting results. It was realized in all of the previous models excluding Thompson's (1993) model. The models often used the names *statement of data* (Brett, 1994; Posteguillo, 1999) or *statement of finding/result* (William, 1999), while some models differentiated the types of results reported and named the steps as follows *stating general findings* and *stating specific findings* (Nwogu, 1997), and *reporting specific results* and *indicating alternative presentation of results* (Cotos et al., 2015). In the present study, this step included both the presentation of general and specific results based on quantitative and qualitative data analysis.

Move 3 Step 2 (M3S2) – Reporting results by referring to table and/or figure

This step involves presenting results by referring to a table or figure. In review of the models in previous studies, it was observed that a similar function was included by only Cotos et al.'s (2015) study by means of a step named as *indicating alternative presentation of results*. The high frequency of this communicative function supports that the step should be identified as separate from reporting results as in Cotos et al.'s (2015) framework. Therefore, the present study suggests including this step as *reporting results by referring to table and/or figure* to the model in an explicit identification.

Move 3 Step 3 (M3S3) – Comparing results within the study

This step involves comparing the results of the study. Excluding Thompson's (1993) and Kanoksilapatham's (2003) models, the earlier studies included moves and steps such as *comparison of finding with the literature* (Brett, 1994; Posteguillo, 1999; William, 1999) and *comparing results with previous studies* (Nwogu, 1997; Yang & Allison, 2003) by relating to the existing research. Only Cotos et al.'s (2015) framework includes the step by

using a general term *comparing results*. Similarly, the current study preferred a more explanatory term *comparing results within the study* that refer to the comparison of findings with those within the study.

Move 3 Step 4 (M3S4) – Explicating and/or Interpreting results

This step involves clarifying and/or interpreting the results. Earlier models were ambiguous in naming this communicative function. First, in some of the previous studies (Thompson, 1993; Nwogu, 1997; William, 1999; Kanoksilapatham, 2003; Yang & Allison, 2003) *interpreting* and *evaluating results* were classified as separate moves, while some of the frameworks included only one of these moves such as *evaluation of findings* (Brett, 1994; Posteguillo, 1999) or *explicating results* (Cotos et al., 2015). Second, the analysis of the previous models suggests that the *evaluating results* move might embody a variety of communicative functions within itself. To exemplify, when Nwogu (1997) included the move *evaluating results*, she excluded the following moves *clarifying expectations*, *acknowledging limitations*, *giving suggestions for further studies* and *summarizing*. On the other hand, Posteguillo (1999) included the move *evaluation* and continued with the steps *further research suggested*, *implications* and *summarizing*. In a similar vein, Yang and Allison (2003) included the move *evaluating the study* and supplemented it with the steps *indicating limitations* and *indicating significance/advantage*. As is seen from the existing research, evaluation seems to be associated with the steps such as expressing expectations, limitations, implications and summarizing. However, the present study aimed to refer to the clarification and interpretation of the results with this step rather than additional evaluations. That's why, the study suggests changing the name of this step into *explicating and/or interpreting results* in order to avoid confusion by adopting the approach in the model of Kanoksilapatham (2003) including the steps *interpretation or generalization*, *evaluation and/or comparison*, *suggested further studies*, *limitation* and *summary*. Therefore, this step will embody the interpretation of the results, while the following steps to be mentioned below will embody the evaluation of the results in the way the previous studies named.

Move 3 Step 5 (M3S5) – Clarifying expectations of results

This step involves providing expectations regarding the findings of the study. Cotos et al.'s (2015) framework included the step *clarifying expectations*. Except from their framework, there is no relevant move or step in the previous studies. The name of this step was

changed into clarifying expectations of results in order to make it more understandable. As shown in the results chapter, the findings of the present study indicated that authors especially from Anglophone countries stated their expectations of the findings.

Move 3 Step 6 (M3S6) – Acknowledging limitations of results

This step involves accepting the limitations of the results. This communicative function was not often identified in the earlier models, excluding Thompson (1993) with the move *statements admitting interpretive perplexities*. However, in recent years the models (Cotos et al., 2015; Kanoksilapatham, 2003; Yang & Allison, 2003) have started to include a statement of the limitations in the results sections as *acknowledging limitations*, *limitation* and *indicating limitations*, respectively. The findings of this study are in accordance with those of recent studies. Therefore, this step was included in the model for the results sections of RAs.

Move 3 Step 7 (M3S7) – Giving personal comments on results

This step involves expressing the personal comments of authors on the results. In the previous studies, there is no relevant move or step. As different from the previous models, it was found that the authors sometimes made comments by using the first person singular and plural pronouns and provided their personal remarks on the results. It is surprising to find the authors tend to refer to their personal comments regarding the findings in the field of educational sciences because this step has been identified for the first time by means of this study.

Move 3 Step 8 (M3S8) – Summarizing results and/or Highlighting principal findings

This step involves outlining the results and emphasizing the main findings. In the previous studies, the frameworks included the moves *summarizing* (Posteguillo, 1999) and *summarizing results* (Yang & Allison, 2003), and the steps *summarizing* (Brett, 1994) and *summary* (Kanoksilapatham, 2003). Though Cotos et al.'s (2015) framework lacked any relevant move or step, the current study found that the Anglophone and Turkish authors summarized their results and/or highlighted principal findings towards the end of the results sections.

Move 3 Step 9 (M3S) – Giving suggestions for further studies

This step involves expressing the recommendations of the authors for the succeeding studies. It was realized during the main study, and was added to the suggested new model.

In the previous studies, Brett (1994) and Posteguillo (1999) included the move *further research suggested*; Kanoksilapatham (2003) used the step *suggested further studies* and Yang and Allison (2003) used the step *recommending further research*. As different from the existing literature, the present study found that the authors almost never provided their suggestions for further research in the results sections in the field of educational sciences.

Move 4 (M4) – Establishing the study

This move involves discussing the results with theoretical background, previous studies and establishing the meaning with evidence, reference and implication. In contrast to earlier assumptions (Weissburg & Buker, 1990), the findings of the present study indicated that the results sections might not be limited to reporting and interpreting results. In addition, the results sections might evaluate the study by means of comparing, clarifying expectations, acknowledging limitations, giving personal comments on results, giving suggestions for further studies, summarizing results and highlighting principal findings. However, it is somewhat surprising to find that the results sections of RAs also establish the study, which is the characteristic of discussion sections. By adopting Cotos et al.'s (2015) model, the present study analyzed the RAs with separate results and discussion sections. As this model suggested, the RAs with separate results sections comply with three moves *approaching the niche*, *occupying the niche* and *construing the niche*, while the RAs with combined results and discussion sections follow one more move *expanding the niche* which includes the communicative functions of discussion. Even though the separate results sections were analyzed in this study, the findings indicated that the RAs included similar steps found in discussion sections. By adopting Morena and Swales' (2018) framework for the discussion sections, the present study found that the authors established the study by providing theoretical or conceptual information, comparing with the results of the previous studies and establishing the significance of the results with evidence, reference and implication. Therefore, the present study suggests including this move characterizing the discussion sections as the last move.

Move 4 Step 1 (M4S1) – Providing theoretical and/or background information

This step involves providing a conceptual background for the findings of the study. Surprisingly, none of the earlier models of the results sections included a relevant move or step concerning theoretical background. However, the findings of the present study support that the authors provided background information at variable rates in the three corpora. On

review of the rhetorical organization of discussion sections in the previous studies, it is seen that this communicative function has been realized in the recent studies. First, Peng's (1987) model included *background information* move in the discussion sections, but it was not clear whether it was precisely linked to the conceptual background or the introduction of the study. In a similar way, Yang and Allison's (2003) model included *background information* move in the discussion sections. Then, Kanoksilapatham's (2003) model gave importance to the use of theoretical information and included the move *contextualizing the study* with the steps *describing established knowledge* and *presenting generalizations, claims, deductions or research gaps*. More comprehensive move and step sequences were outlined by Eveyik-Aydin et al.'s (2015) framework which included the move *setting background* with two steps *describing the established knowledge and stating the gaps* and *making generalizations and claims based on the established knowledge*. Similarly, Cotos et al. (2015) included the step *drawing on a theoretical general background*. Regarding the rhetorical structure of research article discussions, the most recent study by Morena and Swales (2018) introduced the move *background information* and made a distinction with the steps *reporting background information with citations* and *providing background information with citations*. By combining Cotos et al.'s (2015) step *drawing on a theoretical general background* and Morena and Swales' (2018) move *background information*, the present study suggests including a step that provides theoretical background information.

Move 4 Step 2 (M4S2) – Comparing and/or Contrasting with previous research

This step involves comparing the current findings with the findings of previous studies. In the earlier models, relevant moves and steps were identified in the results sections of RAs. For example, Thompson (1993) included the move *statements citing agreement with pre-established studies*, Brett (1994), William (1999) and Posteguillo (1999) added *comparison of findings with the literature* move, and similarly, Nwogu (1997) and Yang and Allison (2003) used the step for the same communicative function *comparing results with previous studies*. On the other hand, Kanoksilapatham (2003) excluded existing studies and included the step *evaluation and/or comparison* by incorporating two communicative functions. Similar to Kanoksilapatham (2003), Cotos et al. (2015) also included the step *comparing results* by excluding previous studies and literature.

As for the discussion sections of the existing research, it is obvious that this communicative function is more noticeable in the discussion sections of RAs. First, it is seen that Belanger (1982) and Dudley-Evans (1994) included the move *reference to previous research*. Nwogu (1997) used the step *contrasting present and previous outcomes*. Though this step might not seem to be directly referred to the previous studies, the findings of the previous studies were implied. Kanoksilapatham (2003) used the term *referring to previous research*, and similarly, Yang and Allison (2003) used the step *comparing results with literature*. Based on Yang and Allison's (2003) model, Toprak (2011) also included the step *comparing findings with the literature*. Dujsik (2013) had a *reference to previous research* move, and also Eveyik-Aydin et al.'s (2015) model included *comparing with results of previous work* step. As different from these terms, Cotos et al. (2015) did not specifically refer to the term comparison; instead, they named the step *drawing on study-specific background*. Another interesting distinction was made by Morena and Swales (2018). They used two different steps *contrasting with previous research* and *comparing with previous research*. Based on the steps of Morena and Swales (2018), the study suggests incorporating the contrasting function in order to become more inclusive and label the step *comparing and/or contrasting with previous research*.

Move 4 Step 3 (M4S3) – Establishing the meaning of results with evidence and/or reference and/or implication

This step involves indicating the significance of the findings with evidence, reference and implication. The moves or steps related to implications were frequently seen in the results sections of the previous studies. For example, Brett (1994) and Posteguillo (1999) included *implications* move. Yang and Allison (2003) included the step *indicating significance/advantage* with a more precise description.

On the other hand, the moves and steps establishing the meaning of results are more frequently found in the discussion sections of the earlier models. Peng (1987) applied the moves *justification* and *validation*, and Nwogu (1997) included two steps, which are connected to separate moves, *indicating significance of the outcome* and *indicating research implications*. Similar to Nwogu's (1997) model, Yang and Allison (2003) and Toprak (2011) included two steps, which are connected to separate moves, *indicating significance/advantage* and *drawing pedagogic implication*, and *indicating significance* and *drawing implications*, respectively. As different from these moves and steps,

Kanoksilapatham (2003) coined a distinctive term for the function and included the step *making overt claims or generalizations*. As for the discussion/conclusion sections of the recent studies, Eveyik-Aydın et al. (2015), Cotos et al. (2015) and Morena and Swales (2018) included two steps in a similar way. Eveyik-Aydın et al. (2015) identified the steps *indicating the significance/contribution of the study* and *pedagogical implications*; Cotos et al. (2015) included the steps *claiming the value* and *noting implications* under the heading of one move in the conclusion sections; Morena and Swales (2018) determined the steps *stating the contribution of the current study* step and *drawing implications* move, respectively. Considering the findings of the previous models, the present study also suggests incorporating the function of implication and including the step *establishing the meaning of results with evidence and/or reference and/or implication*.

5.3. Cross-Linguistic/Cultural Similarities and Differences in the Frequency of Moves and Steps

The third research question addressed the cross-linguistic/cultural similarities and differences in the results sections of L1 English, L2 English and L1 Turkish RAs in educational sciences in regards to the frequencies of moves and steps.

In the sense of the frequency of the moves, the present study indicated that there are both similarities and differences among the three corpora. Beginning with the similarities among the three corpora, L1 English RAs written by authors from Anglophone countries, L2 English and L1 Turkish RAs written by authors from Turkey seem to consider the moves *describing the study* (M2) and *reporting and commenting on the results* (M3) the fundamental functions of the results sections. The findings indicated that the RAs in the three corpora described methodological procedures (M2), and reported and interpreted the results (M3) in the results sections at a high frequency. More specifically, *reporting and commenting on the results* is the most frequently used and *describing the study* is the second most frequently used move in the three corpora. When the findings are compared with the previous models, it was observed that the very first model for the results sections began with the assumption that the results sections of research articles were mainly considered to report and comment on the results (Weissburg & Buker, 1990). As confirmed by Brett (1994), Nwogu (1997), Kanoksilapatham (2003), Yang and Allison (2003) and Cotos et al. (2015) in the succeeding studies, the results sections are composed of two essential moves including presentation and comment category. However, different from the

earlier models, the findings of this study suggest that describing the methodological procedures of the study (M2) might also be considered as the essential move of the results sections in addition to reporting and commenting on the results (M3).

Besides making the essential moves of the results sections evident to us, these findings, at the same time, could contribute to the debate about the unclear communicative functional boundaries between the results and discussion sections by referring to the distinctions between the results and discussion sections. Swales and Feak (1994) maintain that it might be difficult to point out an exact boundary between the results and discussion section as the nature of the results sections tend to report and discuss the findings at the same time (p. 170). On review of the essential moves of the discussion sections, it was observed that Amnuai (2017) in her analysis also found that reporting results (M2) and commenting on results (M4) were obligatory moves of the discussion sections. Moreover, Yang and Allison (2003) confirmed; "Move 4 was an obligatory move which may occur repeatedly in the discussion section" (as cited in Amnuai, 2017, p. 3). They are similar to the findings of the present study concerning the results sections. Based on these findings, it is highly difficult for writers in an academic discourse to make a differentiation between results and discussion sections. However, the findings of the present study introduce another way to make a differentiation and suggest that the results sections of RAs also include describing methodological procedures (M2) in addition to reporting and commenting on the results (M3) in the rhetorical structure as different from the discussion sections. In contrast to the Cotos et al.'s (2015) framework excluding the communicative functions related to the description of methodology, a number of studies (Brett, 1994; Kanoksilapatham, 2003; Nwogu, 1997; Posteguillo, 1999; Thompson, 1993; William, 1999) support the presumption that the results sections of RAs should also include the details related to the methodology (M2). In this sense, this finding might contribute to the understanding of the distinctive features characterizing the results and discussion sections, and the results and discussion sections can be differentiated from this regard.

Another important finding among the three corpora is that L1 English RAs written by authors from Anglophone countries, L2 English and L1 Turkish RAs written by authors from Turkey are similar to each other in the frequency of the use of Move 1 and Move 4. In other words, L1 English, L2 English and L1 Turkish RAs tend to introduce the study at the beginning of the results sections by means of the *preparing the study* move, and discuss the results with theoretical background, previous studies and evidence by utilizing the

establishing the study move. However, Move 1 and Move 4 are not considered to be major components of the results sections when their frequency of use is compared to Move 2 and Move 3. Thus, it can thus be suggested that providing introductory information about the study (M1) and discussing the study with theoretical background information, previous studies or evidence, reference, implication (M4) might be optional components in the results sections of RAs. As well as the frequent use of methodological descriptions in the results sections mentioned above, the less frequent resort to establishing the study (M4) might also contribute to our understanding of the distinction between the results and discussion sections. In order to make a differentiation between the results and discussion sections, the present study formulated two moves, which are Move 3 and Move 4, and classified the steps that are related to the interpretation of the findings in Move 3 (reporting and commenting on the results) and the steps that are related to the discussion of the findings in Move 4 (establishing the study). In this way, it aimed to facilitate the understanding of the distinctive features between the interpretation and discussion of the findings in two separate sections. Therefore, the less frequent use of Move 4 infers lesser use of the move that identifies more with the characteristics of the discussion section. In other words, it might be claimed that the findings are also discussed in the results sections, but less frequently discussed compared to the discussion sections. Concerning the dilemma between the results and discussion sections, Mutinda (2017) concludes that she found many similarities between these two sections of research articles and highlights that differences indeed show variances in accordance with the focus of each section. Considering that the focus of results sections is reporting and commenting on the results, it is understandable that Move 4, which refers to the discussion of the results, is less frequently used in the results sections.

The approach adopted in this study is different from previous studies (Brett, 1994; Kanoksilapatham, 2003; Nwogu, 1997; Posteguillo, 1999; Swales & Feak, 1994; Thompson, 1993; William, 1999) classifying both two functions of interpreting and discussing as one move. For example, concerning the results sections, Swales and Feak (1994) propose a framework including the moves *locating elements* or *summary statements*, *highlighting statements* and *discussion of the findings* (p. 116). According to Bruce (2009) *discussion of findings* in this framework refers to “implications, problems and exceptions” which are the functions more relevant to the discussion section (p. 109). The move *discussion of findings* might refer to a wide range of communicative functions

characterizing both results and discussion sections. This is the common approach in the related literature as described by Swales and Feak (1994). However, the present study adopted the approach which separates each section with their distinctive features and treats this communicative function as two moves *commenting on results* (M3) and *establishing the study* (M4) in order to explore to what extent the results sections of RAs embody the moves and/or steps which rather characterize the discussion sections.

As for the similarity regarding the moves between the two corpora, it is found that L2 English and L1 Turkish RAs written by authors from Turkey share a remarkable similarity in the frequency of the use of moves. A comparison of the findings reveals that L2 English and L1 Turkish RAs written by authors from Turkey have approximate values in providing information about the methodological procedures (M2) and reporting and commenting on the results (M3). On the other hand, the difference regarding the moves in the two corpora, it is observed that the authors from Anglophone countries and Turkey have some cross-linguistic/cultural differences. L1 English RAs written by authors from Anglophone countries referred to methodological procedures at a significantly higher level (M2), and to reporting and commenting on the results (M3) at a relatively higher level as indicated in the results chapter. A possible explanation for these results may be that L1 English RAs allocate more space to the results sections with a lengthy and detailed analysis in contrast to the relatively brief and precise results sections of L2 English and L1 Turkish RAs. These results are consistent with those of Sheldon (2019) who investigated the discussion/conclusion sections of RAs written by L1 English, L2 English and L1 Spanish writers in applied linguistics. According to him/her, “the density of the seven moves has made the EngL1 group produce more rhetorically complex texts than the SpL1 group” (Sheldon, 2019, p. 9).

