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Page Layout, Printing and Binding**: Mehrravash Pub**. (+98 91 99 19 92 42)

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Journal of Language Horizons

According to the Ministry of Science, Research and Technology proclamation dated 1397/12/06 and numbered /3/18/311330, the *Journal of Language Horizons* was granted full Academic-Research status by the ministry's publication committee in their meeting of Jan. 30, 2019. This status has been applied from Volume 1, Issue 1, Spring/Summer 2017.

It is a monolingual (English) journal which operates on a blind peer review policy; it publishes twice- yearly (biannually) papers which report the findings of original research on the current trends and topics in different language related issues.

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Aims and Scope

Considering the National Master Plan for Science and Education in the country and the necessity of *localizing* the humanities, this journal welcomes English articles contributing to this aim.
Aims of this journal include but are not limited to:
- Promoting scientific and professional knowledge of researchers in the below mentioned areas.
- Sharing the findings of researchers in the mentioned fields.
- Promoting general and professional knowledge necessary for learning English as an international language among Iranians and international interaction in the future.
- Promoting Iranian culture along with the English.

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The second file, the main manuscript, starts with the abstract. The abstract should be between 150 and 250 words, followed by five keywords, separated by commas. The abstract should include information on the purpose of the research and/or research question(s), the methods and materials used, information on the analysis procedures as well as the major findings. The Persian translation of the abstract should be provided too. The font type should be Times New Roman and the size is 12. The whole manuscript should be double-spaced throughout and the new paragraphs should be indented. The manuscript should be divided into clear sections such as: Introduction, Review of literature (which may include sub-sections), Method (including participants, materials, and procedure), Results, Discussion, Acknowledgements (if necessary) and References (and Appendices, if needed). The reference list should be on a new page, double spaced, and the hanging indent method should be used (all lines after the first one are indented). The length of the paper should be between 7000 and 10000 words. The following pages provide key information and give examples of APA style. More information on APA can also be found in the website: http://www.apastyle.org/

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Book
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Journal article with volume number
Lee, M-B. (2002). A closer look at language learning strategies and EFL performance. *Foreign Languages Education*, *10*(1), 115-132.

Article in a book
Dechert, H. (1983). How a story is done in a second language. In C. Faerch & G. Kasper (Eds.), *Strategies in inter-language communication* (pp. 175-195). Longman.

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Developmental genetics. (2005). *In Cambridge encyclopedia of child development*. http://www.credoreference.com.library.muhlenberg.edu:80/entry/cupchilddev/developmental_genetics

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Direct citation 1
She states, "the 'placebo effect' ... disappeared when behaviors were studied in this manner" (Miele, 1993, p. 276), but she did not clarify which behaviors were studied.

Direct citation 2: Fewer than forty words
Lee (1999) found that "The EAP writing curriculum incorporate reading and analysis of major academic journal articles in the specific field to identify macro-level organization an obligatory 'moves' in conjunction with writing practice." (p. 21)

Direct citation 3: More than forty words
Miele (1993) found the following:
The "placebo effect," which had been verified in previous studies, disappeared when behaviors were studied in this manner. Furthermore, the behaviors were never exhibited again, even when reed rings were administered. Earlier studies were clearly premature in attributing the results to a placebo effect. (p. 276)

One work by two authors
- Smith and Takamoto (1997) argued that. ...
- In recent study of SLA (Smith & Takamoto, 1997) ...

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A Comparative Study of Metadiscourse Markers in Geology Research Articles

Research Article
pp. 7-26

Abbas Ali Rezaee[*][1]
Arezoo Ghobadi[2]

Abstract
Interest in metadiscourse markers use in Research Articles (RAs) of different disciplines has grown among discourse and genre researchers. Among the hard sciences, Geology and its' sub-disciplines have received scant attention. This is while Geology postgraduate students' original research findings fail to get published in high ranked journals of their specialty, partly due to their insufficient knowledge of the correct use of metadiscourse markers in their RAs. In the present study, using Hyland and Tse's theoretical framework (2004), we focused on the type and frequency of metadiscourse markers use in six main Geology sub-disciplines (i.e., Engineering Geology, Sedimentology, Seismology, Petrology, Palaeontology, and Geotechnics). To answer the research questions raised in the study, 180 RAs from 73 high ranked journals were selected from the main corpora. The results from the word by word analyses of the articles revealed that, except for endophoric markers, the six sub-disciplines demonstrated a statistically significant difference in the type and frequency of metadiscourse features. In addition, the results indicated that Petrology, Engineering Geology, and Sedimentology demonstrated a higher frequency in the employment of interactive markers compared to their three Geology counterparts. Contrarily, the three sub-disciplines, namely Seismology, Palaeontology, and Geotechnics showed a higher frequency in the application of interactional metadiscourse elements. The findings of the study have implications for genre researchers, ESP instructors, and Geology novice authors.