Drawing on the EAP approach to genre, the existing research on the rhetorical analysis of research article results aimed to explore a common text structure with the realizations of moves and steps. Although there are some similarities in terms of communicative purposes, there also appears to be some variation between different language and culture backgrounds. Concerning the frequency of the steps, the present study suggests that there are more similarities between L2 English and L1 Turkish RAs written by authors from Turkey than the similarity between L1 English and L2 English RAs, and L1 English and L1 Turkish RAs. For example, pertaining to the steps of Move 2, L1 Turkish and L2 English RAs written by the authors from Turkey tend to describe data variables (M2S1)

and provide information about data analysis (M2S2) at approximate values. In a similar vein, L1 Turkish and L2 English RAs by authors from Turkey compared and evaluated the results less than L1 English RAs by authors from Anglophone countries (M3S3). Considering that the frequency of reporting results is less in both L1 Turkish and L2 English RAs, it is understandable that the frequency of the use of comparing results and evaluating results is lower than L1 English RAs. Moreover, pertaining to the steps of Move 3 it is seen that L1 Turkish and L2 English RAs written by authors from Turkey are lacking in using a wide range of steps in the research article results. Although L1 English RAs by authors from Anglophone countries could provide expectations (M3S5), state limitations (M3S6), giving personal comments, suggestions (M3S7) and summarize the findings (M3S8) more frequently at a significant level, L1 Turkish and L2 English RAs by authors from Turkey tend to resort to these steps at considerably lower levels. It should be restated that L2 English RAs have more occurrences than L1 Turkish RAs in summarizing the findings. Nevertheless, both L1 Turkish and L2 English RAs by authors from Turkey seem to be incapable of evaluating the findings in a variety of ways when compared to L1 English RAs. Another similarity between L1 Turkish and L2 English RAs by authors from Turkey is found in the steps of Move 4. L1 Turkish and L2 English RAs by authors from Turkey provide theoretical background information more frequently (M4S1) than L1 English RAs by authors from Anglophone countries. This cross-linguistic/cultural difference is interesting when the higher levels of L1 English RAs in all the other moves are considered.

Another cross-linguistic/cultural difference is that L1 Turkish and L2 English RAs by authors from Turkey establish the meaning of findings with evidence, reference and implication (M4S3) at considerably lower levels compared to L1 English RAs. In a similar way, among the previous studies Samraj (2018), for example, provides support for cross-linguistic/cultural differences by indicating the variations between the L2 English abstracts written by Swedes and L1 English abstracts written by American English writers. As seen in these findings, a number of variations exist in the particular genre that includes some set of similar communicative purposes. Devitt (2015) argues, “what we describe as similar communicative purposes and tasks may share enough similarities to be perceived as similar but still differ in important ways” (p. 47). In the current study, the authors from Turkey, who have the same language and culture background, follow similar patterns between themselves and differ from the authors from Anglophone countries in a number of respects.

Despite the tendency to establish a common rhetorical organization in genre analysis, the findings suggest that the variations might occur among the authors from different backgrounds. By relating this variability to the rhetorical organization, Mauranen (1993, as cited in Martin-Martin, 2003b) emphasizes “the way of actually doing this (i.e., the rhetorical strategies employed) may vary in such a way that certain patterns or preferences are distinguished when texts produced by writers from varying backgrounds are compared” (p. 164). Martin-Martin (2003b) offers the prototype theory which “aims to explain why people and cultures categorize the world in the way they do” to be useful (p. 162). However, Mauranen (1993, as cited in Martin-Martin, 2003b) opposes the idea that straightforwardly categorizes genres and indicates “genres are not clear-cut conceptual categories, but kinds of social behavior” (p. 163). In addition, these findings about the authors from varying language and culture background corroborate the ESP approach to genre theory which draws on theoretical claims from both Sydney School and suggests that genres are interrelated with discourse community, discipline, culture and norms (Bawarshi, 2000; Bhatia, 1993; Connor, 1996; Devitt, 2015; Eggins, 1994; Halliday, 1994; Martin, 1992; Swales, 1990). These rhetorical variations might be attributed to the authors varying discourse community and social contexts. Moreover, Bhatia (2008) emphasizes the role of particular social contexts by arguing that “ESP genre analysis needs to move beyond linguistic analysis and integrate socio-cognitive and sociocultural analysis to gain a more complex understanding of how these factors contribute to the construction of genres in different disciplines” (Lee, 2011, p. 28).

On the other hand, it is worth stating that the similarities between L1 English RAs by authors from Anglophone countries and L2 English RAs by authors from Turkey are more than those between L1 English and L1 Turkish RAs. To elaborate, pertaining to the steps of Move 1, it is observed that authors in L1 English and L2 English RAs give general information (M1S1) and state research objectives (M1S2) at approximate values, while authors from Turkey in L1 Turkish RAs give general information more frequently and state research objectives less. Therefore, it might be suggested that the authors in L1 English and L2 English RAs seem to be using two steps by means of both giving general information and stating research objectives while using one step of Move 1 might be sufficient for the authors from Turkey in L1 Turkish RAs. Another similarity is that L1 English and L2 English RAs provide justifications and criticisms of their data analysis (M2S3) more than L1 Turkish RAs. Moreover, concerning the reporting of the results L1

English RAs written by authors from Anglophone countries and L2 English RAs by authors from Turkey share a similarity. These two RAs report the results directly (M3S1) and referred to table/figure less (M3S2) in contrast to L1 Turkish RAs which tend to report results less and instead prefer to report them by referring to tables/figures. These parallel findings between the authors in L1 English and L2 English RAs suggest the language transfer of second language writers. In this way, they seem to be consistent with those of Sheldon (2019) analyzing RAs written by L1 English, L2 English and L1 Spanish writers in applied linguistics. In accordance with the results, s/he (2019) suggests “even if reading articles published in English can influence second language writers” and at the same time “they may transfer patterns of text organization from their target language” (Mauranen, Perez-Llantada & Swales, 2010; Moreno, 2010; Mur-Duenas, 2009, 2012; Perez-Llantada, 2012) (p. 9). Drawing on the theory of contrastive rhetoric, Connor (2002) explains that the “rhetorical tendencies” writers have in their own language are transferred to L2 and affect their “choice of rhetorical strategies” in L2 writing (p. 494). Moreover, the more recently coined term intercultural rhetoric suggests focusing on “the *connections* rather than the cultural and rhetorical *differences*” about their rhetorical tendencies (Connor, 2008, p. 313), and “deals with the analysis of an actual encounter between two participants who represent different linguistic and cultural back-grounds” (Sarangi, 1995, p. 22).

5.4. Cross-Linguistic/Cultural Similarities and Differences in Move Structures

The fourth research question examined the cross-cultural similarities and differences in the results sections of L1 English, L2 English and L1 Turkish RAs in educational sciences related to move sequencing, move patterning and move cycling.

To begin with move sequencing, a move sequence refers to the number of moves used in the results sections of RAs. Regarding the types of move sequences, the findings of the current study suggest that L1 English RAs resort to a wide range of move sequences with 14 different types of cycles. On the other hand, L1 Turkish RAs use less variety in move sequences. It is seen that L2 English RAs fall in between these two groups, and resort to different types of move sequences at a moderate level. According to Sheldon (2019), L2 English RAs are located at “a mid-position in terms of rhetorical organization” (p. 8). A possible explanation for this might be “these writers have merged Anglophone norms with the culture-specific linguistic patterns of their L1” (Perez-Llantada, 2012, as cited in Sheldon, 2019, p. 8). In this way, “the transfer of L1 rhetorical organization to established

academic writing in English” might lead to *hybridity* in the conventions of a specific genre (Sheldon, 2019, p. 8) and “to cross-cultural heterogeneity and diversity” (Mauranen et al., 2010, p. 644).

In addition, a comparison of the move sequences among the three corpora suggests that L1 English RAs written by authors from Anglophone countries employ high-grade move sequences more frequently, while L2 English and L1 Turkish RAs by authors from Turkey often use low-grade move sequences. These findings suggest that L1 English RAs utilize rhetorically more complicated move sequences. Similar to the findings of Sheldon (2019), a possible explanation for this finding may be that L1 English groups tend to create dense and “rhetorically more complex texts” (p. 9).

Regarding move patterning, a move pattern refers to the composition of moves in which the RAs are structured. The findings of the present study suggest that the most frequently used move patterns in the three corpora include the fundamental moves of the results sections. To exemplify, Pattern IV (M2-M3) is the common move pattern uniformly used by the three corpora in the sense of move patterns. In other words, it is most frequently seen that L1 English, L2 English and L1 Turkish RAs first describe the methodological procedures and then report and comment on the results by adopting M2-M3 move sequence. Another pattern used by the three corpora, predominantly by L1 English RAs, is Pattern VI (M3-M2-M3). That is, the research articles prefer to first report and comment on the results, then provide methodological procedures before notifying the results once again. In this sense, the move patterns also support that Move 2 and Move 3 are the essential moves of the results sections similar to the findings of the move frequency.

Another significant finding suggests that L2 English and especially L1 Turkish RAs written by authors from Turkey employ move patterns including M1 more frequently than L1 English RAs written by authors from Anglophone countries. For example, by adopting Pattern II (M1-M3), Pattern I (M1-M2-M3) and Pattern III (M1-M3-M2-M3), respectively authors from Turkey prefer to introduce the study by giving general information about the study, the structure of the results sections and/or research objectives. These findings suggest that M2 and M3 moves are considered to be major components of move sequences in the results sections by authors from Anglophone countries, while M1, M2 and M3 moves might be fundamental communicative functions of move sequences in the results sections according to the authors from Turkey. These variations between the two groups

from varying language and culture backgrounds might be explained “in terms of the different conventions or expectations of national and/or international cultures” (Atkinson, 2004; Mur-Duenas, 2009) and of their readership (Sheldon, 2019, p. 9). Based on the low frequency of *summarizing the results* move in the abstracts in Spanish compared to its high frequency in their counterparts in English, Martin-Martin (2003a) indicated this rhetorical divergence might have mainly derived from “the different expectations that the members of the international and Spanish scientific communities have” (p. 25).

Among the most frequently used move patterns, the findings indicate that Pattern II (M1-M3) was the most preferred by L1 Turkish RAs compared to L1 English and L2 English RAs. Although M2 and M3 are considered to be essential moves of the results sections in accordance with the findings of both the present study and previous studies, it is seen that L1 Turkish RAs deviate from the academic writing conventions in English and lack describing methodological procedures (M2) in the results sections. Moreover, another interesting finding is that Pattern V (M3) is only used by L2 English and L1 Turkish RAs written by authors from Turkey while L1 English RAs had no occurrence of M3-sequence. These findings suggest that both L2 English and L1 Turkish RAs written by authors from Turkey tend to follow uncomplicated and relatively simple move patterns, while L1 English RAs tend to follow complex and lengthy move patterns. There are two likely causes for the differences between authors from Turkey and from Anglophone countries. First, this result may be explained by the fact that authors from Turkey do not have a command of the academic writing conventions in English as well as their counterparts from Anglophone countries, or second, it can be attributed to “socio-cultural aspects, cultural linguistics and research environments” (Jogthong, 2001, p. ii). In another cross-linguistic study, some resemblances between L2 English and L1 Turkish RAs by Turkish academic writers were found, and the compliance of these two corpora with the local discourse community conventions was considered as a sign of socio-cultural factors (Kafes, 2018, p. 76).

Last, as for move cycling, textual variations also exist among the three corpora. First, a move cycle refers to recurring move sequences and move patterns. In accordance with the rhetorical organization suggested for the research article results in this current study, RAs might be expected to follow a linear M1-M2-M3-M4 structure. However, due to the presence of many other possibilities they might also follow M1-M2-M3-M2-M4-M1 structure, and in this case M1 and M2 moves are recycled. For example, according to

Swales (1990), the moves in the CARS model do not follow a linear pattern in the introduction sections. As different from the previous studies, this research explored the cyclicity of the move patterns that are utilized most frequently in the three corpora. The findings suggest a high degree of move pattern cycling in the three corpora. In other words, the most frequently used move patterns are often reiterated. These findings are consistent with the previous studies supporting the cyclic feature of results sections of RAs (Brett, 1994; Kanoksilapatham, 2003; Yang & Allison, 2003). On the other hand, William (1999) identified linear cycling in the discipline of medical sciences, while the cyclical patterning was realized from the disciplines of sociology (Brett, 1994), applied linguistics (Yang & Allison, 2003) to biochemistry (Kanoksilapatham, 2003). This raises the question of whether linear or cyclical patterning might be related to varying disciplines. Bruce (2009) supports this disciplinary assumption claiming, “while there are some similarities in the patterns proposed, there also appears to be variation between disciplines” (p. 109). As is shown from the previous studies, move structures might occur in a linear or cyclical way in a particular discipline.

In addition, the findings concerning the cyclicity of move patterns are in some aspects similar to those found in move patterning. For example, the more frequent cycling of Pattern I (M1-M2-M3) in L2 English and L1 Turkish RAs suggests that authors from Turkey tend to include M1 and prepare the study by providing general orientation and/or research objectives as seen in move patterning. Another similarity in move patterning is that Pattern VI (M3-M2-M3) cycles more frequently in L1 English RAs written by authors from Anglophone countries. This finding confirms that authors from Anglophone countries are not interested in preparing the study (M1), but rather first reporting and commenting on results (M3), then describing the study (M2) and last reporting and commenting on results (M3) compared to the authors from Turkey.

Contrary to expectations, the findings indicate that the frequency of Pattern II (M1-M3), Pattern III (M1-M3-M2-M3), Pattern IV (M2-M3) and Pattern V (M3) have considerably increased in move cycling of L1 English RAs compared to their findings in move patterning. This observed increase in L1 English RAs could be attributed to the complicated and lengthy features of the move sequences. In other words, the findings suggest that L1 English RAs employ these move patterns in a cyclic manner in their lengthy move sequences rather than using merely one pattern in the whole result section. Hence, it could be hypothesized that L1 English RAs follow a cyclical move patterning in

rhetorically complex move structures. In the previous studies (i.e., Dudley-Evans, 1994), a number of differences in move cycles as well as the frequency and type of moves were observed between native speaker (NS) and nonnative speaker (NNS) research articles. In Li's (2011) study, this variation in structure is attributed to the writers' disciplinary as well as linguistic background.

Regarding the move cycling of the remaining move sequences, when the move patterns are excluded, M4 appears to cycle the most. It is clearly seen that L1 English RAs repeatedly establish the study with theoretical background information, previous studies and evidence/reference/implication (M4) at a higher frequency than authors from Turkey in L2 English and L1 Turkish RAs. Considering that the frequency of M4 in L1 English RAs is higher than the other two groups, it is understandable that L1 English RAs has a greater frequency in move cycling as well. Nevertheless, in light of the findings, it might be suggested that the three corpora employ M4 occasionally because it is not among the fundamental components of the results sections, and is mainly more appropriate to the characteristics of discussion sections. However, the authors seem to need the communicative functions of this move, though not as frequently as in the discussion sections of RAs.

Another move sequence that's frequently recycled is M2-M4. The findings suggest that both L1 English and L2 English RAs often tend to describe the methodological procedures (M2) and then establish the study (M4) more when compared with L1 Turkish RAs. It is surprising these two moves follow each other consecutively. Last, another move sequence that frequently reappeared is M2, which cycles almost equally in the three corpora. The findings suggest that the authors occasionally prefer to provide information related to methodology (M2) when necessary besides their realizations in the move patterns.

In general, therefore, it seems that as for the similarity regarding the moves between the two corpora, it is found that L2 English and L1 Turkish RAs written by authors from Turkey share a remarkable similarity in move structures, and the similar rhetorical tendencies of the Turkish writers might be attributed to their common linguistic and cultural backgrounds. On the other hand, the similar findings were found between L1 English RA writers from Anglophone countries and L2 English RA writers from Turkey. This suggests that second language writers might transfer rhetorical structures and academic writing conventions from the target language by leading to the concepts of

“hybridity” (Sheldon, 2019) and “cross-cultural heterogeneity” (Mauranen et al., 2010) in academic genres.



CHAPTER VI

CONCLUSION

This concluding chapter briefly summarizes the main contributions of this study in reference to the aforementioned research areas (i.e., academic writing, EAP, research article genre, rhetorical analysis and move analysis). These findings will be drawn on to address the main research questions, followed by the research and pedagogical implications to rhetorical move analysis and academic writing. Finally, recommendations of possible topics for further research are briefly considered.

6.1. Summary of the Study

The present study set out to investigate the rhetorical organization of the results sections of L1 English, L2 English and L1 Turkish RAs in the field of educational sciences and to identify the communicative functions, frequencies and structures of the moves and steps in terms of cross-linguistic/cultural influence between L1 English RAs written by authors from Anglophone countries, and L2 English and L1 Turkish RAs written by authors from Turkey. This research reported the systematic genre analysis of the results sections in educational science RAs by means of the move analysis technique based on the adapted version of Cotos et al.'s (2015) and Morena and Swales' (2018) models. The inspiration for the study was built on the lack of cross-linguistic/cultural research related to the rhetorical organization of results sections, and also no study to date has attempted to deal with the move analysis of the educational sciences as a particular discipline. Therefore, the present study was designed to determine the cross-linguistic/cultural influence on the rhetorical organization of RAs written by authors having a different language and culture background in a certain genre (i.e., research article) and discipline (i.e., educational sciences).

In regards to the first research question, this study has established a new rhetorical organization for the results sections of RAs in the field of educational sciences. Thereby considering the required communicative purposes in this specific discipline and adapting the moves and steps in Cotos et al.'s (2015) and Morena and Swales' (2018) models, the findings of the present research suggest the new rhetorical structure of research article results, which is functional and user-friendly.

As an answer to the second research question, the move analysis identified a variety of new moves and steps that are utilized in this particular discipline. The findings of the previous studies suggested there are disciplinary variations in the rhetorical structures of RAs. Considering this fact, this study limited the discipline to educational sciences in order to achieve the commonality of communicative purposes and establish a framework that is suitable for the particular discipline. However, the results of this investigation have also shown that the rhetorical structures of RAs involved variations in accordance with the different language and culture backgrounds of the authors. All of the moves and steps realized in the three corpora named EDUCORP were determined by means of their descriptions, and the findings of the analysis showed that altogether four moves and sixteen steps exist in the results sections of research articles in the field of educational sciences. On the other hand, a variety of the steps M3S5, M3S6, M3S7, M3S8 and M4S3) were never or almost never seen in L1 Turkish RAs. Although L2 English RAs follow a similar tendency to L1 Turkish RAs in terms of the lack of the steps (M3S5, M3S6, M3S7, M4S2 and M4S3), the frequency rates of L2 English RAs suggest that they are located at "a mid-position in terms of rhetorical organization" (Sheldon, 2019, p. 8) between L1 Turkish and L1 English RAs.

As part of the third question, the frequency use of the moves and steps were analyzed in order to investigate the cross-linguistic/cultural similarities and differences in the three corpora. The study showed that the research article results sections mainly included two moves *reporting and commenting on the results* (M3) and *describing the study* (M2). On the other hand, the moves *preparing the study* (M1) and *establishing the study* (M4) were not considered as fundamental components of the results sections when their frequency of use is compared with Move 2 and Move 3. Another finding is that the authors from Turkey in L2 English and L1 Turkish RAs share a remarkable similarity in their frequency of the use of moves and a range of moves. First, these two corpora have approximate values in providing information about the methodological procedures (i.e. M2) and presenting and

interpreting the results (i.e. M3), while L1 English RAs written by authors from Anglophone countries have considerably higher values in using Move 2 and Move 3. Second, it is seen that L1 Turkish and L2 English RAs written by authors from Turkey lack using a variety of steps, while their counterparts in Anglophone countries benefit from a wide range of steps in their academic prose. These results suggest that the two groups from the same language/culture backgrounds have obviously similar conventions in the academic writing, and the native language of the second language writers influences how results sections are organized in L2 English RAs. In addition, the findings reveal that the authors from Anglophone countries could establish “rhetorically more complex texts” by means of successfully employing a wide range of steps (Sheldon, 2019, p. 9).