Keywords: discourse markers, interactional elements, interactive elements, geology, rhetorical organization

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Introduction

The "effectiveness" of a text, that is, the extent to which writers transfer their ideas "smoothly, accurately and quickly to any reader", has led to many investigations on the structure of texts (Charney, 2002). Researchers, such as Connor and Kaplan (1987) have broadened their definition of "effectiveness" by carrying out research on different aspects of reading and writing, including the rhetorical nature of texts. As one of the rhetorical features of texts, metadiscourse has received a large amount of attention in the past few decades. This is because both rhetoric and metadiscourse are concerned with effective ways of producing a spoken/written text to persuade the audience as well as to share the speaker/author's ideas and beliefs. The concept of metadiscourse is operationally defined as "the linguistic resources used to organize a discourse or the writer's stance towards either its content or the reader" (Hyland, 2000, p. 109). Regarding it as a rhetorical act, Crismore (1989) maintains that metadiscourse is "writing used to guide and direct the reader, to signal the presence of the author, and to call attention to the speech act itself" (p. 7).

It was in the 1980s that metadiscourse received more attention, and studies on metadiscourse features were developed by researchers such as VandeKopple (1985, 2002); Crismore (1989); Crismore and Farnsworth (1989, 1990); Hyland (1994, 1996, 1998, 2005) and Hyland and Tse (2004). Furthermore, metadiscourse has been investigated in various genres, e.g., academic RAs (Dahl, 2004; Hyland, 1999), postgraduate dissertations (Bunton, 1999), casual conversations (Schiffrin, 1980), school textbooks (Crimsone, 1989), and newspaper discourse (Dafouz-Milne, 2008; Le, 2004). Due to the importance of RAs in academic communities, studies on the role of metadiscourse in such an academic genre has received more attention. Researchers have become increasingly aware of the fact that differences in the use of metadiscourse should be understood not only in relation to the national culture of the writer, but also in relation to the genre and the immediate discourse community to which the text is addressed (Estaji &Vafaemehr, 2015). This is because disciplinary communities are like tribes (Becher, 1989) that have their own particular norms, categorizations, bodies of knowledge, conventions, and modes of inquiry (Bartholomae, 1986; Swales, 1990).There have been few research studies conducted on the use of metadiscourse across different disciplines (Atai & Sadr, 2008; Cao & Hu, 2014; Estaji & Vafaemehr, 2015; Farzannia & Farnia, 2016; Ghaemi & Sabadoust, 2017; Hyland, & Jiang, 2018; Jiang & Hyland, 2017; Keshavarz & Kheirie, 2012; Mur- Duenas, 2011; Pooresfahani et al., 2012). Yet, metadiscourse in Geology articles, as a hard science discipline, does not appear to have attracted the kind of genre-based research described above.

As ESP (English for Specific Purposes) instructors of Geology and related disciplines, the researchers have discovered that Iranian ESP learners, in general, and Geology students, in particular, fail to publish their up to date and original research studies in high ranked journals of their specialties partly due to their lack of knowledge on the correct use of metadiscourse markers in their RAs. This is while, Iranian Geology postgraduate students have made great new advances in Geological topics of research announced by their high ranked

journals. As a solution to their mere knowledge of the use of metadiscourse elements in RAs, Geology postgraduate students imitate the metadiscourse features used in the RAs of the neighboring disciplines of Geology, namely, Biology, Mining Engineering, Civil Engineering, Mechanical Engineering, and Electrical Engineering. Such imitation is due to Geology practitioners' presumption of the identical use of metadiscourse elements in all hard sciences. Consequently, the students receive major corrections or rejections on their manuscripts from high ranked journals of their specialties. This demonstrates the Iranian Geology postgraduate students' dire need to improve their writing skills in English in order to get published or to find the opportunity to present in international conferences. Therefore, to fill in the gap of genre studies on the type and frequency of metadiscourse markers in Geology RAs and to develop the Geology practitioners' awareness of the effective use of metadiscourse features in their RAs, the present study is intended to examine the kinds and frequency of use of metadiscourse markers in RAs of six major Geology sub-disciplines (Palaeontology, Engineering Geology, Sedimentology, Geotechnics, Petrology, and Seismology). Moreover, to develop our understanding of the commonalities or differences in type and frequency of use of metadiscourse markers among the above-mentioned hard sciences, the results of which will be further elaborated in light of the comparison of the research results with the previous findings on the type and frequency of use of metadiscoure features in the disciplines of Biology, Mining Engineering, Civil Engineering, Mechanical Engineering and Electrical Engineering. In this respect, the following research questions will be addressed:

1. What are the most common metadiscourse markers across Geology sub-disciplines?
2. Is there any statistical significant difference in the type and frequency of use of interactive metadiscourse markers in Geology research articles across its' six main sub-disciplines?
3. Is there any statistical significant difference in the type and frequency of use of interactional metadiscourse markers in Geology research articles across its' six main sub-disciplines?

The present article attempts to give a short and relevant review of the related literature, in which the most important sources as well as the studies done in the area are reviewed. Then, a detailed account of the method, including corpora, theoretical framework, procedures and data analysis measures employed will be presented. The next section of the article deals with the results of the study obtained. In the discussion section, following the results, there have been attempts to present a thorough discussion of the findings in light of the theoretical framework and the studies done. Conclusions and implications make the final section of the report.

Literature Review

The growing interest in metadiscourse and its subcategories has led to different research projects which mainly focus on the use of metadiscourse features by native and nonnative students in academic and disciplinary writing (Attarn, 2014; Ghadyani & Tahririan, 2015; Gholami & Ilgamit, 2016; Musa & Hussin, 2020; Shafqat et al., 2020). As mentioned above, there are few

disciplinary studies conducted on the use of metadiscourse markers within hard sciences.

Abdi (2002) investigated the use of interpersonal metadiscourse markers in the discussion sections of 55 research articles from the fields of social and hard sciences. To study interpersonal metadiscourse, Abdi studied three markers as attitude markers, boosters, and hedges. Through the analysis, it was found that social science writers used the interpersonal metadiscourse markers more than hard science writers. Although there was a significant difference between the two majors in the use of hedges and attitude markers, the results showed that there were little differences in the use of boosters.

In a study conducted by Keshavarz and Kheiri (2011) on 120 RAs of two disciplines of Applied Linguistics and Civil Engineering, they found that the writers from the two disciplines were significantly different in using metadiscourse elements collectively. With regard to different subcategories of metadiscourse, the results revealed that the four groups of writers from the two disciplines used different types of metadiscourse differently.

Zarei and Mansoori's (2011) study on the use of metadiscourse markers in 40 RAs in two disciplines of Applied Linguistics and Computer Engineering revealed that Applied Linguistics representing Humanities relied heavily on interactive elements rather than on interactional ones, compared with Computer Engineering representing non Humanities. The analysis attested that Humanities focus on the textuality at the expense of reader involvement.

In an attempt to examine the type, frequency and functions of intensity markers in RAs of two disciplines of Applied Linguistics and Electrical Engineering, Behnam and Mirzapour (2012) found that the overall distribution of intensity markers in Applied Linguistics articles is higher than those in Electrical Engineering ones. In addition, their research indicated that the Electrical Engineering writers tend to use more boosters in the conclusions sections than the abstract sections of their RAs.

Estaji and Vafaemehr's (2015) contrastive study on interactional metadiscourse markers in the introduction and conclusion sections of 42 Mechanical and Electrical Engineering RAs showed that although there were some minor differences in the frequency and type of these metadiscourse markers, there was no statistically significant difference across the disciplines, which can be attributed to the close nature of these fields. In a comparative study on the use of interactive and interactional discourse markers in 120 Chemical Engineering RAs, Ahmadi and Abdi (2016) found that Chemical Engineering authors tend to use evidentials, frame markers, and endophoric markers more than code glosses and transitions, which reveals that writers of the discipline are aware of the importance and contribution of such markers in RAs.

Farzannia and Farnia's (2016) study on metadiscourse markers in the introduction sections of 34 Mining Engineering articles demonstrated significant differences in the use of code glosses and evidentials. The utilization of boosters, engagements, and endophorics were approximately the same across the corpus. Finally, attitudes and self-mentions were the less frequent metadiscourse markers in the corpus. The authors relate the findings to the nature of hard sciences which are considered as objective and unbiased.

Moreover, Kahkesh and Alipour's (2017) investigation on the frequency of metadiscourse markers in the result and discussion sections of 40 Literature and Engineering RAs showed significant differences in the overall frequency of metadiscourse markers except for frame markers and boosters in both disciplines.

Hyland and Jiang (2018) explored whether and to what extent metadiscourse has changed in professional writing in four disciplines of Electrical Engineering, Biology, Applied Linguistics and Sociology over the past fifty years. Their analysis of the corpora showed that there has been a significant increase in interactive features and a significant decrease in the interactional types of metadiscourse markers. Their findings indicated that the interactional metadiscourse showed a marked decline in the soft knowledge fields and a substantial increase in the Science subjects. Following them, in a study conducted on 200 evaluative essays from hard and soft sciences Zali et al. (2020) discovered that soft science students used more interactional metadiscourse features than the students in hard sciences. They also found that students in both fields of studies prominently used self-mentions and hardly used any attitude markers in their academic essays.

Also, to the researchers' best knowledge, there are two studies conducted on the frequency of use of metadiscourse markers in Geology discipline. Sahragard and Yazdanpanah (2017) compared the use of English engagement markers in both Humanities (Psychology, Sociology, Economic, and Law) and Science (Geology, Mathematics, Physics, and Biology) RAs. Sixteen articles from each discipline were selected. The results indicated that Humanities RAs make use of more engagement markers than Science RAs. Also, the findings of their study suggest that directives are used more than other markers both in Humanities and Science RAs. Regarding the use of engagement markers in 1990s and 2000s, a significant increase in the use of engagement markers was observed with the passage of time, both in Humanities and Science RAs including Geology.

Among the research which focus on the use of metadiscourse elements by native and nonnative disciplinary authors Ebadi et al. (2015) examined the metadiscourse features in the discussion and conclusion sections of 30 Geology RAs written by Iranian and native English authors. The results showed that the native English writers used more interactional metadiscourse devices than the interactive metadiscourse features in the argumentative sections of their RAs. However, native Persian authors applied more interactive metadiscourse resources than the interactional ones in the discussion and conclusion sections of their RAs. The findings implied that although the native Persian writers well organized their discourse flow, they could not make an effective interpersonal relationship with their own readers. As the literature above indicates, there is a dearth of research conducted on the use of metadiscourse markers in Geology articles. Therefore, the present study aims to fill in this gap to ameliorate our understanding of the use of metadiscourse markers in such genre.

Method
Corpora

For the corpora to be representative of the genre, 29 Geology professors were consulted for the selection of each corpus. But, prior to the selection of the RAs, the course-specific professors were asked to introduce the high ranked journals within their specialties. They introduced 73 high ranked journals within their fields of studies. Based on the nature of each specialty, of course, the number of journals varied. The number of journals for each sub-discipline included: 19 for Seismology, 6 for Geotechnics, 13 for Engineering Geology, 9 for Sedimentology, 21 for Petrology, and 5 for Palaeontology. To compensate for the differing number of journals in each sub-discipline, care was taken to select the same number of RAs from each specialty. Therefore, 300 RAs, written in English, from 2012-2018 issues were randomly selected as the preliminary corpora. Then, thirty RAs for each sub-discipline were randomly selected by the professors. Consequently, the corpora included 180 RAs consisting of approximately 3,000,000 running words, excluding the abstracts, figures and tables' captions. The abstracts were not included due to their impact on the frequency and interpretation of interactional markers (Gillaerts & De Velde, 2010).

Theoretical Framework

The study employed Hyland and Tse's (2004) theoretical framework which distinguishes between interactive and interactional resources. In Hyland's definition (as cited in Hyland and Jiang, 2018), the interactive metadiscourse markers are concerned with ways of organizing discourse and reflect the writer's assessment of what needs to be made explicit to guide readers to what should be recovered from the text. The interactional metadiscourse is concerned with the writer's efforts to control the level of personality in a text and establish a suitable relationship to their data, arguments and audience, marking the degree of intimacy, the extent of reader involvement and the expression of attitude and commitments. According to the theoretical framework, the two groups of metadiscourse are classified as the following:

Interactive resources:

- *Transitions* comprise an array of devices, mainly conjunctions, used to mark additive, contrastive, and consequential relations between main clauses; such as *in addition, but, thus.*
- *Frame markers* are references to text boundaries or text structure, including items used to sequence, to label text stages, to announce discourse goals and to indicate topic shifts; such as *finally* and *to conclude.*
- *Endophoric markers* make additional material salient to the reader in recovering the writer's intentions by referring to other parts of the text; such as *see Fig,* or *noted above.*
- *Evidentials* indicate the source of information which originates outside the current text, mainly consisting of citations and explicit evidential markers; such as *according to,* or *Z states.*