To answer the fourth research question, the move structures were analyzed, and the three aspects of evidence were presented to prove cross-cultural influence. First, in the sense of move sequencing, L1 English RAs resorted to a wide range of move sequences at the highest level, while L1 Turkish RAs used different types of move sequences at the lowest level. In a similar vein, it is seen that L2 English RAs fall in between these two groups at a moderate level. It might be suggested that the second language writers “have merged Anglophone norms with the culture-specific linguistic patterns of their L1” (Perez-Llantada, 2012, as cited in Sheldon, 2019, p. 8). In addition to this, L1 English RAs became prominent in the terms of their preferences for elongated move sequences. The findings suggest that L1 English RAs often apply high-grade move sequences rather than low-grade move sequences more often than L2 English and L1 Turkish RAs do, and create rhetorically complicated and dense texts. Second, as regards move patterns, L2 English and L1 Turkish RAs are seen to have a similar move patterning and apply the move patterns of *preparing the study* (M1), while L1 English RAs employ more frequently the move patterns of *describing the study* (M2) and *reporting and commenting on the study* (M3) which are the fundamental components of the results sections. These variations between native and nonnative groups from varying culture backgrounds might be explained “in terms of the different conventions or expectations of national and/or international cultures” (Atkinson, 2004; Mur-Duenas, 2009) and of their readership (Sheldon, 2019, p. 9).

Furthermore, L1 English RAs had no occurrence of Pattern V (M3), while authors from Turkey use this pattern frequently, suggesting that they follow uncomplicated and relatively simple move patterns. Third, the findings suggest a high degree of move and move pattern cycling in the three corpora. However, compared to the findings in move

patterning, there is a considerable increase in the cycling of these move patterns of L1 English RAs. This observed increase in L1 English RAs could be attributed to the relatively complicated and lengthy features of their move sequences, and they could employ these move patterns repeatedly in this way. Another finding regarding move cycling is that L1 English RAs employ the move *establishing the study* (M4) repeatedly at a higher frequency than authors from Turkey in L2 English and L1 Turkish RAs. Considering that Move 4 is more related to the detailed discussion of the findings with evidence, reference and implication, the findings suggest that the Anglophone norms in academic writing expect writers to focus on the evaluation of their findings as well.

6.2. Implications of the Study

The present study has significant research and pedagogical implications. To begin with the contributions to the research area, it consolidated the practice and development of qualitative approach to genre analysis. The coding was conducted at the sentence and/or phrase level rather than the paragraph level which enabled the coding units to be understood within their own contexts. In other words, each sentence and/or phrase was annotated, and each coding unit was composed of sentence and/or phrase structures. Although coding each sentence and/or phrase is laborious work, this move analysis technique allows researchers to interpret the communicative purposes intended by the authors in a more accurate way. The other researchers (e.g., Cotos et al., 2015; Hyland, 1993, 2000; Swales, 1990, 2004) also support discourse-level annotation firmly to create rhetorical models (Nesi, 2016, p. 213).

Second, the study used a qualitative research analysis tool, Nvivo 12.0. in order to annotate moves, steps, move sequences, move patterns and move cycles and to compute how frequent they are realized. Compared to hand-tagged move and step structure analysis which is commonly preferred, this method is considered worthy as it meticulously identified and localized these moves and steps in the RAs, and counted the frequency use of moves and steps in a more accurate and in a faster way.

Third, the study contributes to our understanding of the distinctive features between the results and discussion sections in the discussion of findings. Due to the overlapping features of results and discussion sections, it is challenging for writers to determine whether communicative purposes belong to results or discussion sections. In contrast to the

previous studies which involve one move referring to a variety of communicative functions to interpret and discuss the findings in results sections, this study adopted the approach which classifies these functions under the heading of two moves as *commenting on results* (M3) and *establishing the study* (M4) in the results sections. By classifying the steps related to the interpretation of findings in Move 3 and the steps that are related to the discussion of findings in Move 4, the present study aimed to facilitate the understanding of distinctions between results and discussion sections.

As for the pedagogical implications, first, the new rhetorical structure offered for the research article results might help novice writers how to organize their rhetorical structures for the results sections in the educational sciences. To become a member of the discourse community and publish in English-medium international journals, the writers are required to “gain fluency in the conventions of English language academic discourses to understand their disciplines and to successfully navigate their learning” (Hyland & Hamp-Lyons, 2002, p. 1). However, “nonnatives speakers are at a disadvantage when reading these journals as well as submitting articles to journal for publication” (Kanoksilapatham, 2003, p. 384). Therefore, this model might contribute to novice writers who are keen on sharing their academic knowledge and following recent studies in the field of educational sciences in order to understand what rhetorical moves and steps are included and in what order and pattern research article results are organized so that they could meet the expectations of the accepted conventions in academic writing.

Second, the findings reported here might shed new light on the reconsideration of designing course syllabus and of integrating teaching materials and activities into coursebooks by practitioners and course book writers so that EAP learners can have knowledge of genres and the accepted academic conventions used in their discipline in terms of presentation and sequence of information. For example, the graduate schools of educational sciences might pay attention to students’ lack of knowledge in rhetorical organization in academic writing, and they might provide training to their graduate students and/or integrate academic writing courses that are oriented to enlighten their students with the conventions in the academic context. The students can find the opportunity to keep up with the latest established understandings in the field and practice their academic writing skills in English through tasks and activities. When conducted in an effective way, practitioners and teachers might encourage their students to feel more competent and confident in producing organized research articles. Besides EAP learners,

even English language teachers seem to experience difficulties when they start to teach EAP due to its distinctive teaching context, teaching content and materials. The teachers also require more time to develop themselves in a professional sense in this EAP context through activities such as peer-observations and subject tutors (Campion, 2016, p. 67). Considering that EAP teachers feel the need for additional training to become successful at an academic discourse, there is, therefore, a definite need for redesigning course syllabus and teaching materials in accordance with EAP learners as well. Taken together, these findings highlight that EAP, or more recently emerged ERPP, requires greater consideration as a separate teaching profession, and the lack of attention given to teaching EAP and ERPP should be realized.

Third, the current data highlight the importance of cross-linguistic/cultural variations in the rhetorical organization of RAs, so the findings of this study regarding linguistic/cultural variations might have implications to increase the knowledge and awareness of the novice writers from Turkey as nonnative speakers, thereby providing information about their own linguistic/cultural tendencies. In this way, writers from Turkey might understand in what aspects they differentiate from their fellows from Anglophone countries in their research article results and how they consolidate their texts so that they could meet the expectations of the accepted conventions in academic writing and publish their articles in many international journals.

6.3. Suggestions for Future Research

This study has made substantial implications to the descriptions of research article results in the educational sciences among the three groups of varying language backgrounds. Nevertheless, several questions still remain to be answered, and future studies are suggested to follow further remarks (which can also be considered as the limitations of this study).

First, considerably more work will need to be done on genre-based and contrastive rhetoric studies in order to explore variations between native and nonnative speakers. The nonnative writers from different cultural backgrounds are still lacking in knowledge regarding how they diverge from the established academic conventions.

Second, further work is needed to fully understand the implications of discipline-specific studies in rhetorical organization. The findings indicated that the common framework

presented by Cotos et al. (2015) as a result of the analysis including 30 disciplines might be inadequate in aiding understanding on how RAs in certain disciplines are constructed. Therefore, further work might limit genre-based studies to specific disciplines.

Last, this study enhanced our understanding about the rhetorical patterns at the macro level. In addition to move analysis, further research might adopt cross-linguistic/cultural analysis at the micro-level and explore linguistic features characterizing each rhetorical move in academic discourse.

To conclude, a number of studies have attempted to examine the rhetorical patterns in the different sections of RAs by means of move analysis in order to understand how they are constructed. However, very little is known about how the rhetorical organization could be taught to EAP learners. A further study with more focus on the teaching of rhetorical moves in a specific genre is therefore suggested, and researchers might conduct experimental studies to investigate the pedagogical contributions of rhetorical organization instruction to language teaching.



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APPENDICES



Appendix 1. List of L1 English RAs in the EDUCORP

Discipline	Year	Journal	Country	Authors	Title
COM_L1_ENG1	2015	Journal of Computer Assisted Learning	USA	E. A. Bagley & D. W. Shaffert	Stop talking and type: comparing virtual and face-to-face mentoring in an epistemic game
COM_L1_ENG2	2015	Computers & Education	USA	Blanche W. O'Bannon & Kevin M. Thomas	Mobile phones in the classroom: pre-service teachers answer the call
COM_L1_ENG3	2017	British Journal of Educational Technology	Australia	Matt Bower, Mark J. W. Lee & Barney Dalgarno	Collaborative learning across physical and virtual worlds: factors supporting and constraining learners in a blended reality environment
COM_L1_ENG4	2016	Computers in the Schools	USA	Kelly B. Butzler	The synergistic effects of self-regulation tools and the flipped classroom
COM_L1_ENG5	2016	Computers & Education	USA	Charles Calderwood, Jeffrey D. Green, Jennifer A. Joy-Gaba & Jaclyn M. Moloney	Forecasting errors in student media multitasking during homework completion
COM_L1_ENG6	2017	Computers in the Schools	USA	Jeffrey P. Carpenter & Julie Ellison Justice	Evaluating the roles of technology in the global read aloud project
COM_L1_ENG7	2015	British Journal of Educational Technology	UK	Darren Cooper & Steve Higgins	The effectiveness of online instructional videos in the acquisition and demonstration of cognitive, affective and psychomotor rehabilitation skills
COM_L1_ENG8	2015	Computer Science Education	USA	Michelle Friend	Middle school girls' envisioned future in computing
COM_L1_ENG9	2015	Computer Science Education	USA	Shuchi Grover, Roy Pea & Stephen Cooper	Designing for deeper learning in a blended computer science course for middle school students
COM_L1_ENG10	2017	Computers in the Schools	USA	Sanghoon Park & Allison Braud	The effects of multimedia content design modalities on students' motivation and achievement in history
EDU_L1_ENG1	2018	Journal of Educational Psychology	Canada	Dillon T Browne, Mark Wade, Heather Prime & Jennifer M. Jenkins	School readiness amongst urban Canadian families: risk profiles and family mediation
EDU_L1_ENG2	2018	Journal of Further and Higher Education	UK	Carol J. Callinan, Emile van der Zee & Garry Wilson	Developing essay writing skills: an evaluation of the modeling behaviour method and the influence of student self-efficacy

Discipline	Year	Journal	Country	Authors	Title
EDU_L1_ ENG3	2018	Journal of Further and Higher Education	Canada	Stephen Childs. Ross Finnie & Richard E. Mueller	Assessing the importance of cultural capital on post-secondary education attendance in Canada
EDU_L1_ ENG4	2017	Journal of Educational Psychology	USA	Jessica R. Chittum & Brett D. Jones	Identifying pre-high school students' science class motivation profiles to increase their science identification and persistence
EDU_L1_ ENG5	2018	Journal of Educational Psychology	USA	David L. Coker. Austin S. Jennings. Elizabeth Farley-Ripple & Charles A. MacArthur	The type of writing instruction and practice matters: the direct and indirect effects of writing instruction and student practice on reading achievement
EDU_L1_ ENG6	2015	American Educational Research Journal	USA	Jeffrey A. Greene. Christopher A. Oswald & Jeffrey Pomerantz	Predictors of retention and achievement in a massive open online course
EDU_L1_ ENG7	2017	American Educational Research Journal	USA	Jason A. Grissom. Demetra Kalogrides & Susanna Loeb	Strategic staffing? How performance pressures affect the distribution of teachers within schools and resulting student achievement
EDU_L1_ ENG8	2017	American Educational Research Journal	Canada	Daniel Hamlin	Are charter schools safer in deindustrialized cities with high rates of crime? Testing hypotheses in detroit
EDU_L1_ ENG9	2016	American Educational Research Journal	USA	Thomas Hatch. Kathryn Hill & Rachel Roegman	Investigating the role of instructional rounds in the development of social networks and district-wide improvement
EDU_L1_ ENG10	2018	Journal of Further and Higher Education	UK	Claire T. McEvoy. Ruth F. Hunter. Kyle B. Matchett. Linda Carey. Michelle C. McKinley. Karen D. McCloskey & Jane V.Woodside	Exploring perceived support of postgraduate medical science research students
LING_L1_ ENG1	2017	Language Learning	USA	Matthew T. Carlson & Chip Gerfen	You say dientito. I say dentito: navigating complex word formation in second language Spanish

Discipline	Year	Journal	Country	Authors	Title
LING_L1_ENG2	2016	System	UK	Jason Cole & Robert Vanderplank	Comparing autonomous and class-based learners in Brazil: evidence for the present-day advantages of informal, out-of-class learning
LING_L1_ENG3	2015	Applied Linguistics	USA	Scott A. Crossley, Tom Salsbury & Danielle S. McNamara	Assessing lexical proficiency using analytic ratings: A case for collocation accuracy
LING_L1_ENG4	2015	Language Learning	Australia	H. Colin Gallagher & Garry Robins	Network statistical models for language learning contexts: exponential random graph models and willingness to communicate
LING_L1_ENG5	2018	Applied Linguistics	UK	Christopher Hart	Event-frames affect blame assignment and perception of aggression in discourse on political protests: an experimental case study in critical discourse analysis
LING_L1_ENG6	2017	System	UK	Gianna Hessel	A new take on individual differences in L2 proficiency gain during study abroad
LING_L1_ENG7	2016	Applied Linguistics	USA	Justine A. Neiderhiser, Patrick Kelly, Kohlee M. Kennedy, John M. Swales & Carla Vergaro	Notice the similarities between the two sets...': imperative usage in a corpus of upper-level student papers
LING_L1_ENG8	2016	Applied Linguistics	USA	Gary J. Ockey & Robert French	From one to multiple accents on a test of L2 listening comprehension
LING_L1_ENG9	2017	English for Specific Purposes	New Zealand	Jean Parkinson, Murielle Demecheleer & James Mackay	Writing like a builder: acquiring a professional genre in a pedagogical setting
LING_L1_ENG10	2016	English for Specific Purposes	New Zealand	Rosemary Wette & Susan J. Hawken	Measuring gains in an emp course and the perspectives of language and medical educators as assessors
SPE_L1_ENG1	2015	Journal of Learning Disabilities	USA	Kristen D. Beach & Rollanda E. O'Connor	Early response-to-intervention measures and criteria as predictors of reading disability in the beginning of third grade
SPE_L1_ENG2	2017	Journal of Learning Disabilities	USA	Virginia Berninger, Robert Abbott, Clayton R. Cook & William Nagy	Relationships of attention and executive functions to oral language, reading, and writing skills and systems in middle childhood and early adolescence

Discipline	Year	Journal	Country	Authors	Title
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SPE_L1_E NG3	2016	Journal of Special Education	USA	Carly L. Blustein, Erik W. Carter & Elise D. McMillan	The voices of parents: post-high school expectations, priorities, and concerns for children with intellectual and developmental disabilities
SPE_L1_E NG4	2016	Journal of Special Education	USA	Matthew E. Brock, Elizabeth E. Biggs, Erik W. Carter, Gillian N. Cattey & Kevin S. Raley	Implementation and generalization of peer support arrangements for students with severe disabilities inclusive classrooms
SPE_L1_E NG5	2016	British Journal of Special Education	UK	Jackie Dearden, Anne Emerson, Tom Lewis & Rebecca Papp	Transforming engagement: a case study of building intrinsic motivation in a child with autism
SPE_L1_E NG6	2018	Topics in Early Childhood Special Education	USA	Glen Dunlap, Phillip Strain, Janice K. Lee, Jaclyn Joseph & Nancy Leech	A randomized controlled evaluation of prevent-teach- reinforce for young children
SPE_L1_E NG7	2016	Remedial and Special Education	USA	Dorothy L. Espelage, Chad A. Rose & Joshua R. Polanin	Social-emotional learning program to promote prosocial and academic skills among middle school students with disabilities
SPE_L1_E NG8	2017	Remedial and Special Education	USA	Dan Farley, Daniel Anderson, P. Shawn Irvin & Gerald Tindal	Modeling reading growth in grades 3 to 5 with an alternate assessment
SPE_L1_E NG9	2017	Topics in Early Childhood Special Education	USA	Sarah M. Garrity, Sascha L. Longstreth & Lisa K. Linder	An examination of the quality of discipline policies in naeyc- accredited early care and education programs
SPE_L1_E NG10	2016	British Journal of Special Education	UK	Katie Norburn, Abigail Levin, Sally Morgan & Celia Harding	A survey of augmentative and alternative communication used in an inner city special school

Appendix 2. List of L2 English RAs in the EDUCORP

Discipline	Year	Journal	Country	Authors	Title
COM_L2_ ENG1	2017	Education and Science	Turkey	Devrim Akgündüz & Orhan Akinoğlu	The impact of blended learning and social media-supported learning on the academic success and motivation of the student in science education
COM_L2_ ENG2	2018	Educational Sciences: Theory & Practice	Turkey	Özgür Anıl. Veli Batdı & Hüseyin Küçüközer	The effect of computer-supported education on student attitudes: A meta-analytical comparison for the period 2005-2015
COM_L2_ ENG3	2017	TOJET	Turkey	Berrin Atiker & Bülent Onur Turan	Screen design principles of computer-aided instructional software for elementary school students
COM_L2_ ENG4	2018	Computers & Education	Turkey	Arif Bakla	Learner-generated materials in a flipped pronunciation class: a sequential explanatory mixed-methods study
COM_L2_ ENG5	2016	British Journal of Educational Technology	Turkey	Nadire Çavuş & Erineç Erçağ	The scale for the self-efficacy and perceptions in the safe use of the internet for teachers: the validity and reliability studies
COM_L2_ ENG6	2018	TOJET	Turkey	Serdar Çiftçi	The studies on educational digital games regarding children: a new word analysis approach
COM_L2_ ENG7	2014	Journal of Computer Assisted Learning	Turkey	M. Dindar. I. Kabakçı Yurdakul & F. İnan Dönmez	Measuring cognitive load in test items: static graphics versus animated graphics
COM_L2_ ENG8	2016	TOJET	Turkey	Aziz İlhan. H. Coşkun Çelik. Muharrem Gemcioğlu & Malik Ejder Çiftaslan	Examination of the relationship between internet attitudes and internet addictions of 13-18-year-old students: the case of Kahramanmaraş
COM_L2_ ENG9	2017	Education and Science		Songül Karabatak & Muhammed Turhan	Effect of web-based problem based learning on school administrators' self-efficacy beliefs and attitudes towards principalship profession
COM_L2_ ENG10	2017	British Journal of Educational Technology		Rabia M. Yılmaz. Sevdâ Küçük & Yüksel Göktaş	Are augmented reality picture books magic or real for preschool children aged five to six?
EDU_L2_ ENG1	2018	Education and Science	Turkey	Coşkun Arslan. Tuncay Oral & Ali Karababa	Examination of secondary school students' hope levels in terms of anxiety, depression and perfectionism
EDU_L2_ ENG2	2017	Education and Science	Turkey	Gülay Aslan	Determinants of student successes in transition from basic education to secondary education (teog) examination: an analysis related to nonschool variables