- *Code glosses* signal the reworking of ideational information; such as *namely, for example, for instance.*

Interactional resources:

- *Hedges* withhold the writer's full commitment to a statement; such as *might, perhaps, about.*
- *Boosters* express certainty and emphasize the force of propositions; such as *in fact, it is clear that.*
- *Attitude markers* express the writer's attitude to propositions, conveying surprise, obligation, agreement, importance, and so on; such as *I agree, surprisingly.*
- *Engagement markers* explicitly address readers by focusing their attention or including them in the text through second person pronouns, imperatives, questions and asides; such as *consider,* or *note.*
- *Self-mentions* explicit reference to authors; such as *I, we, my, you.*

Procedure

After the random selection of 180 RAs from the main corpora, a preliminary list of discourse markers based on Hyland and Tse's theoretical framework (2004) was developed. As metadiscourse is essentially an open category, and due to insider opacity, the analyst may never recover all intended metadiscoursal meanings (Hyland & Jiang, 2018); thus, a list of each element's synonyms was collected through wordnik.com online thesaurus. Subsequently, the synonyms were checked by the framework's definition on each category of metadiscourse markers. Consequently, a total of 402 metadiscourse markers were listed and classified into 10 sub-categories. Some examples for each sub-category of metadiscourse extracted from the corpora are presented below:

- **Transitions:** although, hence, however, since, so, yet, and, also, moreover
- **Frame markers:** another, first of all, here, in regard to, in summary, turn to, to repeat
- **Endophoric markers:** as follows, previously, in this chapter, referred to, the list below
- **Evidentials:** (19--), according to, cited, following, in a later article
- **Code glosses:** in fact, like, namely, such as, that is, which means
- **Hedges:** almost, argue, claim, fairly, from my perspective, in most cases, perhaps
- **Boosters:** actually, believe, distinguish, it is clear, emphasized, obviously, the fact that
- **Attitude markers:** appropriate, convincing, easily, hopeful, interesting, it is better, prefer
- **Self-mentions:** author, I, in my case, my, our, we, writer
- **Engagement markers:** allow…, consider…, let…, look at…, note that

Next, due to the variability in the size of the articles' sections in each sub-discipline, the frequency of metadiscourse markers for each section of the articles was calculated per 1,000 words. This was to assure comparability of the results (Crismore et al., 1993).

Then, the researchers analyzed the articles manually through a word by word analyses of the 180 RAs and classified each element into the metadiscoursal subcategories presented in the theoretical framework. The same procedure was independently done by a genre analyst who was an expert in discourse and discourse markers analysis. Subsequently, an inter-rater reliability estimate was gained between the three raters' data, which was estimated as 0.82 (Kappa) indicating a good reliability index. Moreover, since the present authors were not specialists in Geology, everything was double-checked by asking Geology professors who were reviewers of Geology high ranked English journals to recheck the analysis after the reliability had been estimated.

Data Analysis

After detecting, coding, and counting the distribution of metadiscourse markers in the RAs the data were analyzed for the type, frequency and percentages of each sub-category of interactive and interactional metadiscourse markers within the articles of each Geology sub-discipline. Then, to investigate the research questions the variables were examined for normal distribution through Shapiro-Wilk test. Since the variables did not exhibit a normal distribution, the non- parametric Kruskal-Wallis test was applied to analyze the data. The analysis procedure was done through SPSS program version 26.

Results

The results indicated that the interactive features were used more frequently in Petrology (M = 90.39), Engineering Geology (M= 83.16), and Sedimentology (M= 102. 62) RAs; whereas, Seismology (M = 96.96), Palaeontology (M = 124.62), and Geotechnics (M = 111.68) demonstrated a higher frequency of use of interactional metadiscourse features by their authors. The results on the first group of interactive markers indicated that the most transitions used in Geology RAs is the connective 'and' which is in common among the six variations. Also, the Kruskal-Wallis test demonstrated a statistical significant difference (H < 0.05) in the use of transitions among the six sub-disciplines with Sedimentology possessing the highest and Geotechnics possessing the lowest application of transitions among the six sub-disciplines (Table 1).

Table 1
Results on Use of Transitions among the Geology Sub-Disciplines

Metadiscourse markers	Sub-discipline	N	Mean Rank	H	df	Sig
Transitions	Petrology	30	88.47	117.063	5	0.001
	Engineering Geology	30	42.35			
	Seismology	30	83.28			
	Palaeontology	30	135.72			
	Geotechnics	30	41.37			
	Sedimentology	30	151.82			

The results on the percentages of each frame marker in each sub-discipline illustrated that the most frame markers used in the Geology RAs are 'first', 'second', 'third', 'after', and 'then'. Also, the Kruskal-Wallis test indicated a statistical significant difference (H < 0.05) in the use of frame markers among the six variations. In addition, the results showed that the highest and lowest application of frame markers among the six sub-disciplines belong to Seismology and Sedimentology, respectively (Table 2).

Table 2
Results on Use of Frame Markers among the Geology Sub-Disciplines

Metadiscourse markers	Sub-discipline	N	Mean Rank	H	df	Sig
Frame markers	Petrology	21	91.31	63.041	5	0.001
	Engineering Geology	30	56.1			
	Seismology	21	120.26			
	Palaeontology	21	42.69			
	Geotechnics	30	85.88			
	Sedimentology	21	40.05			

As the third category of interactive metadiscourse features, the percentages for each endophoric marker in each Geology variation illustrated that the most endophoric marker used in the Geology RAs is the word 'Figure', such as in Figure 2. Moreover, the Kruskal-Wallis test results indicated no significant difference (H > 0.05) in the use of endophoric markers among the six sub-disciplines (Table 3).

Table 3
Results on Use of Endophoric Markers among the Geology Sub-Disciplines

Metadiscourse markers	Sub-discipline	N	Mean Rank	H	df	Sig
Endophoric markers	Petrology	30	68.68	10.108	5	0.072
	Engineering Geology	30	86.03			
	Seismology	30	100.65			
	Palaeontology	30	93.33			
	Geotechnics	30	107.62			
	Sedimentology	30	86.68			

The fourth category belongs to evidentials. The results on the percentages for each evidential in each sub-discipline illustrated that the most evidentials used in the Geology RAs are references and in-text citations, e.g., Johnson, 1992, which belong to Sedimentology. Additionally, the results from the Kruskal-Wallis test indicated a statistical significant difference (H < 0.05) in the use of evidentials among the six variations. Also, the results show that the highest and lowest application of evidentials among the six sub-disciplines belong to Sedimentology and Seismology, respectively (Table 4)

Table 4
Results on Use of Evidentials among the Geology Sub-Disciplines

Metadiscourse markers	Sub-discipline	N	Mean Rank	H	df	Sig
Evidential	Petrology	31	84.02	57.508	5	0.001
	Engineering Geology	30	66.53			
	Seismology	31	46.35			
	Palaeontology	31	121.89			
	Geotechnics	31	106.95			
	Sedimentology	30	129.62			

As the last group of interactive discourse markers, the results on the percentages of code glosses revealed that the most frequently used code glosses in the Geology RAs include *e.g., such as*, and *i.e.* In addition, the Kruskal-Wallis test indicated a statistical significant difference (H < 0.05) in the use of code glosses among the six sub-disciplines. Also, the results show that the highest and lowest application of code glosses among the six sub-disciplines belong to Engineering Geology and Seismology, respectively (Table 5).

Table 5
Results on the Use of Code Glosses among the Geology Sub-Disciplines

Metadiscourse markers	Sub-discipline	N	Mean Rank	H	df	Sig
Code glosses	Petrology	30	119.48	130.437	5	0.001
	Engineering Geology	30	164.83			
	Seismology	30	39.93			
	Palaeontology	30	71.22			
	Geotechnics	30	42.57			
	Sedimentology	30	104.97			

The results on the percentages of the first group of interactional markers, i.e., hedges, illustrated that most hedges used in the Geology RAs are 'probably' and 'seem'. Moreover, the results on the Kruskal-Wallis test indicated a statistical significant difference (H < 0.05) in the use of hedges across the six sub-disciplines. Further, the results show that the highest and lowest application of hedges among the six sub-disciplines belong to Palaeontology and Engineering Geology, respectively (Table 6).

Table 6
Results on Use of Hedges among the Geology Sub-Disciplines

Metadiscourse markers	Sub-discipline	N	Mean Rank	H	df	Sig
Hedges	Petrology	30	123.68	128.554	5	0.001
	Engineering Geology	30	24.07			
	Seismology	30	39.07			
	Palaeontology	30	136.55			
	Geotechnics	30	126.93			
	Sedimentology	30	92.7			

The results obtained from the percentages of boosters in Geology RAs demonstrated that the most frequently used boosters in the Geology RAs include 'clearly', 'it is clear', 'in fact', and 'positively'. In addition, the results from the Kruskal-Wallis test indicated that there is a statistical significant difference (H < 0.05) in the use of boosters across the six variations. Also, the results show that the highest and lowest application of boosters belong to Geotechnics and Petrology, respectively (Table 7).