Discipline	Year	Journal	Country	Authors	Title
EDU_L2_ ENG3	2016	Educational Sciences: Theory & Practice	Turkey	Semih Aşiret & Seçil Ömür Sünbül	Investigating test equating methods in small samples through various factors
EDU_L2_ ENG4	2016	Education and Science	Turkey	Fatma Ataman & Yaşar Kondakçı	Predictors of organizational socialization of instructors in higher education
EDU_L2_ ENG5	2017	Educational Sciences: Theory & Practice	Turkey	Asiye Şengül Aşar & Ezel Tavsancıl	Examination of polytomous items' psychometric properties according to nonparametric item response theory models in different test conditions
EDU_L2_ ENG6	2017	İnönü University Journal of the Faculty of Education	Turkey	Necla Ekinci	Examining the relationships between epistemological beliefs and teaching and learning conceptions of lower-secondary education teachers
EDU_L2_ ENG7	2018	İnönü University Journal of the Faculty of Education	Turkey	Başaran Gençdoğan, Semanur Kodan Çetinkaya & Esra Gümüş	Effects of coloring mandalas on test anxiety
EDU_L2_ ENG8	2018	TOJET	Turkey	Abdullah Yasin Gündüz & Aytekin İşman	Pre-service teachers' perception of distance education
EDU_L2_ ENG9	2017	TOJET	Turkey	Hıdır Karaduman	Social studies teacher candidates' opinions about digital citizenship and its place in social studies teacher training program: a comparison between the USA and Turkey
EDU_L2_ ENG10	2017	TOJET	Turkey	Cengiz Şahin	The predictive level of social media addiction for life satisfaction: a study on university students
LING_L2_ ENG1	2016	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Abdullah Coşkun	Exploring the microteaching component of an EFL teacher education program
LING_L2_ ENG2	2016	Educational Sciences: Theory & Practice	Turkey	Mehmet Demirezen	Assimilation as a co-articulation producer in words and pronunciation problems for Turkish English teachers
LING_L2_ ENG3	2016	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Emre Güvendir	The relationship between the acculturation attitudes and English achievement of the Turkish students in the US
Discipline	Year	Journal	Country	Authors	Title
LING_L2_ ENG1	2016	TOJET	Turkey	Esra	Attitudes of Turkish EFL

ENG4				Harmandaoğlu Baz	student teachers towards technology use
LING_L2_ ENG5	2018	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Selma Kara	Blended Learning: a model to enhance engagement in reading class
LING_L2_ ENG6	2018	İnönü University Journal of the Faculty of Education	Turkey	Ebru Melek Koç	Exploring collaborative learning with a focus on group activities in EFL classrooms
LING_L2_ ENG7	2018	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Mustafa Sarioğlu & Özgür Yıldırım	The effects of clustering new words in semantic, thematic or unrelated sets in teaching vocabulary to EFL learners
LING_L2_ ENG8	2017	Educational Sciences: Theory & Practice	Turkey	Adem Soruç & Bilal Tekin	Vocabulary learning through data-driven learning in an English as a second language setting
LING_L2_ ENG9	2017	RELC Journal	Turkey	Ayşe Şahin Kızıl	EFL learners in the digital age: an investigation into personal and educational digital engagement
LING_L2_ ENG10	2016	Educational Sciences: Theory & Practice	Turkey	Evrım Üstünlüoğlu	Perceptions versus realities: teaching quality in higher education
SPE_L2_E NG1	2017	The Journal of Special Education	Turkey	Çimen Acar, Elif Tekin İftar & Ahmet Yıkılmış	Effects of mother-delivered social stories and video modeling in teaching social skills to children with autism spectrum disorders
SPE_L2_E NG2	2018	Education and Science	Turkey	Esra Orum Çattık & Yasemin Ergenekon	Effectiveness of video modeling combined with auditory technology support in teaching skills for using community resources to individuals with intellectuals' disabilities
SPE_L2_E NG3	2018	Educational Sciences: Theory & Practice	Turkey	Arzu Doğanay Bilgi & E. Rüya Özmen	The effectiveness of modified multi-component cognitive strategy instruction in expository text comprehension of students with mild intellectual disabilities
SPE_L2_E NG4	2017	Educational Sciences: Theory & Practice	Turkey	Binnur Yıldırım Hacıbrahimoglu & Tevhide Kargin	Determining the difficulties children with special needs experience during the transition to primary school

Discipline	Year	Journal	Country	Authors	Title
SPE_L2_E NG5	2017	Education and Science	Turkey	Tolgay Karanfiller. Hüseyin Göksu &kamil Yurtkan	A mobile application design for students who need special education
SPE_L2_E NG6	2017	Educational Sciences: Theory & Practice	Turkey	Caner Kasap & Yasemin Ergenekon	Effects of a schema approach for the achievement of the verbal mathematics problem- solving skills in individuals with autism spectrum disorders
SPE_L2_E NG7	2016	Educational Sciences: Theory & Practice	Turkey	Seray Olçay Gül	The combined use of video modeling and social stories in teaching social skills for individuals with intellectual disability
SPE_L2_E NG8	2018	Education and Science	Turkey	Mehmet Palancı	A prediction of the resilience. subjective well-being and marital adjustment of the parents having children with disabilities based on psycho- social competence
SPE_L2_E NG9	2015	TOJET	Turkey	Özgül Polat & Ayşegül Sönmez	The effect of play supported program on the school readiness of 60-72 month-old disadvantaged children
SPE_L2_E NG10	2018	Education and Science	Turkey	Selma Şenel & Ömer Kutlu	Computerized adaptive testing design for students with visual impairment

Appendix 3. List of L1 Turkish RAs in the EDUCORP

Discipline	Year	Journal	Country	Authors	Title
COM_L1_TUR1	2016	Pamukkale University Journal of Education	Turkey	Şeyma Büşra Bozkurt & Hasan Çakır	Ortaokul öğrencilerinin 21. Yüzyıl öğrenme beceri düzeylerinin cinsiyet ve sınıf seviyesine göre incelenmesi
COM_L1_TUR2	2017	Ege Journal of Education	Turkey	Biröl Çiloğlu. Burak Galip Aslan & Mustafa Murat İnçeoğlu	Lise öğrencilerine bilgisayar donanımı öğretimi: devremi kuruyorum
COM_L1_TUR3	2017	Education and Science	Turkey	Ali Çimen & M. Betül Yılmaz	Nasıl bir harmanlama? Karma öğrenmede sosyal ağların lise düzeyinde erişimi ve ağ kullanım davranışlarına etkisi
COM_L1_TUR4	2016	Education and Science	Turkey	Barış Çukurbaşı. Onur İşbulan & Mübin Kıyıcı	tablet bilgisayarların eğitsel kullanımının kabulü: FATİH projesine eleştirel bir bakış
COM_L1_TUR5	2016	İnönü University Journal of the Faculty of Education	Turkey	Cemal Hakan Dikmen & Veysel Demirel	Öğretmenlerin teknoloji entegrasyonuna yönelik davranışlarını etkileyen değişkenlerin incelenmesi
COM_L1_TUR6	2017	İnönü University Journal of the Faculty of Education	Turkey	Devkan Kaleci & Uğur Özhan	Bilgisayar ve öğretim teknolojileri eğitimi öğrencilerinin internet tabanlı programlama dersindeki akademik başarılarının öğrenme stilleri açısından incelenmesi
COM_L1_TUR7	2016	Ege Journal of Education	Turkey	Melih Karasu & Deniz Arıkan	Öğretmen adaylarının sosyal medya kullanım durumları ve medya okuryazarlık düzeyleri arasındaki ilişkinin incelenmesi
COM_L1_TUR8	2015	Ondokuz Mayıs University Journal of Faculty of Education	Turkey	Özgen Korkmaz. Recep Çakır. M. Yaşar Özden. Ali Oluk & Sevet Sarıoğlu	Bireylerin bilgisayarca düşünme becerilerinin farklı değişkenler açısından incelenmesi
COM_L1_TUR9	2016	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Fatih Önder & İlhan Sılay	Zenginleştirilmiş e-kitapla desteklenen laboratuvar etkinliklerinin öğretmen adaylarının bilgisayar destekli eğitim yapmaya yönelik tutumlarına etkisi
COM_L1_TUR10	2017	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Nuh Yavuzalp & Mehmet Gürol	E-öğrenme ortamında kullanılan öğrenme stillerinin web kullanım madenciliği ile analizi

Discipline	Year	Journal	Country	Authors	Title
EDU_L1_TUR1	2016	Education and Science	Turkey	Yahya Altinkurt. Burcu Türkkaş Anasız & C. Ergin Ekinci	Öğretmenlerin yapısal ve psikolojik güçlendirilmeleri ile örgütsel vatandaşlık davranışları arasındaki ilişki
EDU_L1_TUR2	2016	Pamukkale University Journal of Education	Turkey	Şengül Saime Anagün. Nurhan Atalay. Zeynep Kılıç & Serhat Yaşar	Öğretmen adaylarına yönelik 21. yüzyıl becerileri yeterlilik algıları ölçeğinin geliştirilmesi: geçerlik ve güvenirlik çalışması
EDU_L1_TUR3	2017	Education and Science	Turkey	Gazanfer Anlı & Ali Haydar Şar	Boyun eğici davranışları azaltmaya yönelik bilişsel davranışçı psiko-eğitim programının kişilerarası duyarlılık, öfke ve düşmanlık (hostilite) üzerine etkisi
EDU_L1_TUR4	2016	İnönü University Journal of the Faculty of Education	Turkey	Cemal Bıyıklı	Öğrencilerin öğrenme yaklaşımları ile ders çalışma süreleri arasındaki ilişki
EDU_L1_TUR5	2018	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Esin Bağcan Büyükturan	Anketlerde dereceleme türü tepki kategorilerinde yanıtlayıcılar tarafından algılanma biçimleri
EDU_L1_TUR6	2018	Ege Journal of Education	Turkey	Volkan Demir & Nazire Gündoğan	Bilinçli farkındalık temelli bilişsel terapi programının üniversite öğrencilerinin duygu düzenleme güçlüklerini azaltmadaki etkisi
EDU_L1_TUR7	2016	Ondokuz Mayıs University Journal of Faculty of Education	Turkey	Ümit Doğan & Hüseyin Aslan	Özel eğitim kurumlarında çalışan müdürlerin hizmetkâr liderlik davranışları ile öğretmenlerin örgütsel adanmışlık düzeyleri arasındaki ilişki
EDU_L1_TUR8	2017	Ege Journal of Education	Turkey	Burcu Karaşar & Selahaddin Öğülmüş	Sosyal onay ihtiyacı ölçeği: geçerlik ve güvenirlik analizi
EDU_L1_TUR9	2018	Ege Journal of Education	Turkey	Derya Şahin Ası & Şakire Ocak Karabay	Öğrenci – öğretmen ilişki ölçeği kısa formunun Türkçe'ye uyarlanması
EDU_L1_TUR10	2018	Ankara University Journal of Faculty of Educational Sciences	Turkey	Ramazan Yılmaz & Yaşar Murat Beşkaya	Eğitim yöneticilerinin yaşam boyu öğrenme eğilimleri ile bireysel yenilikçilik düzeylerinin incelenmesi

Discipline	Year	Journal	Country	Authors	Title
LING_L1_TUR1	2015	Ankara University Journal of Faculty of Educational Sciences	Turkey	Gülten Genç	Bağımsız yabancı dil öğrenme. öğrenme stilleri ve bazı değişkenler arasındaki ilişkinin araştırılması
LING_L1_TUR2	2013	İnönü University Journal of the Faculty of Education	Turkey	Eyüp İzci & Hatice Özgan Sucu	İlköğretim 8. sınıf öğrencilerinin yabancı dil öğrenirken kullandıkları öğrenme stratejileri (Nevşehir ili örneği)
LING_L1_TUR3	2015	Education and Science	Turkey	Mahir Kalfa	Yabancı dil olarak Türkçe öğreten öğretmenlerin alan yeterliklerine dayalı gereksinim çözümlemesi
LING_L1_TUR4	2017	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Şefik Kartal & Ramazan Özbek	İşbirlikli öğrenme yönteminin öğrencilerin İngilizce dersine yönelik tutumlarına ve başarılarına etkileri
LING_L1_TUR5	2014	Education and Science	Turkey	Orhan Kocaman & Gonca Kızılkaya Cumaoglu	Eğitsel yazılım (Denis) ve oyunlarla İngilizce kelime öğretiminin kelime öğrenme stratejilerine ve başarıya etkisi
LING_L1_TUR6	2016	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Erdoğan Kurt & M. Bahaddin Acat	Yabancı dil olarak İngilizce öğrenen lise öğrencilerinin özerklik algılarının incelenmesi
LING_L1_TUR7	2014	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Hasan Basri Memduhoğlu. Serkan Çiftçi & Halil İbrahim Özok	İşbirlikli öğrenmenin yabancı dil öğretimindeki önemine ilişkin öğretmen görüşleri
LING_L1_TUR8	2015	Education and Science	Turkey	Mustafa Öztürk & Ali Yıldırım	İngilizce öğretim elemanlarının dil öğrenme süreçlerine ilişkin bilişleri ve bu bilişleri etkileyen faktörler
LING_L1_TUR9	2018	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Harun Şahin & Güngör Kil	Yabancı dil öğretiminde bellek destekleyicilerden anahtar sözcük yönteminin öğrencilerin sözcük dağarcığını geliştirmeye ve kalıcılığa etkisi
LING_L1_TUR10	2018	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Kübra Şengül	Dil partnerliği (tandem) yönteminin Türkçe öğretmeni adaylarının kültürel zekâlarına etkisi: karma yöntemli bir yaklaşım

Discipline	Year	Journal	Country	Authors	Title
SPE_L1_T UR1	2018	Ondokuz Mayıs University Journal of Faculty of Education	Turkey	Aydan Aydın & Cennet Tuba Arslantürk Egin	Zihin engelli. serebral palsili ve otizmli çocuk ebeveynlerinin psikolojik dayanıklılıkları ile ebeveynlik algılarının karşılaştırılması
SPE_L1_T UR2	2016	Education and Science	Turkey	Abdülkadir Bahar, Ahmet İhsan Kaya & Feyza Bahar	Üstün zekâlı olan ve olmayan ilkokul öğrencilerinin okuma tutum ve tercihlerinin karşılaştırılması
SPE_L1_T UR3	2017	İnönü University Journal of the Faculty of Education	Turkey	Hatice Bakkaloğlu. Özlem Altındağ Kumaş & Pervin Naile Aykaç	Okul öncesi kaynaştırma sınıflarının niteliğini öğretmenler ve bağımsız gözlemciler nasıl değerlendiriyor?
SPE_L1_T UR4	2016	Education and Science	Turkey	Salih Çakmak. Tamer Karakoç & Pınar Şafak	Görme engelliler okulundaki ve kaynaştırma eğitim ortamlarındaki az gören öğrencilerin işlevsel görme becerilerinin karşılaştırılması
SPE_L1_T UR5	2015	Education and Science	Turkey	Murat Doğan	İşitme engelli çocuklarda zeka: demografik. eğitimsel ve odyolojik özelliklerle bir değerlendirme
SPE_L1_T UR6	2017	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Erkan Efiltili & Yahya Çıkılı	Özel eğitim bölümü öğrencilerinin benlik saygısı ile mesleki benlik saygısının incelenmesi
SPE_L1_T UR7	2017	Pamukkale University Journal of Education	Turkey	Abdullah Görmez & İlknur Çiftçi Tekinarslan	Kaynaştırma sınıflarındaki özel gereksinimli olan ve olmayan öğrencilerin yalnızlığını yordamada algılanan sosyal desteğin etkisi
SPE_L1_T UR8	2018	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Tuğba Gülsöz & Yahya Çıkılı	Otizm spektrum bozukluğu olan öğrencilere soğuk içecek hazırlama ve sunma becerisinin video model ile eğitimin etkililiği
SPE_L1_T UR9	2017	İnönü University Journal of the Faculty of Education	Turkey	Mustafa Serdar Köksal & Gamze Akkaya	Üstün yetenekli öğrencilerin sözel kısa süreli hafızalarının incelenmesi
SPE_L1_T UR10	2018	Ankara University Journal of Faculty of Educational Sciences	Turkey	Mehmet İkbâl Yetişir. Kaan Batı. Mustafa Kahyaoğlu & Fırat Kıyas Birel	Dezavantajlı öğrencilerin fen okuryazarlık performanslarının duyuşsal özellikleriyle ilişkisinin incelenmesi

Appendix 4. The Coding Protocol

Results		
Code	Communicative function	
M1 M1S1 M1S2	Move 1- Preparing the Study: It provides general information about the study and the research objectives.	Step 1- Providing general orientation: It introduces the study or give brief information to the readers about the flow of the results section. Step 2- Stating study specifics: It reminds the readers of their research questions and hypotheses briefly before reporting results.
M2 M2S1 M2S2 M2S3	Move 2- Describing the Study: It provides methodological procedures and information that had already been mentioned in the previous sections of RAs by preparing the data, describing the data analysis and giving rationales for the data analysis.	Step 1- Preparing the data: It describes the data and identify variables. Step 2- Describing the data analysis: It reminds readers of the research methodology of the study before presenting the results, and indicates the details of the data analysis. Step 3-Rationalizing/Criticizing data processing/analysis: It provides justifications for or/and criticisms of the data analysis.
M3 M3S1 M3S2 M3S3 M3S4 M3S5 M3S6 M3S7 M3S8	Move 3- Reporting and Commenting on the Results: It presents and interprets results in a wide range of ways.	Step 1- Reporting results: It reports general and specific findings in quantitative and qualitative research studies. Step 2- Referring to table/figure: It reports the results by referring to the tables and figures. Step 3- Comparing results: It compares the results within the study rather than with the results of previous studies. Step 4- Explicating/Evaluating results: It clarifies and interprets the results after reporting the results. Step 5- Clarifying expectations: It aims to provide authors' expectations regarding the results of the study. Step 6- Acknowledging limitations: It accepts the limitations of the results. Step 7- Giving personal comments on results/Giving suggestions for further studies: It gives authors' personal comments on the results and give their suggestions for further studies. Step 8- Summarizing results/Highlighting principal findings: It summarizes the results and emphasizes the main findings.
M4 M4S1 M4S2 M4S3	Move 4- Establishing the Study: It discusses the results of the study with theoretical background, previous studies and establish the meaning with evidence.	Step 1- Providing theoretical/background information: It provides a conceptual background for the results of the study. Step 2- Comparing with previous research: It compares the results of the study with the results of the previous studies. Step 3- Establishing the meaning of results with evidence: It indicates the significance of the study with evidence.

Appendix 5. Results of Normality Test and Skewness-Kurtosis Values for the Distribution of Normality

Group		Statistic	Std. Error
M1S1	L1_ENG	Mean	.70
		Skewness	2.484
		Kurtosis	5.553
	L1_TUR	Mean	.85
		Skewness	.933
		Kurtosis	.148
	L2_ENG	Mean	.65
		Skewness	2.890
		Kurtosis	9.566
M1S2	L1_ENG	Mean	.43
		Skewness	1.762
		Kurtosis	1.969
	L1_TUR	Mean	.43
		Skewness	2.892
		Kurtosis	7.937
	L2_ENG	Mean	.83
		Skewness	1.818
		Kurtosis	2.418

Tests of Normality

Group		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
M1S1	L1_ENG	.383	40	.000	.544	40	.000
	L1_TUR	.247	40	.000	.802	40	.000
	L2_ENG	.326	40	.000	.576	40	.000
M1S2	L1_ENG	.449	40	.000	.580	40	.000
	L1_TUR	.494	40	.000	.431	40	.000
	L2_ENG	.368	40	.000	.642	40	.000

a. Lilliefors Significance Correction

Descriptives

Group		Statistic	Std. Error
M2S1	L1_ENG	Mean	1.45
		Skewness	2.423
		Kurtosis	5.879
	L1_TUR	Mean	.75
		Skewness	3.562
		Kurtosis	15.065
	L2_ENG	Mean	.80
		Skewness	6.221
		Kurtosis	39.076
M2S2	L1_ENG	Mean	6.25
		Skewness	1.716
		Kurtosis	4.442
	L1_TUR	Mean	5.43
		Skewness	.923
		Kurtosis	-.177
	L2_ENG	Mean	5.13
		Skewness	2.914
		Kurtosis	11.097

M2S3	L1_ENG	Mean	3.78	1.147
		Skewness	3.594	.374
		Kurtosis	14.970	.733
	L1_TUR	Mean	1.50	.404
		Skewness	1.686	.374
		Kurtosis	1.620	.733
	L2_ENG	Mean	2.00	.661
		Skewness	3.807	.374
		Kurtosis	16.744	.733

Tests of Normality

Group	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
M2S1	L1_ENG	.363	40	.000	.573	40
	L1_TUR	.430	40	.000	.466	40
	L2_ENG	.431	40	.000	.191	40
M2S2	L1_ENG	.154	40	.017	.855	40
	L1_TUR	.182	40	.002	.849	40
	L2_ENG	.236	40	.000	.686	40
M2S3	L1_ENG	.301	40	.000	.550	40
	L1_TUR	.347	40	.000	.643	40
	L2_ENG	.350	40	.000	.506	40

a. Lilliefors Significance Correction

Descriptives^a

Group		Statistic	Std. Error
M3S1	L1_ENG	Mean	27.90
		Skewness	2.084
		Kurtosis	4.220
	L1_TUR	Mean	17.98
		Skewness	.737
		Kurtosis	.095
	L2_ENG	Mean	23.85
		Skewness	1.918
		Kurtosis	4.982
M3S2	L1_ENG	Mean	4.33
		Skewness	2.088
		Kurtosis	4.409
	L1_TUR	Mean	8.23
		Skewness	1.413
		Kurtosis	2.276
	L2_ENG	Mean	4.28
		Skewness	1.729
		Kurtosis	2.943

M3S3	L1_ENG	Mean	8.13	1.227
		Skewness	1.155	.374
		Kurtosis	.630	.733
	L1_TUR	Mean	5.38	1.635
		Skewness	3.764	.374
		Kurtosis	14.291	.733
	L2_ENG	Mean	5.88	1.083
		Skewness	1.606	.374
		Kurtosis	2.082	.733
M3S4	L1_ENG	Mean	5.53	.716
		Skewness	.968	.374
		Kurtosis	.694	.733
	L1_TUR	Mean	3.53	.736
		Skewness	1.165	.374
		Kurtosis	.042	.733
	L2_ENG	Mean	2.83	.742
		Skewness	3.232	.374
		Kurtosis	12.664	.733
M3S5	L1_ENG	Mean	1.18	.379
		Skewness	2.139	.374
		Kurtosis	3.685	.733
	L1_TUR	Mean	.10	.060
		Skewness	4.107	.374
		Kurtosis	17.568	.733
	L2_ENG	Mean	.08	.055
		Skewness	4.983	.374
		Kurtosis	25.614	.733
M3S6	L1_ENG	Mean	.43	.255
		Skewness	5.635	.374
		Kurtosis	33.703	.733
	L2_ENG	Mean	.03	.025
		Skewness	6.325	.374
		Kurtosis	40.000	.733
M3S7	L1_ENG	Mean	.60	.220
		Skewness	2.813	.374
		Kurtosis	7.663	.733
	L1_TUR	Mean	.03	.025
		Skewness	6.325	.374
		Kurtosis	40.000	.733
	L2_ENG	Mean	.13	.102
		Skewness	5.831	.374
		Kurtosis	35.107	.733
M3S8	L1_ENG	Mean	1.55	.612
		Skewness	3.997	.374
		Kurtosis	17.579	.733
	L1_TUR	Mean	.18	.079
		Skewness	2.937	.374
		Kurtosis	7.995	.733
	L2_ENG	Mean	.78	.552
		Skewness	6.066	.374
		Kurtosis	37.682	.733

Tests of Normality ^b							
	Group	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
M3S1	L1_ENG	.223	40	.000	.743	40	.000
	L1_TUR	.131	40	.081	.940	40	.034
	L2_ENG	.151	40	.022	.826	40	.000
M3S2	L1_ENG	.231	40	.000	.751	40	.000
	L1_TUR	.156	40	.016	.878	40	.000
	L2_ENG	.261	40	.000	.797	40	.000
M3S3	L1_ENG	.206	40	.000	.872	40	.000
	L1_TUR	.326	40	.000	.473	40	.000
	L2_ENG	.233	40	.000	.795	40	.000
M3S4	L1_ENG	.182	40	.002	.915	40	.005
	L1_TUR	.256	40	.000	.763	40	.000
	L2_ENG	.285	40	.000	.609	40	.000
M3S5	L1_ENG	.413	40	.000	.567	40	.000
	L1_TUR	.529	40	.000	.292	40	.000
	L2_ENG	.535	40	.000	.226	40	.000
M3S6	L1_ENG	.429	40	.000	.278	40	.000
	L2_ENG	.538	40	.000	.147	40	.000
M3S7	L1_ENG	.417	40	.000	.501	40	.000
	L1_TUR	.538	40	.000	.147	40	.000
	L2_ENG	.526	40	.000	.197	40	.000
M3S8	L1_ENG	.344	40	.000	.446	40	.000
	L1_TUR	.512	40	.000	.395	40	.000
	L2_ENG	.413	40	.000	.224	40	.000

a. Lilliefors Significance Correction

Descriptives				
Group		Statistic		Std. Error
M4S1	L1_ENG	Mean	.58	.205
		Skewness	2.488	.374
		Kurtosis	5.668	.733
	L1_TUR	Mean	.70	.346
		Skewness	4.156	.374
		Kurtosis	19.227	.733
	L2_ENG	Mean	.78	.441
		Skewness	4.724	.374
		Kurtosis	24.188	.733
M4S2	L1_ENG	Mean	.90	.293
		Skewness	3.449	.374
		Kurtosis	14.814	.733
	L1_TUR	Mean	.58	.478
		Skewness	6.126	.374
		Kurtosis	38.178	.733
	L2_ENG	Mean	.23	.127
		Skewness	3.986	.374
		Kurtosis	15.950	.733
M4S3	L1_ENG	Mean	.48	.212
		Skewness	3.021	.374
		Kurtosis	8.676	.733
	L1_TUR	Mean	.10	.060

L2_ENG		Skewness	4.107	.374
		Kurtosis	17.568	.733
		Mean	.10	.060
		Skewness	4.107	.374
		Kurtosis	17.568	.733

Tests of Normality

Group		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
M4S1	L1_ENG	.446	40	.000	.513	40	.000
	L1_TUR	.476	40	.000	.371	40	.000
	L2_ENG	.460	40	.000	.316	40	.000
M4S2	L1_ENG	.337	40	.000	.545	40	.000
	L1_TUR	.500	40	.000	.191	40	.000
	L2_ENG	.511	40	.000	.317	40	.000
M4S3	L1_ENG	.489	40	.000	.411	40	.000
	L1_TUR	.529	40	.000	.292	40	.000
	L2_ENG	.529	40	.000	.292	40	.000

a. Lilliefors Significance Correction

Descriptives

Group		Statistic		Std. Error
M1	L1_ENG	Mean	1.1250	.27547
		Skewness	1.789	.374
		Kurtosis	2.730	.733
	L1_TUR	Mean	1.2750	.24281
		Skewness	1.657	.374
		Kurtosis	2.823	.733
	L2_ENG	Mean	1.4750	.35624
		Skewness	2.512	.374
		Kurtosis	7.788	.733
M2	L1_ENG	Mean	11.4750	1.73279
		Skewness	1.953	.374
		Kurtosis	4.592	.733
	L1_TUR	Mean	7.6750	1.42342
		Skewness	1.464	.374
		Kurtosis	2.114	.733
	L2_ENG	Mean	7.9250	1.80859
		Skewness	3.149	.374
		Kurtosis	12.605	.733

M3	L1_ENG	Mean	49.6250	5.75144
		Skewness	1.840	.374
		Kurtosis	3.198	.733
	L1_TUR	Mean	35.4000	3.26850
		Skewness	1.059	.374
		Kurtosis	1.333	.733
	L2_ENG	Mean	37.8250	4.60001
		Skewness	1.822	.374
		Kurtosis	4.426	.733
M4	L1_ENG	Mean	1.9500	.55116
		Skewness	2.395	.374
		Kurtosis	6.163	.733
	L1_TUR	Mean	1.3750	.69401
		Skewness	4.587	.374
		Kurtosis	22.910	.733
	L2_ENG	Mean	1.1000	.48145
		Skewness	4.145	.374
		Kurtosis	19.658	.733

Tests of Normality

	Group	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
M1	L1_ENG	.291	40	.000	.701	40	.000
	L1_TUR	.271	40	.000	.777	40	.000
	L2_ENG	.283	40	.000	.685	40	.000
M2	L1_ENG	.170	40	.005	.813	40	.000
	L1_TUR	.197	40	.000	.824	40	.000
	L2_ENG	.244	40	.000	.654	40	.000
M3	L1_ENG	.204	40	.000	.786	40	.000
	L1_TUR	.122	40	.140	.929	40	.015
	L2_ENG	.156	40	.015	.832	40	.000
M4	L1_ENG	.319	40	.000	.621	40	.000
	L1_TUR	.398	40	.000	.356	40	.000
	L2_ENG	.391	40	.000	.419	40	.000

a. Lilliefors Significance Correction

Appendix 6. List of L1 English RAs in the Pilot Study

Discipline	Year	Journal	Country	Authors	Title
COM_L1_E NG1	2017	Computers & Education	UK	Manal Alothman, Judy Robertson & Greg Michaelson	Computer usage and attitudes among Saudi Arabian undergraduate students
COM_L1_E NG2	2017	Journal of Computer Assisted Learning	USA	M. L. Barr	Encouraging college student active engagement in learning: Student response methods and anonymity
COM_L1_E NG3	2016	Computer Science Education	USA	Kathleen J. Lehman, Linda J. Sax & Hilary B. Zimmerman	Women planning to major in computer science: who are they and what makes them unique?
EDU_L1_E NG4	2017	American Educational Research Journal	USA	Eleanor R. Anderson	Accommodating change: relating fidelity of implementation to program fit in educational reforms
EDU_L1_E NG5	2016	American Educational Research Journal	USA	Yolanda Anyon, Anne Gregory, Susan Stone, Jordan Farrar, Jeffret M. Jenson, Jeanette McQueen, Barbara Downing, Eldridge Greer & John Simmons	Restorative interventions and school discipline sanctions in a large urban school district
EDU_L1_E NG6	2018	American Educational Research Journal	USA	Michael A. Gottfried & Jay Stratte Plasman	Linking the timing of career and technical education course taking with high school dropout and college-going behaviour
LING_L1_E ENG7	2018	Language Learning	USA	Lynne E. Bernstein	Response errors in females' and males' sentence lip reading necessitate structurally different models for predicting lip reading accuracy
LING_L1_E ENG8	2016	English for Specific Purposes	UK	Philip Nathan	Analysing options in pedagogical business case reports: genre, process and language
LING_L1_E ENG9	2017	English for Specific Purposes	UK & Canada	Heather Rolls & Michael P. H. Rodgers	Science-specific technical vocabulary in science fiction-fantasy texts: a case for 'language through literature'
SPE_L1_E NG10	2016	The Journal of Special Education	USA	Lynn Ahlgrim-Delzell, Diane M. Browder, Leah Wood, Carol Stanger, Angela I. Preston & Amy Kemp-Inman	Systematic instruction phonics skills using an ipad for students with developmental disabilities who are aac users
SPE_L1_E NG11	2016	British Journal of Special Education	UK	Sharon Arnold & Phil Reed	Reading assessments for students with asd: a survey of summative reading assessments used in special educational schools in the UK
SPE_L1_E NG12	2017	British Journal of Special Education	UK	Caroline Bark & Greg Brooks	How can children with mild literacy difficulties be supported at the transition to secondary school? A small-scale quasi-experimental study

Appendix 7. List of L2 English RAs in the Pilot Study

Discipline	Year	Journal	Country	Authors	Title
COM_L2_ ENG1	2017	British Journal of Educational Technology	Turkey	Oğuz Ak & Birgül Kutlu	Comparing 2D and 3D game-based learning environments in terms of learning gains and student perceptions
COM_L2_ ENG2	2016	British Journal of Educational Technology	Turkey	Şerife Ak	The role of technology-based scaffolding in problem-based online asynchronous discussion
COM_L2_ ENG3	2017	Education and Science	Turkey	Derya Orhan Göksün & Adile Aşkın Kurt	The relationship between pre-service teachers' use of 21st century learner skills and 21st century teacher skills
EDU_L2_ ENG4	2015	TOJET	Turkey	Ömür Akdemir, Ömer F. Vural & Özgür M. Çolakoğlu	Prospective teachers' likelihood of performing unethical behaviors in the real and virtual environments
EDU_L2_ ENG5	2018	TOJET	Turkey	Yavuz Akpınar & Özlem Şengül	Two modalities of the contextualized courseware in three modalities of classroom use
EDU_L2_ ENG6	2017	TOJET	Turkey	İ. Bakır Arabacı	Investigation faculty of education students' cyberloafing behaviors in terms of various variables
LING_L2_ ENG7	2017	İnönü University Journal of the Faculty of Education	Turkey	Aslı Akyüz, Ayfer Tanış, Eftima Khalil, Özdenur Ardıç & Enisa Mede	Effects of videos on students' knowledge of the target language culture
LING_L2_ ENG8	2016	İnönü University Journal of the Faculty of Education	Turkey	Hakan Aydoğan	A psycholinguistic case study: the relations of learned helplessness, locus of control, and attitudes towards English with academic success
LING_L2_ ENG9	2018	TOJET	Turkey	Ali Bostancıoğlu	Online communities of practice in the service of teachers' technology professional development: the case of webhead in actions
SPE_L2_E NG10	2017	TOJET	Turkey	Melih Cattık & Serhat Odluyurt	The effectiveness of the smart board-based small group graduated guidance instruction on digital gaming and observational learning skills of children with autism spectrum disorder
SPE_L2_E NG11	2017	Educational Sciences: Theory & Practice	Turkey	Ş. Şenay İlik & Hakan Sarı	The training program for individualized education programs (IEPs): its effect on how inclusive education teachers perceive their competencies in devising IEPs
SPE_L2_E NG12	2017	TOJET	Turkey	H. Pelin Karasu	The written expression performance of students with hearing loss: results from an implementation of the auditory-oral approach

Appendix 8. List of L1 Turkish RAs in the Pilot Study

Discipline	Year	Journal	Country	Authors	Title
COM_L1_T UR1	2016	Pamukkale University Journal of Education	Turkey	Şengül Saime Anagün. Nurhan Atalay. Zeynep Kılıç & Serhat Yaşar	Öğretmen adaylarına yönelik 21. yüzyıl becerileri yeterlilik algıları ölçeğinin geliştirilmesi: geçerlik ve güvenirlik çalışması
COM_L1_T UR2	2017	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Cem Aslan & Adnan Kan	Yardımcı teknolojilere yönelik tutum ölçeği
COM_L1_T UR3	2018	İnönü University Journal of the Faculty of Education	Turkey	Barış Çukurbaşı & Mübin Kıyıcı	Öğretmen adaylarının elektronik portfolyoya yönelik görüşlerinin incelenmesi: weebly örneği
EDU_L1_TU R4	2015	Education and Science	Turkey	Ahmet Akın & Ümran Akın	Arkadaşlık kalitesi ve öznel mutluluk: öznel zindeliğin aracılık rolü
EDU_L1_TU R5	2018	Education and Science	Turkey	Erdem Aksoy. Ufuk Akbaş & Gölge Seferoğlu	Öğretme yaklaşımları envanterinin Türkçe' ye uyarlanması ve Türkiye'deki öğretim elemanlarının öğretme yaklaşımlarının incelenmesi
EDU_L1_TU R6	2016	Ege Journal of Education	Turkey	Yağmur Amanvermez & Serkan Denizli	İş ve aile çatışmasını yönetme öz- yeterliliği ölçeği Türkçe formunun uyarlanması: yapı geçerliliği ve güvenirlik çalışması
LING_L1_T UR7	2017	İnönü University Journal of the Faculty of Education	Turkey	Seda Aktı Aslan & Eyüp İzci	Ortaokul İngilizce öğretim programının öğretmen görüşlerine göre bağlam. girdi. süreç ve ürün (CIPP) modeli ile değerlendirilmesi
LING_L1_T UR8	2015	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Hakan Bayezit & Feryal Çubukçu	Yabancı dil olarak Türkçe ve İngilizce ders kitaplarındaki öğrenme stratejilerinin kullanımı
LING_L1_T UR9	2018	Education and Science	Turkey	Gülşat Bican & Necati Demir	Danimarka'da Türkçe-Danca konuşan öğrencilerin dil baskınlığının iki dillilik temelinde incelenmesi
SPE_L1_TU R10	2016	İnönü University Journal of the Faculty of Education	Turkey	Mahmut Açık	İşitme engelli öğrencilerin beden eğitimi öğretmenlerinin mesleki becerilerine ilişkin değerlendirmeleri
SPE_L1_TU R11	2015	Education and Science	Turkey	Banu Altunay Arslantekin	Görme yetersizliği olan öğrencilerin bağımsız hareket becerilerinin değerlendirilmesi
SPE_L1_TU R12	2016	Abant İzzet Baysal University Journal of Faculty of Education	Turkey	Salih Çakmak. Tamer Karakoç & Pınar Şafak	Az gören öğrencilerin görme becerileri ile ilgili farkındalık düzeylerinin belirlenmesi
SPE_L1_TU R13 (Excluded from the pilot study)	2018	Ege Journal of Education	Turkey	Güzin Karasu. Yıldız Uzuner & Ayşe Beral	İşitme engelli üniversite öğrencilerinin yazma sürecinde uygulanan etkinlik ve stratejilerinin incelenmesi