Table 7
Results on Use of Boosters among the Geology Sub-Disciplines

Metadiscourse markers	Sub-discipline	N	Mean Rank	H	df	Sig
Boosters	Petrology	30	42.22	81.608	5	0.001
	Engineering Geology	30	71.32			
	Seismology	30	100.98			
	Palaeontology	30	68.33			
	Geotechnics	30	150.85			
	Sedimentology	30	109.3			

The results on the percentages of attitude markers illustrated that the attitude markers used most frequently in the Geology RAs are 'x notes', 'I agree', 'x asserts' and 'surprisingly. Additionally, the results from the Kruskal-Wallis test indicated a statistical significant difference (H < 0.05) in the use of attitude markers among the six sub-disciplines. Moreover, the results show that the highest and lowest application of attitude markers among the six sub-disciplines belong to Palaeontology and Petrology, respectively (Table 8).

Table 8
Results on the Use of Attitude Markers among the Geology Sub-Disciplines

Metadiscourse markers	Sub-discipline	N	Mean rank	H	df	Sig
Attitude markers	Petrology	30	50.63	129.131	5	0.001
	Engineering Geology	30	62.93			
	Seismology	30	136.28			
	Palaeontology	30	160.05			
	Geotechnics	30	58.8			
	Sedimentology	30	74.3			

The results obtained on the percentages of the engagement markers showed that the most frequent engagement marker used in the Geology RAs is 'consider'. Furthermore, the results from the Kruskal-Wallis test revealed that there is a statistical significant difference (H < 0.05) in the use of engagement markers across the six main sub-disciplines. Also, the results show that the highest and lowest application of engagement markers among the six sub-disciplines belong to Sedimentology and Petrology, respectively (Table 9).

Table 9
Results on Use of Engagement Markers among the Geology Sub-Disciplines

Metadiscourse markers	Sub-discipline	N	Mean Rank	H	df	Sig
Engagement markers	Petrology	30	39.3	116.827	5	0.001
	Engineering Geology	30	46.22			
	Seismology	30	134.03			
	Palaeontology	30	114.68			
	Geotechnics	30	67.13			
	Sedimentology	30	141.63			

As the last group of interactional metadiscourse markers, the percentages on self-mentions illustrated that the most frequent self-mention used in the Geology RAs is the pronoun 'we'. Additionally, the results from the Kruskal-Wallis test indicated that there is a significant difference ($H < 0.05$) in the use of self-mentions among the Geology six variations. Moreover, the results show that the highest and lowest application of self-mentions among the six sub-disciplines belong to Geotechnics and Engineering Geology, respectively (Table 10).

Table 10
Results on Use of Self-Mentions among the Geology Sub-Disciplines

Metadiscourse markers	Sub-discipline	N	Mean Rank	H	df	Sig
Self-mentions	Petrology	30	90.25	148.646	5	0.001
	Engineering Geology	30	15.97			
	Seismology	30	74.45			
	Palaeontology	30	143.53			
	Geotechnics	30	154.73			
	Sedimentology	30	64.07			

According to the results, the answer to the second research question (*Is there any statistical significant difference in the type and frequency of use of interactive metadiscourse markers in Geology research articles across its' six main sub-disciplines?*) is that, except for endophoric markers ($H > 0.05$), the six main variations of Geology demonstrate a statistical significant difference ($H < 0.05$) in the use of transitions, frame markers, evidentials, and code glosses. Moreover, the results on the third research question (*Is there any statistical significant difference in the type and frequency of use of interactional metadiscourse markers in Geology research articles across its' six main sub-disciplines?*) indicate that the six main sub-disciplines demonstrate a significant difference ($H < 0.05$) in the use of five subcategories of interactional markers.

To summarize, our analysis identified clear cross sub-disciplinary differences in the use of metadiscourse markers. In addition, the results

indicate that the most frequent metadiscourse markers used among the Geology variations belong to Sedimentology RAs. It was also indicated that the lowest number of metadiscourse features used among the Geology RAs belongs to the Petrology variation. This reveals that, among the Geology authors, the Sedimentology writers use a heterogeneous array of cohesive and interpersonal features to relate text to context and assist readers to connect, organize, and interpret content in a way which they prefer (Hyland & Tse, 2004).