Appendix 9. Results of Cohen's Kappa Coefficients in the Pilot Study

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M1	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	0.5	99.74	0	99.74	0.26	0.26	0
M1	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	99.74	0	99.74	0.26	0.26	0
M1	a- İlik et al. - 2017 - KUYEB - Spe L2	0.5	99.84	0	99.84	0.16	0.16	0
M1	a- Karasu - 2017 - TOJET - Spe L2	0.5	99.83	0	99.83	0.17	0.17	0
M1	a- Karasu - 2017 - TOJET - Spe L2	0.5	99.91	0	99.91	0.09	0.09	0
M1\M1S1	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	0.5	99.69	0	99.69	0.31	0.31	0
M1\M1S1	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	0.5	99.74	0	99.74	0.26	0.26	0
M1\M1S1	a- İlik et al. - 2017 - KUYEB - Spe L2	0.5	99.84	0	99.84	0.16	0.16	0
M1\M1S1	a- Karasu - 2017 - TOJET - Spe L2	0.5	99.91	0	99.91	0.09	0.09	0
M1\M1S1	a- Karasu - 2017 - TOJET - Spe L2	0.5	99.92	0	99.92	0.08	0.08	0
M1\M1S2	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	0.5	99.69	0	99.69	0.31	0	0.31
M1\M1S2	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	99.74	0	99.74	0.26	0.26	0
M1\M1S2	a- Karasu - 2017 - TOJET - Spe L2	0.5	99.91	0	99.91	0.09	0.09	0
M2	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	0.5	95.65	0	95.65	4.35	4.35	0
M2	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	92.24	0	92.24	7.76	7.76	0
M2	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	91.38	0	91.38	8.62	8.62	0
M2	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	0.5	94.83	0	94.83	5.17	5.17	0
M2	a- Çattık et al. - 2017 - TOJET - Spe L2	0.5	99.85	0	99.85	0.15	0.15	0
M2	a- İlik et al. - 2017 - KUYEB - Spe L2	0.5	87.41	0	87.41	12.59	12.59	0
M2	a- Karasu - 2017 - TOJET - Spe L2	0.5	96.07	0	96.07	3.93	3.93	0
M2\M2S1	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	0.5	99.48	0	99.48	0.52	0.52	0
M2\M2S1	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	0.5	96	0	96	4	4	0
M2\M2S1	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	94.42	0	94.42	5.58	5.58	0
M2\M2S1	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	99.79	0	99.79	0.21	0.21	0
M2\M2S1	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	0.5	94.83	0	94.83	5.17	5.17	0
M2\M2S1	a- İlik et al. - 2017 - KUYEB - Spe L2	0.5	99.52	0	99.52	0.48	0.48	0
M2\M2S1	a- Karasu - 2017 - TOJET - Spe L2	0.5	96.77	0	96.77	3.23	3.23	0
M2\M2S2	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	0.5	99.65	0	99.65	0.35	0.35	0
M2\M2S2	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	97.82	0	97.82	2.18	2.18	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M2\M2S2	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	91.58	0	91.58	8.42	8.42	0
M2\M2S2	a -Çattık et al. - 2017 - TOJET - Spe L2	0.5	99.85	0	99.85	0.15	0.15	0
M2\M2S2	a- İlik et al. - 2017 - KUYEB - Spe L2	0.5	87.9	0	87.9	12.1	12.1	0
M2\M2S2	a- Karasu - 2017 - TOJET - Spe L2	0.5	99.3	0	99.3	0.7	0.7	0
M3	a- Açak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	0.5	99.75	0	99.75	0.25	0.25	0
M3	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	0.5	99.83	0	99.83	0.17	0.17	0
M3	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	0.5	99.82	0	99.82	0.18	0.18	0
M3	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	99	0	99	1	1	0
M3	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	97.56	0	97.56	2.44	2.44	0
M3	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	98.69	0	98.69	1.31	1.31	0
M3	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	97.65	0	97.65	2.35	2.35	0
M3	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	0.5	91.49	0	91.49	8.51	8.51	0
M3	a- İlik et al. - 2017 - KUYEB - Spe L2	0.5	99.05	0	99.05	0.95	0.95	0
M3	a- Karasu - 2017 - TOJET - Spe L2	0.5	98.42	0	98.42	1.58	1.58	0
M3	a- Karasu - 2017 - TOJET - Spe L2	0.5	99.5	0	99.5	0.5	0.5	0
M3\M3S1	a- Açak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	0.5	99.75	0	99.75	0.25	0.25	0
M3\M3S1	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	99.8	0	99.8	0.2	0.2	0
M3\M3S1	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	99.18	0	99.18	0.82	0.82	0
M3\M3S1	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	99.27	0	99.27	0.73	0.73	0
M3\M3S1	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	0.5	91.49	0	91.49	8.51	8.51	0
M3\M3S1	a- İlik et al. - 2017 - KUYEB - Spe L2	0.5	99.7	0	99.7	0.3	0.3	0
M3\M3S1	a- Karasu - 2017 - TOJET - Spe L2	0.5	99.65	0	99.65	0.35	0.35	0
M3\M3S2	a- Açak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	0.5	99.77	0	99.77	0.23	0.23	0
M3\M3S2	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	0.5	99.84	0	99.84	0.16	0.16	0
M3\M3S2	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	0.5	99.83	0	99.83	0.17	0.17	0
M3\M3S2	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	99.82	0	99.82	0.18	0.18	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M3\M3S2	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	98.07	0	98.07	1.93	1.93	0
M3\M3S2	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	99.18	0	99.18	0.82	0.82	0
M3\M3S2	a- İlik et al. - 2017 - KUYEB - Spe L2	0.5	99.61	0	99.61	0.39	0.39	0
M3\M3S2	a- Karasu - 2017 - TOJET - Spe L2	0.5	98.87	0	98.87	1.13	1.13	0
M3\M3S3	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	0.5	99.82	0	99.82	0.18	0.18	0
M3\M3S3	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	99.69	0	99.69	0.31	0.31	0
M3\M3S3	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	99.37	0	99.37	0.63	0.63	0
M3\M3S3	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	99.51	0	99.51	0.49	0.49	0
M3\M3S3	a- İlik et al. - 2017 - KUYEB - Spe L2	0.5	99.73	0	99.73	0.27	0.27	0
M3\M3S3	a- Karasu - 2017 - TOJET - Spe L2	0.5	99.85	0	99.85	0.15	0.15	0
M3\M3S3	a- Karasu - 2017 - TOJET - Spe L2	0.5	99.55	0	99.55	0.45	0.45	0
M3\M3S4	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	99.49	0	99.49	0.51	0.51	0
M3\M3S5	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	0.5	99.53	0	99.53	0.47	0.47	0
M3\M3S1	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	0.7159	99.25	0.29	98.96	0.75	0	0.75
M3	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	0.8317	99.48	0.52	98.96	0.52	0	0.52
M2\M2S2	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	0.8972	99.67	0.65	99.02	0.33	0.06	0.27
M3	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	0.9022	99.54	0.98	98.56	0.46	0.34	0.13
M3\M3S2	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	0.9022	99.54	0.98	98.56	0.46	0.34	0.13
M3	a- attık et al. - 2017 - TOJET - Spe L2	0.9079	99.85	0.34	99.51	0.15	0	0.15
M3\M3S2	a- attık et al. - 2017 - TOJET - Spe L2	0.9079	99.85	0.34	99.51	0.15	0	0.15
M2	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	0.9366	99.23	2.84	96.39	0.77	0.52	0.25
M3	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	0.9468	99.84	0.66	99.18	0.16	0.16	0
M2	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	0.9515	99.71	1.42	98.28	0.29	0.06	0.24
M2\M2S2	a- attık et al. - 2017 - TOJET - Spe L2	0.9607	99.62	2.37	97.24	0.38	0.14	0.24
M2\M2S1	a- attık et al. - 2017 - TOJET - Spe L2	0.9723	99.69	2.8	96.89	0.31	0	0.31
M2\M2S2	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	0.978	99.75	2.84	96.91	0.25	0	0.25
M2	a- attık et al. - 2017 - TOJET - Spe L2	0.9793	99.59	5.32	94.27	0.41	0	0.41
M2\M2S1	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	0.9878	99.96	0.73	99.23	0.04	0.04	0
M1	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	0.9987	100	0.31	99.69	0	0	0

Code	File	Kappa	Agree- ment (%)	A and B (%)	Not A and Not B (%)	Disagree- ment (%)	A and Not B (%)	B and Not A (%)
M1	a- Açak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1	a- Açak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M1	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M1	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M1	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M1	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S1	a- Açak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Açak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M1\M1S1	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S1	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S1	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S1	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M1\M1S1	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M1\M1S1	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S2	a- Açıık - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a- Açıık - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M1\M1S2	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S2	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S2	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S2	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M1\M1S2	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M1\M1S2	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M1\M1S2	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S2	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S3	a- AÇAK - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- AÇAK - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- AÇAK - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M1\M1S3	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S3	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S3	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S3	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S3	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M1\M1S3	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M1\M1S3	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M1\M1S3	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S3	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S3	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S4	a- AÇAK - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S4	a- AÇAK - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S4	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1\M1S4	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1\M1S4	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M1\M1S4	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M1\M1S4	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S4	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S4	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S4	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S4	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S4	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S4	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S4	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S4	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M1\M1S4	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M1\M1S4	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M1\M1S4	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S5	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S5	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1\M1S5	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M1\M1S5	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S5	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S5	a- akmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S5	a -attık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S5	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M1\M1S5	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S6	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S6	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M1\M1S6	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M1\M1S6	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S6	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M1\M1S6	a- akmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S6	a -attık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M1\M1S6	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M1\M1S6	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M2	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M2	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M2	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M2	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M2	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M2	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M2	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M2	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M2	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M2	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M2	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S1	a- Açıık - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S1	a- Açıık - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S1	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M2\M2S1	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M2\M2S1	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M2\M2S1	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M2\M2S1	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S1	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S1	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S1	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S1	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S1	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S1	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S1	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S1	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M2\M2S1	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M2\M2S1	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S1	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S2	a- Açıık - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M2\M2S2	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S2	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M2\M2S2	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M2\M2S2	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M2\M2S2	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M2\M2S2	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S2	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S2	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S2	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S2	a- akmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S2	a- akmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S2	a- akmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S2	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S2	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M2\M2S2	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M2\M2S2	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S2	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S3	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S3	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S3	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M2\M2S3	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M2\M2S3	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M2\M2S3	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M2\M2S3	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S3	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S3	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S3	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M2\M2S3	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S3	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S3	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S3	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S3	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M2\M2S3	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M2\M2S3	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S3	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S4	a- AÇAK - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S4	a- AÇAK - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S4	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M2\M2S4	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M2\M2S4	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M2\M2S4	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M2\M2S4	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S4	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S4	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S4	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S4	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S4	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S4	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S4	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S4	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M2\M2S4	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M2\M2S4	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S4	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S5	a- AÇAK - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S5	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M2\M2S5	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M2\M2S5	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M2\M2S5	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S5	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S5	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S5	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M2\M2S5	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S6	a- AÇAK - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S6	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M2\M2S6	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M2\M2S6	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S6	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S6	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S6	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S6	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M2\M2S6	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S7	a- AÇAK - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S7	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M2\M2S7	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M2\M2S7	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S7	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M2\M2S7	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S7	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M2\M2S7	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M2\M2S7	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3	a- AÇAK - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M3	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M3	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M3	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M3	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M3	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M3	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M3	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M3	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M3	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3\M3S1	a- AÇAK - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S1	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M3\M3S1	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0.66	99.34	0	0	0
M3\M3S1	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M3\M3S1	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M3\M3S1	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M3\M3S1	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M3\M3S1	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M3\M3S1	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M3\M3S1	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M3\M3S1	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S1	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S1	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3\M3S1	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3\M3S1	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3\M3S1	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M3\M3S1	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M3\M3S1	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3\M3S1	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3\M3S2	a- AÇAK - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S2	a- AÇAK - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M3\M3S2	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M3\M3S2	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M3\M3S2	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M3\M3S2	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M3\M3S2	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M3\M3S2	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M3\M3S2	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S2	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S2	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S2	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3\M3S2	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3\M3S2	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M3\M3S2	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M3\M3S2	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3\M3S2	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3\M3S3	a- Açıak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S3	a- Açıak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S3	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M3\M3S3	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M3\M3S3	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M3\M3S3	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M3\M3S3	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S3	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S3	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3\M3S3	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3\M3S3	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M3\M3S4	a- Açıak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S4	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M3\M3S4	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M3\M3S4	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M3\M3S4	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S4	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3\M3S4	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M3\M3S4	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3\M3S5	a- Açıık - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S5	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M3\M3S5	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M3\M3S5	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M3\M3S5	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S5	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M3\M3S5	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M3\M3S5	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M4	a- Açıık - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M4	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M4	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M4	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M4	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M4	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M4	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M4	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M4	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M4\M4S1	a- Açıık - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M4\M4S1	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M4\M4S1	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M4\M4S1	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M4\M4S1	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M4\M4S1	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M4\M4S1	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M4\M4S1	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M4\M4S1	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M4\M4S2	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M4\M4S2	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M4\M4S2	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M4\M4S2	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M4\M4S2	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M4\M4S2	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M4\M4S2	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M4\M4S2	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M4\M4S2	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M4\M4S3	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M4\M4S3	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M4\M4S3	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M4\M4S3	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M4\M4S3	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M4\M4S3	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M4\M4S3	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M4\M4S3	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M4\M4S3	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M4\M4S4	a- Aak - 2016 - İnönü Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M4\M4S4	a- Ahlgrim-Delzell-2016-Journal of Special Education - Spe L1	1	100	0	100	0	0	0
M4\M4S4	a- Altunay Arslantekin - 2015 - Eğitim ve Bilim - Spe L1	1	100	0	100	0	0	0
M4\M4S4	a- Arnold_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M4\M4S4	a- Bark_et_al-2016-British_Journal_of_Special_Education - Spe L1	1	100	0	100	0	0	0
M4\M4S4	a- Çakmak et al. - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Spe L1	1	100	0	100	0	0	0
M4\M4S4	a -Çattık et al. - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0
M4\M4S4	a- İlik et al. - 2017 - KUYEB - Spe L2	1	100	0	100	0	0	0
M4\M4S4	a- Karasu - 2017 - TOJET - Spe L2	1	100	0	100	0	0	0

Appendix 10. Frequency of Move Patterns of the Results Sections in the Pilot Study

Move Patterns		COM			EDU			LANG			SPE			TOTAL
		L1_ENG	L2_ENG	L1_TUR	L1_ENG	L2_ENG	L1_TUR	L1_ENG	L2_ENG	L1_TUR	L1_ENG	L2_ENG	L1_TUR	
1	M3	0	1	0	0	1	1	0	0	0	0	1	1	5
2	M2-M3	4	1	3	2	2	1	2	0	0	1	2	1	19
3	M2-M4	0	0	0	0	0	0	0	0	0	0	0	1	1
4	M1-M3	1	0	0	0	0	1	1	0	3	0	1	2	9
5	M3-M2	0	0	1	0	2	0	0	0	0	0	1	0	4
6	M3-M4	0	0	0	0	0	0	1	0	0	1	0	0	2
7	M2-M1-M3	0	0	0	0	0	0	0	0	1	0	0	0	1
8	M2-M3-M2	0	0	0	0	0	0	0	1	0	0	0	0	1
9	M1-M2-M3	0	0	1	0	0	0	0	0	2	0	0	2	5
10	M1-M3-M4	0	0	0	0	0	0	0	1	0	0	0	0	1
11	M3-M2-M3	1	2	1	3	0	0	1	0	1	5	3	2	19
12	M3-M1-M3	0	0	0	0	1	0	0	0	0	0	0	0	1
13	M2-M1-M2-M3	0	0	1	0	0	0	0	0	0	0	0	0	1
14	M2-M1-M3-M1	0	0	0	0	1	0	0	0	0	0	0	0	1
15	M2-M3-M1-M3	0	0	0	0	0	0	0	1	0	0	0	0	1
16	M1-M2-M3-M2	1	0	0	0	0	0	0	0	0	0	0	0	1
17	M1-M3-M2-M3	0	1	1	1	1	1	0	1	0	0	0	0	6
18	M3-M2-M3-M1	1	0	0	0	0	0	0	0	0	0	0	0	1
19	M3-M4-M2-M3	0	0	0	2	0	0	0	0	0	0	0	0	2
20	M2-M3-M1-M2-M3	0	0	0	0	0	0	0	1	0	0	0	1	2
21	M2-M3-M1-M3-M2	0	1	0	0	0	0	0	0	0	0	0	0	1
22	M1-M2-M3-M1-M3	0	0	0	0	0	0	0	1	0	0	0	0	1
23	M1-M3-M2-M3-M4	0	0	0	0	0	1	0	0	0	0	0	0	1
24	M1-M4-M3-M2-M3	0	0	0	0	0	1	0	0	0	0	0	0	1
25	M3-M2-M3-M1-M3	0	0	0	0	0	0	0	0	0	1	0	0	1
26	M3-M2-M3-M4-M2	0	0	0	0	0	0	0	1	0	0	0	0	1
27	M3-M2-M3-M4-M3	0	0	0	0	0	1	1	0	0	0	0	0	2
28	M3-M1-M3-M1-M3	0	0	0	0	0	1	0	0	0	0	0	0	1
29	M2-M3-M1-M3-M2-M3	0	0	0	0	0	0	0	0	0	1	0	0	1

Move Patterns		COM			EDU			LANG			SPE			TOTAL
		L1_ENG	L2_ENG	L1_TUR	L1_ENG	L2_ENG	L1_TUR	L1_ENG	L2_ENG	L1_TUR	L1_ENG	L2_ENG	L1_TUR	
30	M1-M3-M2-M3-M4-M3	0	0	1	0	0	0	0	0	0	0	0	0	1
31	M1-M3-M4-M2-M3-M4	0	0	0	0	0	0	0	0	1	0	0	0	1
32	M3-M2-M1-M3-M2-M3	1	0	0	0	0	0	0	0	0	0	0	0	1
33	M3-M2-M3-M1-M2-M3	0	1	0	0	0	0	0	0	0	0	0	0	1
34	M3-M2-M2-M3-M1-M3	0	0	0	0	0	0	0	0	0	0	1	0	1
35	M2-M1-M3-M2-M3-M1-M3	0	0	0	0	0	0	0	1	0	1	0	0	2
36	M2-M3-M1-M2-M3-M4-M3	0	0	0	0	0	0	1	0	0	0	0	0	1
37	M1-M3-M2-M3-M4-M3-M2	1	0	0	0	0	0	0	0	0	0	0	0	1
38	M1-M2-M3-M1-M3-M2-M1	0	1	0	0	0	0	0	0	0	0	0	0	1
39	M1-M2-M3-M1-M3-M2-M3	0	0	0	0	1	0	0	0	0	0	0	0	1
40	M1-M2-M3-M4-M3-M2-M3	0	0	0	0	0	0	0	1	0	0	0	0	1
41	M1-M2-M4-M2-M3-M4-M3	0	0	0	0	0	1	0	0	0	0	0	0	1
42	M1-M3-M2-M3-M1-M2-M3	0	1	0	0	0	0	0	0	0	0	0	0	1
43	M3-M2-M3-M4-M1-M3-M2	0	0	0	1	0	0	0	0	0	0	0	0	1
44	M1-M2-M4-M2-M3-M4-M3-M2	0	0	0	0	0	1	0	0	0	0	0	0	1

Move Patterns		COM			EDU			LANG			SPE			TOTAL
		L1_ENG	L2_ENG	L1_TUR	L1_ENG	L2_ENG	L1_TUR	L1_ENG	L2_ENG	L1_TUR	L1_ENG	L2_ENG	L1_TUR	
45	M1-M4-M3-M1-M2-M3-M1-M3	0	0	0	0	0	0	0	0	1	0	0	0	1
46	M3-M1-M2-M3-M4-M3-M2-M3	0	0	0	0	0	0	0	0	0	0	1	0	1
47	M2-M3-M4-M3-M2-M3-M1-M2-M3	0	0	0	0	0	1	0	0	0	0	0	0	1
48	M2-M3-M4-M3-M2-M4-M2-M1-M2-M3	0	0	0	0	0	0	0	0	0	1	0	0	1
49	M1-M2-M3-M1-M3-M2-M3-M4-M2-M3	0	0	1	0	0	0	0	0	0	0	0	0	1
50	M2-M3-M1-M3-M2-M3-M4-M2-M3-M1-M3-M4-M3	0	0	0	0	0	0	1	0	0	0	0	0	1
51	M1-M3-M4-M3-M1-M3-M2-M4-M2-M3-M2-M4-M3	0	0	0	1	0	0	0	0	0	0	0	0	1
52	M1-M3-M1-M2-M3-M4-M1-M3-M4-M3-M2-M3-M4-M3	0	0	0	0	0	0	1	0	0	0	0	0	1

Move Patterns		COM			EDU			LANG			SPE			TOTAL
		L1_ENG	L2_ENG	L1_TUR	L1_ENG	L2_ENG	L1_TUR	L1_ENG	L2_ENG	L1_TUR	L1_ENG	L2_ENG	L1_TUR	
53	M1-M3- M4-M3- M1-M2- M3-M4- M1-M3- M4-M1- M3-M1- M4-M2	0	0	0	0	0	0	0	0	1	0	0	0	1
54	M2-M1- M2-M3- M1-M2- M3-M2- M4-M3- M4-M2- M1-M4- M3-M2- M4-M3- M2-M3	0	1	0	0	0	0	0	0	0	0	0	0	1
55	M1-M4- M2-M3- M2-M1- M3-M2- M3-M1- M2-M3- M1-M3- M4-M3- M1-M3- M2-M3	0	0	0	0	0	0	1	0	0	0	0	0	1
TOTAL		120												

Appendix 11. Results of Cohen's Kappa Coefficients in the Main Study

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M3\M3S3	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	0.495	98.88	0	98.88	1.12	0.76	0.37
M3\M3S2	a- Carlson_et_al-2017- Language_Learning - Lang L1	0.4997	99.87	0	99.87	0.13	0.11	0.02
M2\M2S2	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	0.5	99.43	0	99.43	0.57	0.57	0
M3\M3S2	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	0.5	99.56	0	99.56	0.44	0	0.44
M3\M3S3	a- Acar et al.-2017-Journal of Special Education- Spe L2	0.5	99.61	0	99.61	0.39	0.39	0
M3\M3S3	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	0.5	99.82	0	99.82	0.18	0.18	0
M3\M3S6	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	0.5	99.64	0	99.64	0.36	0.36	0
M3\M3S3	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	0.6561	99.04	0.23	98.81	0.96	0.79	0.18
M3\M3S3	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	0.7464	99.58	0.21	99.38	0.42	0.31	0.1
M2	a- Akgündüz et al.- 2017 - Education and Science - Com L2	0.7828	99.63	0.24	99.39	0.37	0.37	0
M2\M2S2	a- Akgündüz et al.- 2017 - Education and Science - Com L2	0.7828	99.63	0.24	99.39	0.37	0.37	0
M3\M3S3	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	0.8443	99.22	0.9	98.32	0.78	0.78	0
M3\M3S2	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	0.849	99.78	0.26	99.52	0.22	0.22	0
M3\M3S3	a- Carlson_et_al-2017- Language_Learning - Lang L1	0.8593	99.48	0.68	98.8	0.52	0.23	0.29
M3\M3S3	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	0.8679	99.47	0.75	98.72	0.53	0.53	0
M3\M3S1	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	0.8968	98.54	3.08	95.46	1.46	0	1.46
M3\M3S2	a- Akgündüz et al.- 2017 - Education and Science - Com L2	0.9002	99.23	1.63	97.6	0.77	0	0.77
M3\M3S1	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	0.9021	99.46	1.15	98.31	0.54	0.11	0.43
M3\M3S4	a- Bagley_et_al-2015- Journal_of_Computer_Assisted_Learning - Com L1	0.9075	99.89	0.23	99.66	0.11	0.11	0
M3\M3S4	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	0.9105	99.33	1.62	97.71	0.67	0.67	0
M2\M2S3	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	0.9143	99.41	1.49	97.91	0.59	0.02	0.57
M3\M3S1	a- Carlson_et_al-2017- Language_Learning - Lang L1	0.9168	99.25	1.99	97.26	0.75	0.29	0.46
M3\M3S4	a- Carlson_et_al-2017- Language_Learning - Lang L1	0.918	99.88	0.3	99.58	0.12	0.12	0
M3\M3S3	a- Bagley_et_al-2015- Journal_of_Computer_Assisted_Learning - Com L1	0.9392	99.82	0.67	99.14	0.18	0.18	0
M4	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	0.9485	99.96	0.16	99.8	0.04	0	0.04
M4\M4S2	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	0.9485	99.96	0.16	99.8	0.04	0	0.04

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M3\M3S1	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	0.9487	98.58	7.55	91.03	1.42	0.43	0.98
M3\M3S1	a- Bagley_et_al-2015-Journal_of_Computer_Assisted_Learning - Com L1	0.9514	99.44	2.81	96.63	0.56	0.27	0.29
M3\M3S1	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	0.9593	99.24	4.86	94.38	0.76	0.04	0.72
M3\M3S3	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	0.9669	99.93	0.48	99.45	0.07	0.05	0.02
M3\M3S1	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	0.9702	99.55	3.87	95.69	0.45	0.1	0.35
M3	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	0.971	99.48	4.76	94.72	0.52	0.22	0.31
M2\M2S2	a- Carlson_et_al-2017-Language_Learning - Lang L1	0.9722	99.95	0.42	99.53	0.05	0.05	0
M3\M3S1	a- Akgündüz et al.- 2017 - Education and Science - Com L2	0.9722	99.58	3.86	95.72	0.42	0.18	0.24
M3\M3S1	a- Acar et al.-2017-Journal of Special Education- Spe L2	0.9727	99.5	4.89	94.61	0.5	0.12	0.39
M3\M3S1	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	0.9729	99.55	4.37	95.18	0.45	0.04	0.41
M3\M3S2	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	0.9737	99.98	0.19	99.79	0.02	0.01	0.01
M2	a- Acar et al.-2017-Journal of Special Education- Spe L2	0.9738	99.88	1.09	98.8	0.12	0	0.12
M2\M2S2	a- Acar et al.-2017-Journal of Special Education- Spe L2	0.9738	99.88	1.09	98.8	0.12	0	0.12
M2\M2S1	a- Carlson_et_al-2017-Language_Learning - Lang L1	0.9742	99.95	0.45	99.5	0.05	0	0.05
M3\M3S3	a- Akgündüz et al.- 2017 - Education and Science - Com L2	0.9768	99.76	2.63	97.13	0.24	0.24	0
M3	a- Akgündüz et al.- 2017 - Education and Science - Com L2	0.9803	99.41	8.93	90.48	0.59	0	0.59
M3\M3S1	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	0.9812	99.82	2.44	97.38	0.18	0	0.18
M3	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	0.9814	99.83	2.29	97.54	0.17	0.03	0.14
M3\M3S2	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	0.9816	99.97	0.33	99.64	0.03	0	0.03
M3	a- Bagley_et_al-2015-Journal_of_Computer_Assisted_Learning - Com L1	0.9825	99.73	4.15	95.58	0.27	0.27	0
M2\M2S1	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	0.983	99.98	0.31	99.67	0.02	0.01	0.02
M3\M3S4	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	0.9842	99.98	0.34	99.64	0.02	0.01	0.02
M3	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	0.9892	99.76	6.21	93.55	0.24	0.04	0.2
M2	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	0.9913	99.97	0.95	99.02	0.03	0.02	0.02
M3	a- Acar et al.-2017-Journal of Special Education- Spe L2	0.9943	99.88	5.72	94.17	0.12	0.12	0
M2\M2S2	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	0.9956	99.99	0.64	99.35	0.01	0.01	0

Code	File	Kappa	Agree- ment (%)	A and B (%)	Not A and Not B (%)	Disagree- ment (%)	A and Not B (%)	B and Not A (%)
M3	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	0.9959	99.91	6.15	93.77	0.09	0.04	0.05
M2	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	0.9972	99.98	2.06	97.91	0.02	0.02	0
M3	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	0.9977	99.93	9.16	90.77	0.07	0.07	0
M3	a- Carlson_et_al-2017- Language_Learning - Lang L1	0.9987	99.98	3.72	96.26	0.02	0	0.02
M2	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	0.9993	100	0.27	99.73	0	0	0
M2	a- Bagley_et_al-2015- Journal_of_Computer_Assisted_L earning - Com L1	0.9993	100	0.24	99.76	0	0	0
M2\M2S2	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	0.9993	100	0.27	99.73	0	0	0
M2\M2S2	a- Bagley_et_al-2015- Journal_of_Computer_Assisted_L earning - Com L1	0.9993	100	0.24	99.76	0	0	0
M4	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	0.9998	100	1.19	98.81	0	0	0
M4\M4S1	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	0.9998	100	0.96	99.04	0	0	0
M1	a- Acar et al.-2017-Journal of Special Education- Spe L2	1	100	0	100	0	0	0
M1	a- Akgündüz et al.- 2017 - Education and Science - Com L2	1	100	0.43	99.57	0	0	0
M1	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	1	100	0.13	99.87	0	0	0
M1	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0.16	99.84	0	0	0
M1	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1	a- Bagley_et_al-2015- Journal_of_Computer_Assisted_L earning - Com L1	1	100	0	100	0	0	0
M1	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	1	100	0.16	99.84	0	0	0
M1	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0.19	99.81	0	0	0
M1	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	1	100	0	100	0	0	0
M1	a- Carlson_et_al-2017- Language_Learning - Lang L1	1	100	0	100	0	0	0
M1	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0	100	0	0	0
M1	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	1	100	0	100	0	0	0
M1\M1S1	a- Acar et al.-2017-Journal of Special Education- Spe L2	1	100	0	100	0	0	0
M1\M1S1	a- Akgündüz et al.- 2017 - Education and Science - Com L2	1	100	0	100	0	0	0
M1\M1S1	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	1	100	0.13	99.87	0	0	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M1\M1S1	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0	100	0	0	0
M1\M1S1	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Bagley_et_al-2015-Journal_of_Computer_Assisted_Learning - Com L1	1	100	0	100	0	0	0
M1\M1S1	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	1	100	0	100	0	0	0
M1\M1S1	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0.19	99.81	0	0	0
M1\M1S1	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	1	100	0	100	0	0	0
M1\M1S1	a- Carlson_et_al-2017-Language_Learning - Lang L1	1	100	0	100	0	0	0
M1\M1S1	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0	100	0	0	0
M1\M1S1	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	1	100	0	100	0	0	0
M1\M1S2	a- Acar et al.-2017-Journal of Special Education- Spe L2	1	100	0	100	0	0	0
M1\M1S2	a- Akgündüz et al.- 2017 - Education and Science - Com L2	1	100	0.43	99.57	0	0	0
M1\M1S2	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	1	100	0	100	0	0	0
M1\M1S2	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0.16	99.84	0	0	0
M1\M1S2	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M1\M1S2	a- Bagley_et_al-2015-Journal_of_Computer_Assisted_Learning - Com L1	1	100	0	100	0	0	0
M1\M1S2	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	1	100	0.16	99.84	0	0	0
M1\M1S2	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0	100	0	0	0
M1\M1S2	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	1	100	0	100	0	0	0
M1\M1S2	a- Carlson_et_al-2017-Language_Learning - Lang L1	1	100	0	100	0	0	0
M1\M1S2	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0	100	0	0	0
M1\M1S2	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	1	100	0	100	0	0	0
M2	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0.26	99.74	0	0	0
M2	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0.24	99.76	0	0	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M2	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0	100	0	0	0
M2	a- Carlson_et_al-2017- Language_Learning - Lang L1	1	100	1.06	98.94	0	0	0
M2	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0.55	99.45	0	0	0
M2	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	1	100	0	100	0	0	0
M2\M2S1	a- Acar et al.-2017-Journal of Special Education- Spe L2	1	100	0	100	0	0	0
M2\M2S1	a- Akgündüz et al.- 2017 - Education and Science - Com L2	1	100	0	100	0	0	0
M2\M2S1	a- Altınkurt et al. -2016 - Eğitim ve Bilim - Edu L1	1	100	0	100	0	0	0
M2\M2S1	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0	100	0	0	0
M2\M2S1	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M2\M2S1	a- Bagley_et_al-2015- Journal_of_Computer_Assisted_Learning - Com L1	1	100	0	100	0	0	0
M2\M2S1	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	1	100	0	100	0	0	0
M2\M2S1	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0	100	0	0	0
M2\M2S1	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0	100	0	0	0
M2\M2S1	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	1	100	0	100	0	0	0
M2\M2S2	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0.26	99.74	0	0	0
M2\M2S2	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0.14	99.86	0	0	0
M2\M2S2	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0	100	0	0	0
M2\M2S2	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0.55	99.45	0	0	0
M2\M2S2	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	1	100	0	100	0	0	0
M2\M2S3	a- Acar et al.-2017-Journal of Special Education- Spe L2	1	100	0	100	0	0	0
M2\M2S3	a- Akgündüz et al.- 2017 - Education and Science - Com L2	1	100	0	100	0	0	0
M2\M2S3	a- Altınkurt et al. -2016 - Eğitim ve Bilim - Edu L1	1	100	0	100	0	0	0
M2\M2S3	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0	100	0	0	0
M2\M2S3	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0.1	99.9	0	0	0

Code	File	Kappa	Agree- ment (%)	A and B (%)	Not A and Not B (%)	Disagree- ment (%)	A and Not B (%)	B and Not A (%)
M2\M2S3	a- Bagley_et_al-2015-Journal_of_Computer_Assisted_Learning - Com L1	1	100	0	100	0	0	0
M2\M2S3	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0	100	0	0	0
M2\M2S3	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	1	100	0	100	0	0	0
M2\M2S3	a- Carlson_et_al-2017-Language_Learning - Lang L1	1	100	0.13	99.87	0	0	0
M2\M2S3	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0	100	0	0	0
M2\M2S3	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	1	100	0	100	0	0	0
M3	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	1.39	98.61	0	0	0
M3	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	2.8	97.2	0	0	0
M3	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	1	100	7.21	92.79	0	0	0
M3\M3S1	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	1.14	98.86	0	0	0
M3\M3S2	a- Acar et al.-2017-Journal of Special Education- Spe L2	1	100	0.44	99.56	0	0	0
M3\M3S2	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	1	100	0.08	99.92	0	0	0
M3\M3S2	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0.25	99.75	0	0	0
M3\M3S2	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0.18	99.82	0	0	0
M3\M3S2	a- Bagley_et_al-2015-Journal_of_Computer_Assisted_Learning - Com L1	1	100	0.15	99.85	0	0	0
M3\M3S2	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	1	100	0.15	99.85	0	0	0
M3\M3S3	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0	100	0	0	0
M3\M3S4	a- Acar et al.-2017-Journal of Special Education- Spe L2	1	100	0	100	0	0	0
M3\M3S4	a- Akgündüz et al.- 2017 - Education and Science - Com L2	1	100	0.39	99.61	0	0	0
M3\M3S4	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	1	100	0	100	0	0	0
M3\M3S4	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0	100	0	0	0
M3\M3S4	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S4	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	1	100	0.43	99.57	0	0	0
M3\M3S4	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0	100	0	0	0

Code	File	Kappa	Agree- ment (%)	A and B (%)	Not A and Not B (%)	Disagree- ment (%)	A and Not B (%)	B and Not A (%)
M3\M3S4	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0	100	0	0	0
M3\M3S5	a- Acar et al.-2017-Journal of Special Education- Spe L2	1	100	0	100	0	0	0
M3\M3S5	a- Akgündüz et al.- 2017 - Education and Science - Com L2	1	100	0	100	0	0	0
M3\M3S5	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	1	100	0	100	0	0	0
M3\M3S5	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0	100	0	0	0
M3\M3S5	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S5	a- Bagley_et_al-2015-Journal_of_Computer_Assisted_Learning - Com L1	1	100	0	100	0	0	0
M3\M3S5	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	1	100	0.13	99.87	0	0	0
M3\M3S5	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0	100	0	0	0
M3\M3S5	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	1	100	0	100	0	0	0
M3\M3S5	a- Carlson_et_al-2017-Language Learning - Lang L1	1	100	0	100	0	0	0
M3\M3S5	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0	100	0	0	0
M3\M3S5	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	1	100	0	100	0	0	0
M3\M3S6	a- Acar et al.-2017-Journal of Special Education- Spe L2	1	100	0	100	0	0	0
M3\M3S6	a- Akgündüz et al.- 2017 - Education and Science - Com L2	1	100	0	100	0	0	0
M3\M3S6	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	1	100	0	100	0	0	0
M3\M3S6	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0	100	0	0	0
M3\M3S6	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S6	a- Bagley_et_al-2015-Journal_of_Computer_Assisted_Learning - Com L1	1	100	0	100	0	0	0
M3\M3S6	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0	100	0	0	0
M3\M3S6	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	1	100	0	100	0	0	0
M3\M3S6	a- Carlson_et_al-2017-Language Learning - Lang L1	1	100	0	100	0	0	0
M3\M3S6	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0	100	0	0	0
M3\M3S6	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	1	100	0	100	0	0	0
M3\M3S7	a- Acar et al.-2017-Journal of Special Education- Spe L2	1	100	0	100	0	0	0

Code	File	Kappa	Agree- ment (%)	A and B (%)	Not A and Not B (%)	Disagree- ment (%)	A and Not B (%)	B and Not A (%)
M3\M3S7	a- Akgündüz et al.- 2017 - Education and Science - Com L2	1	100	0	100	0	0	0
M3\M3S7	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	1	100	0	100	0	0	0
M3\M3S7	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0	100	0	0	0
M3\M3S7	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S7	a- Bagley_et_al-2015- Journal_of_Computer_Assisted_L earning - Com L1	1	100	0	100	0	0	0
M3\M3S7	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	1	100	0	100	0	0	0
M3\M3S7	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0	100	0	0	0
M3\M3S7	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	1	100	0	100	0	0	0
M3\M3S7	a- Carlson_et_al-2017- Language_Learning - Lang L1	1	100	0	100	0	0	0
M3\M3S7	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0	100	0	0	0
M3\M3S7	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	1	100	0	100	0	0	0
M3\M3S8	a- Acar et al.-2017-Journal of Special Education- Spe L2	1	100	0	100	0	0	0
M3\M3S8	a- Akgündüz et al.- 2017 - Education and Science - Com L2	1	100	0	100	0	0	0
M3\M3S8	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	1	100	0	100	0	0	0
M3\M3S8	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0	100	0	0	0
M3\M3S8	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M3\M3S8	a- Bagley_et_al-2015- Journal_of_Computer_Assisted_L earning - Com L1	1	100	0	100	0	0	0
M3\M3S8	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	1	100	0	100	0	0	0
M3\M3S8	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0	100	0	0	0
M3\M3S8	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	1	100	0	100	0	0	0
M3\M3S8	a- Carlson_et_al-2017- Language_Learning - Lang L1	1	100	0	100	0	0	0
M3\M3S8	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0	100	0	0	0
M3\M3S8	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	1	100	0	100	0	0	0
M4	a- Acar et al.-2017-Journal of Special Education- Spe L2	1	100	0	100	0	0	0

Code	File	Kappa	Agreement (%)	A and B (%)	Not A and Not B (%)	Disagreement (%)	A and Not B (%)	B and Not A (%)
M4	a- Akgündüz et al.- 2017 - Education and Science - Com L2	1	100	0	100	0	0	0
M4	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	1	100	0	100	0	0	0
M4	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0	100	0	0	0
M4	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M4	a- Bagley_et_al-2015-Journal_of_Computer_Assisted_Learning - Com L1	1	100	0	100	0	0	0
M4	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0	100	0	0	0
M4	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	1	100	0	100	0	0	0
M4	a- Carlson_et_al-2017-Language_Learning - Lang L1	1	100	0.27	99.73	0	0	0
M4	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0	100	0	0	0
M4\M4S1	a- Acar et al.-2017-Journal of Special Education- Spe L2	1	100	0	100	0	0	0
M4\M4S1	a- Akgündüz et al.- 2017 - Education and Science - Com L2	1	100	0	100	0	0	0
M4\M4S1	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	1	100	0	100	0	0	0
M4\M4S1	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0	100	0	0	0
M4\M4S1	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M4\M4S1	a- Bagley_et_al-2015-Journal_of_Computer_Assisted_Learning - Com L1	1	100	0	100	0	0	0
M4\M4S1	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	1	100	0	100	0	0	0
M4\M4S1	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0	100	0	0	0
M4\M4S1	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	1	100	0	100	0	0	0
M4\M4S1	a- Carlson_et_al-2017-Language_Learning - Lang L1	1	100	0.09	99.91	0	0	0
M4\M4S1	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0	100	0	0	0
M4\M4S2	a- Acar et al.-2017-Journal of Special Education- Spe L2	1	100	0	100	0	0	0
M4\M4S2	a- Akgündüz et al.- 2017 - Education and Science - Com L2	1	100	0	100	0	0	0
M4\M4S2	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	1	100	0	100	0	0	0
M4\M4S2	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0	100	0	0	0
M4\M4S2	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0

Code	File	Kappa	Agree- ment (%)	A and B (%)	Not A and Not B (%)	Disagree- ment (%)	A and Not B (%)	B and Not A (%)
M4\M4S2	a- Bagley_et_al-2015-Journal_of_Computer_Assisted_Learning - Com L1	1	100	0	100	0	0	0
M4\M4S2	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0	100	0	0	0
M4\M4S2	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	1	100	0	100	0	0	0
M4\M4S2	a- Carlson_et_al-2017-Language_Learning - Lang L1	1	100	0.18	99.82	0	0	0
M4\M4S2	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0	100	0	0	0
M4\M4S2	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	1	100	0.23	99.77	0	0	0
M4\M4S3	a- Acar et al.-2017-Journal of Special Education- Spe L2	1	100	0	100	0	0	0
M4\M4S3	a- Akgündüz et al.- 2017 - Education and Science - Com L2	1	100	0	100	0	0	0
M4\M4S3	a- Altinkurt et al. -2016 - Eğitim ve Bilim - Edu L1	1	100	0	100	0	0	0
M4\M4S3	a- Arslan et al.-2018-Education and Science - Edu L2	1	100	0	100	0	0	0
M4\M4S3	a- Aydın et al. - 2018 - Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi - Spe L1	1	100	0	100	0	0	0
M4\M4S3	a- Bagley_et_al-2015-Journal_of_Computer_Assisted_Learning - Com L1	1	100	0	100	0	0	0
M4\M4S3	a- Beach et al.-2015-Journal of Learning Disabilities - Spe L1	1	100	0	100	0	0	0
M4\M4S3	a- Bozkurt et al. - 2016 - Pamukkale Üniversitesi Eğitim Fakültesi Dergisi - Com L1	1	100	0	100	0	0	0
M4\M4S3	a- Browne et al.-2018-Journal of Educational Psychology - Edu L1	1	100	0	100	0	0	0
M4\M4S3	a- Carlson_et_al-2017-Language_Learning - Lang L1	1	100	0	100	0	0	0
M4\M4S3	a- Coşkun - 2016 - Abant İzzet Baysal Üni Eğt. Fak. Dergisi - Lang L2	1	100	0	100	0	0	0
M4\M4S3	a- İzci et al. - 2013 - İnönü Üniversitesi Dergisi - Lang L1	1	100	0	100	0	0	0

Appendix 12. List of Move Sequences

Number of Sequences	Move Sequences
1-sequence	M3
2-sequence	M1-M3 M2-M3 M3-M2 M3-M4
3-sequence	M1-M2-M3 M2-M3-M2 M3-M2-M3 M3-M4-M3
4-sequence	M1-M3-M2-M3 M2-M3-M1-M3 M2-M3-M4-M3 M3-M1-M2-M3 M3-M2-M3-M4
5-sequence	M1-M2-M3-M1-M3 M1-M2-M3-M4-M3 M1-M3-M2-M1-M3 M1-M3-M2-M3-M4 M1-M3-M4-M2-M3 M2-M1-M2-M3-M4 M2-M3-M1-M2-M3 M2-M3-M2-M1-M3 M2-M3-M4-M2-M3 M3-M1-M3-M2-M3 M3-M2-M3-M1-M3 M3-M2-M3-M4-M3
6-sequence	M1-M3-M2-M3-M1-M3 M2-M3-M1-M2-M3-M4 M2-M3-M4-M3-M2-M3 M3-M2-M4-M3-M2-M3
7-sequence	M1-M2-M3-M4-M3-M2-M3 M2-M1-M3-M2-M3-M1-M3 M2-M3-M1-M3-M4-M2-M3 M2-M3-M2-M4-M3-M2-M3 M3-M2-M3-M1-M2-M4-M3 M3-M2-M3-M1-M3-M2-M3 M3-M2-M3-M4-M3-M2-M3
8-sequence	M1-M2-M3-M4-M3-M1-M2-M3 M2-M1-M2-M3-M4-M3-M2-M3 M3-M1-M3-M4-M3-M2-M3-M4 M3-M2-M3-M1-M2-M3-M1-M3
9-sequence	M2-M3-M4-M3-M2-M3-M4-M2-M3
10-sequence	M1-M2-M3-M1-M3-M2-M3-M1-M2-M3 M1-M3-M4-M1-M4-M3-M2-M3-M4-M3 M2-M3-M2-M4-M3-M2-M3-M1-M3-M4 M2-M3-M4-M2-M3-M1-M2-M3-M4-M3
12-sequence	M1-M3-M2-M3-M1-M2-M3-M1-M3-M2-M3-M1 M3-M4-M2-M3-M2-M4-M2-M3-M4-M3-M2-M3
15-sequence	M1-M3-M2-M3-M4-M1-M2-M3-M4-M1-M3-M2-M3-M4-M3
16-sequence	M1-M2-M3-M4-M2-M3-M4-M3-M2-M3-M4-M2-M3-M2-M4-M3 M2-M1-M3-M2-M4-M2-M3-M1-M2-M3-M4-M3-M2-M3-M1-M3 M2-M3-M4-M2-M4-M3-M2-M3-M4-M2-M3-M2-M4-M3-M2-M3
19-sequence	M2-M3-M4-M3-M2-M1-M2-M3-M2-M4-M1-M2-M3-M2-M4-M2-M3-M4-M3
21-sequence	M1-M3-M4-M1-M4-M3-M2-M3-M4-M1-M3-M4-M2-M3-M4-M3-M2-M3-M4-M2-M3
27-sequence	M3-M2-M4-M3-M1-M3-M2-M3-M4-M3-M2-M4-M2-M3-M4-M3-M2-M3-M4-M2-M3-M1-M2-M3-M2-M4-M3

Appendix 13. List of Move Cycles

Move Sequences	Move Patterns	L1 English	L2 English	L1 Turkish	f Total
M1-M2-M3	Pattern I	0	3	4	7
M1-M2-M3-M1-M3	Pattern I - Pattern II	0	2	0	2
M1-M2-M3-M1-M3-M2-M3-M1-M2-M3	Pattern I - Pattern II - Pattern IV - Pattern I	0	0	1	1
M1-M2-M3-M4-M2-M3-M4-M3-M2-M3-M4-M2-M3-M2-M4-M3	Pattern I - M4 - Pattern IV - M4 - Pattern VI - M4 - Pattern IV - M2 - M4 - Pattern V	0	1	0	1
M1-M2-M3-M4-M3	Pattern I - M4 - Pattern V	0	0	1	1
M1-M2-M3-M4-M3-M1-M2-M3	Pattern I - M4 - Pattern V - Pattern I	0	1	0	1
M1-M2-M3-M4-M3-M2-M3	Pattern I - M4 - Pattern V - Pattern IV	0	1	1	2
M1-M3	Pattern II	1	3	9	13
M1-M3-M2-M1-M3	Pattern II - M2 - Pattern II	1	1	0	2
M1-M3-M2-M3	Pattern III	1	1	3	5
M1-M3-M2-M3-M1-M2-M3-M1-M3-M2-M3-M1	Pattern III - Pattern I - Pattern III - M1	0	1	0	1
M1-M3-M2-M3-M1-M3	Pattern III - Pattern II	1	1	0	2
M1-M3-M2-M3-M4	Pattern III - M4	0	0	1	1
M1-M3-M2-M3-M4-M1-M2-M3-M4-M1-M3-M2-M3-M4-M3	Pattern III - M4 - Pattern I - M4 - Pattern III - M4 - Pattern V	1	0	0	1
M1-M3-M4-M1-M4-M3-M2-M3-M4-M1-M3-M4-M2-M3-M4-M3-M2-M3-M4-M2-M3	Pattern III - M4 - M1 - M4 - Pattern VI - M4 - Pattern II - M4 - Pattern IV - M4 - Pattern VI - M4 - Pattern IV	1	0	0	1
M1-M3-M4-M1-M4-M3-M2-M3-M4-M3	Pattern III - M4 - M1 - M4 - Pattern VI - M4 - Pattern V	1	0	0	1
M1-M3-M4-M2-M3	Pattern III - M4 - Pattern IV	0	0	1	1
M2-M1-M2-M3-M4	M2 - Pattern I - M4	0	0	1	1
M2-M1-M2-M3-M4-M3-M2-M3	M2 - Pattern I - M4 - Pattern VI	0	0	1	1
M2-M1-M3-M2-M3-M1-M3	M2 - Pattern III - Pattern II	0	1	0	1
M2-M1-M3-M2-M4-M2-M3-M1-M2-M3-M4-M3-M2-M3-M1-M3	M2 - Pattern II - M2 - M4 - Pattern IV - Pattern I - M4 - Pattern VI - Pattern II	1	0	0	1
M2-M3	Pattern IV	5	5	6	16
M2-M3-M1-M2-M3	Pattern IV - Pattern I	0	1	1	2
M2-M3-M1-M2-M3-M4	Pattern IV - Pattern I - M4	0	1	0	1
M2-M3-M1-M3	Pattern IV - Pattern II	1	0	0	1
M2-M3-M1-M3-M4-M2-M3	Pattern IV - Pattern II - M4 - Pattern IV	1	0	0	1
M2-M3-M2	Pattern IV - M2	0	1	0	1
M2-M3-M2-M1-M3	Pattern IV - M2 - Pattern II	1	0	0	1
M2-M3-M2-M4-M3-M2-M3	Pattern IV - M2 - M4 - Pattern VI	0	1	0	1
M2-M3-M2-M4-M3-M2-M3-M1-M3-M4	Pattern IV - M2 - M4 - Pattern VI - Pattern II - M4	1	0	0	1
M2-M3-M4-M2-M3-M1-M2-M3-M4-M3	Pattern IV - M4 - Pattern IV - Pattern I - M4 - Pattern V	1	0	0	1

Move Sequences	Move Patterns	L1 English	L2 English	L1 Turkish	<i>f</i> Total
M2-M3-M4-M2-M3	Pattern IV - M4 - Pattern IV	0	1	0	1
M2-M3-M4-M2-M4-M3-M2-M3-M4-M3-M2-M3	Pattern IV - M4 - M2 - M4 - Pattern VI - M4 - Pattern IV - M2 - M4 - Pattern VI	0	0	1	1
M2-M3-M4-M3	Pattern IV - M4 - Pattern V	1	1	0	2
M2-M3-M4-M3-M2-M1-M2-M3-M2-M4-M1-M2-M3-M2-M4-M2-M3-M4-M3	Pattern IV - M4 - Pattern V - M2 - Pattern I - M2 - M4 - Pattern I - M2 - M4 - Pattern IV - M4 - Pattern V	0	1	0	1
M2-M3-M4-M3-M2-M3	Pattern IV - M4 - Pattern VI	1	0	0	1
M2-M3-M4-M3-M2-M3-M4-M2-M3	Pattern IV - M4 - Pattern VI - M4 - Pattern IV	1	0	0	1
M3	Pattern V	0	3	2	5
M3-M1-M2-M3	Pattern V - Pattern I	0	0	1	1
M3-M1-M3-M2-M3	Pattern V - Pattern II - Pattern IV	1	1	0	2
M3-M1-M3-M4-M3-M2-M3-M4	Pattern V - Pattern II - M4 - Pattern VI - M4	1	0	0	1
M3-M2	Pattern V - M2	0	1	0	1
M3-M2-M3	Pattern VI	8	4	4	16
M3-M2-M3-M1-M2-M3-M1-M3	Pattern VI - Pattern I - Pattern II	0	1	0	1
M3-M2-M3-M1-M2-M4-M3	Pattern VI - M1 - M2 - M4 - Pattern V	0	1	0	1
M3-M2-M3-M1-M3	Pattern VI - Pattern II	1	0	0	1
M3-M2-M3-M1-M3-M2-M3	Pattern VI - Pattern III	1	0	0	1
M3-M2-M3-M4	Pattern VI - M4	1	0	0	1
M3-M2-M3-M4-M3	Pattern VI - M4 - Pattern V	1	0	0	1
M3-M2-M3-M4-M3-M2-M3	Pattern VI - M4 - Pattern VI	1	0	0	1
M3-M2-M4-M3-M1-M3-M2-M3-M4-M3-M2-M4-M2-M3-M4-M3-M2-M3-M4-M2-M3-M1-M2-M3-M2-M4-M3	Pattern V - M2 - M4 - Pattern V - Pattern III - M4 - Pattern V - M2 - M4 - Pattern IV - M4 - Pattern VI - M4 - Pattern IV - Pattern I - M2 - M4 - Pattern V	1	0	0	1
M3-M2-M4-M3-M2-M3	Pattern V - M2 - M4 - Pattern VI	0	1	0	1
M3-M4	Pattern V - M4	2	0	1	3
M3-M4-M2-M3-M2-M4-M2-M3-M4-M3-M2-M3	Pattern V - M4 - Pattern IV - M2 - M4 - Pattern IV - M4 - Pattern VI	1	0	0	1
M3-M4-M3	Pattern V - M4 - Pattern V	0	0	1	1
TOTAL		40	40	40	120

ÖZGEÇMİŞ

Kişisel Bilgiler

Adı Soyadı : Nihan Erdemir
Doğum Tarihi : 05.06.1987
Doğum Yeri : Isparta, Türkiye
Akademik Unvanı : Öğretim Görevlisi
E-posta : nihanerdemir@gmail.com
Yabancı Dil : İngilizce (İleri), Almanca (Orta)

Eğitim

Derece	Bölüm/Program	Okul	Yıl
Doktora	İngiliz Dili Eğitimi	Gazi Üniversitesi	2014-2019
Y. Lisans	İngiliz Dili Eğitimi	Viyana Üniversitesi	2011-2013
Lisans	İngilizce Öğretmenliği	ODTÜ	2005-2009
Lise	Yabancı Dil Bölümü	Müşide Ermumcu AÖL	2001-2005

Yüksek Lisans Tez Başlığı ve Tez Danışmanı

Reconsidering Translation and Mother Tongue in English Language Teaching: An Attitudinal Study of Tertiary-Level Students and Teachers in Austria and Turkey

Danışman: Prof. Dr. Barbara SEIDLHOFER

Doktora Tezi Başlığı ve Danışmanı

A Corpus-based Rhetorical Move Analysis of the Results Sections in L1 English, L2 English and L1 Turkish Research Articles

Danışman: Doç. Dr. Hacer Hande UYSAL GÜRDAL

İş Deneyimi

Görev Unvanı	Görev Yeri	Yıl
Öğretim Görevlisi	Isparta Uygulamalı Bilimler Üniversitesi, Isparta	2018-Devam ediyor
Öğretim Görevlisi	Süleyman Demirel Üniversitesi, Isparta	2017-2018
Araştırma Görevlisi	Kırklareli Üniversitesi, Kırklareli	2014-2017
İngilizce Öğretmeni	Türk-Amerikan Derneği, Ankara	2014-2015
Mütercim-Tercüman	Bilkent Çeviri Ofisi, Isparta	2010-2014
İngilizce Öğretmeni	Ardem Dil Merkezi, Isparta	2010-2011
İngilizce/Türkçe Dil Asistanı	BAKIP 10 Anaokulu & BAKIP 10 Pedagojik Eğitim Yüksekokulu, Viyana	2009-2010
İngilizce Öğretmeni	Halk Eğitim Merkezi, Isparta	2009 (Yaz dönemi)

İdari Görevler

6. Ulusal Yabancı Dil Eğitim Kurultayında düzenleme kurulu üyesi, İngiliz Dili Eğitimi Bölümü, Eğitim Fakültesi, Süleyman Demirel Üniversitesi, 2018

İngilizce Hazırlık Bölümü Koordinatör Yardımcısı, Mütercim-Tercümanlık Bölümü, Fen-Edebiyat Fakültesi, Kırklareli Üniversitesi, 2015-2017

Erasmus Bölüm Koordinatörlüğü, Mütercim-Tercümanlık Bölümü, Fen-Edebiyat Fakültesi, Kırklareli Üniversitesi, 2015-2017

Son iki yılda verdiği lisans düzeyindeki dersler

Akademik Dinleme I	Çocuklara Yabancı Dil Öğretimi I	İngiliz Kültür Tarihi
Akademik Dinleme II	Çocuklara Yabancı Dil Öğretimi II	Okul Deneyimi
Dinleme ve Sesletim I	İngilizce Yazı Yazma II	Öğretmenlik Uygulamaları
Bağlamsal Dilbilgisi II	Türkçe-İngilizce Çeviri	Formasyon
İngilizce 101	İngilizce 102	Mesleki İngilizce

Ödüller ve Burslar

MEB Yurtdışı Lisansüstü Eğitim Bursu, 2011-2013

Ulusal Ajans Comenius Programı Yurtdışı Dil Asistanlığı Bursu, 2009-2010

MEB Öğretmenlik Bursu, 2005-2009

Eserler

A. Yazılan ulusal/uluslararası kitaplar veya kitaplardaki bölümler

A1. Basılan uluslararası kitaplar:

Erdemir, N. (2017). *Reconsidering Translation and Mother Tongue in Teaching English*. Saarbrücken: AV Akademikerverlag.

A2. Yazılan uluslararası kitaplardaki bölümler:

Erdemir, N. (2017). Learners' report of strategy-use at self-access centers. In D. Köksal, (Ed.), *Researching ELT: Classroom Methodology and Beyond* (pp. 127-137). Frankfurt: Peter Lang.

B. Ulusal/Uluslararası hakemli dergilerde yayımlanan makaleler

B1. Ulusal hakemli dergilerde yayımlanan makaleler:

Erdemir, N. (2019). Exploring learners' media preferences to develop intercultural competence. *Baskent University Journal of Education*, 6(2), 353-364.

Erdemir, N., & Yangın Ekşi, G. (2019). The perceptions of student teachers about using an online learning environment 'Edmodo' in a 'flipped classroom.' *SDU International Journal of Educational Studies*, 6(2), 174-186.

C. Ulusal/Uluslararası bilimsel toplantılarda sunulan ve bildiri kitaplarında (proceedings) basılan bildiriler

C1. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitaplarında (proceedings) basılan bildiriler:

Erdemir, N., & Seildhofer, B. (2014). Reconsidering translation and own language in English language teaching. In B.Ç. Başaran, B. C. Cengiz, F. Gümüşok & D. F. Şafak (Eds.), *9th ODTÜ International Postgraduate Conference on Linguistics and Language Teaching* (pp. 247-262). Ankara: Gazi Kitabevi.

C2. Uluslararası bilimsel toplantılarda sunulan ve basılan özet bildiriler:

Erdemir, N. (2018). *Exploring the domination of auditory, visual and written types of media on learners' intercultural competence*. The 10th International ELT Research Conference, Antalya, Turkey.

Erdemir, N. (2016). *The differences of strategy-use between learners who attend and do not attend self-access centers (SACs)*. The 9th International ELT Research Conference, Çanakkale, Turkey.

Erdemir, N. (2016). *An action research: Teaching compensation strategies and speaking skills. Does it really make a difference?* GlobELT 2016 Conference, Antalya, Turkey.

Yangın Ekşi, G., & Erdemir, N. (2015). *The perceptions of student teachers in using a multimedia tool 'Edmodo' in a 'Flipped Classroom.'* IATEFL LTSIG, ELT Ireland & MEI 4th Digital ELT Conference, Dublin, Ireland.

Erdemir, N. (2012). *A corpus-based study of conjunctions in L1 and L2 writing*. The 5th Austrian Students' Conference of Linguistics, Vienna, Austria.



GAZİLİOLMAK AYRICALIKTIR...