Discussion

The findings from the results indicated that the writers in the six variations were significantly different in applying metadiscourse elements in the articles of their specialties. This is rather surprising since the variations are all sub-branches of one discipline. The cohesiveness resulting from the dominant use of interactional markers in the RAs of three variations of Paleontology, Geotechnics, and Sedimentology RAs clearly shows their authors' awareness of the readers' active involvement in the discourse. This, according to Gholami and Ilgamit (2016), is considered as a motivating factor in organizing the RAs. It also suggests that the authors in these sub-disciplines are more successful on convincing their readers of what they have accomplished. On the other hand, the higher frequency of use of interactive markers in the three sub-disciplines of Seismology, Sedimentology, and Engineering Geology demonstrate the authors' awareness of their readers' reading requirements. Thus, they provide their readers with an organized text (Gholami & Ilgamit's, 2016) through the prevalent use of connectives, transitions, evidentials, and code glosses.

The difference in the type and frequency of the use of interactive and interactional metadiscourse features between the six sub-disciplines could be due to their authors' shifts towards rhetorical issues (Gillaerts & Van de Velde, 2010). That is, the higher frequency of employment of interactional markers in Paleontology, Geotechnics, and Sedimentology RAs compared to their Geology counterparts might be due their writers' attempts to establish scholarly credibility through using cautious expressions of scientific claims (Gillaerts & Van de Velde, 2010). However, as the Iranian Geology postgraduate students consider metadiscourse features used in the RAs of five disciplines of Biology, Mining Engineering, Civil Engineering, Mechanical Engineering, and Electrical Engineering as good metadiscourse sources for Geology articles, the results will be further discussed in comparison with the findings on these five neighboring disciplines of Geology.

Transitions as conjunctions and adverbial phrases which signal logical relations in the writer's thinking and help readers interpret connections between clauses and steps in an argument (Hyland & Jiang, 2018) had the highest frequency of use in Sedimentology RAs which illustrates its writers' stance towards logical relations compared to other Geology variations. The finding is in line with Gholami and Ilgamit's (2016) and Hyland and Jiang's (2018) discoveries on the use of transitions in Biology and Electrical Engineering RAs. However, the findings are not in agreement with their research findings on the use of transitions in the other five Geology variations

which could indicate that the authors in Seismology, Geotechnics, Palaeontology, Petrology, and Engineering Geology are less proficient in making semantic relations within the text (Hyland &Tse, 2004).

Frame markers as the second subcategory of interactive markers had the highest frequency of use in Seismology, which shows the Seismology authors' tendency to label up-coming segments of text, shift in direction or the sequencing of material (Hyland& Jiang, 2018). According to Hyland and Jiang (2018), the use of frame markers has had the heaviest increase in Electronic Engineers' RAs during the past 50 years which is in line with the study's finding. However, this increase in the application of frame markers is contrary to the results on Civil Engineering (Keshavarz &Kheiri, 2011) and the other five sub-disciplines of Geology under study.

On the contrary, endophoric markers did not display any differences among the six sub-disciplines which shows that all writers in the six variations are explicit in elaborating concepts, spelling out connections between ideas, and clarifying associations between text entities (Hyland & Jiang, 2018). This is in line with the Biology (Gholami & Ilgamit, 2016), and Civil Engineering (Keshavarz & Kheiri, 2011) authors' use of endophoric markers. It also confirms Hyland and Jiang's (2018) discoveries on the use of endophoric markers in Electrical Engineering and Biology articles during the past 50 years, which, according to them, has risen up to 69% and 32%, respectively. Opposite to their findings are the results on the use of endophoric markers in Mining RAs (Farzannia & Farnia, 2016) which, compared to other interactive markers, are less frequent in the discipline.

Evidentials, as the fourth subgroup of interactive markers, demonstrated their highest application in Sedimentology compared to other Geology variations. The result is in agreement with Hyland and Jiang's findings (2018) on the use of evidentials in Electrical Engineering RAs which indicate that the use of evidentials has particularly increased since 1968. This is the same for Mining Engineering RAs (Farzannia & Farnia, 2016). It is rather noteworthy that, in the use of evidentials, the two other sub-disciplines of Geology, namely Palaeontology and Geotechnics, are in the next rankings, respectively. This is evidenced in their generous use of references and text citations. Such generosity can reach up to 90-180 references in some Sedimentology, Palaeontology, and Geotechnics' RAs. This is more compelling when the number of references in such articles is compared to the number of citations in Seismology RAs where the number could approximately reach up to a maximum of 14 in most of the Seismology corpus. This, in Hyland's view (as cited in Hyland & Jiang, 2018), "showcases [the Sedimentology, Palaeontology, and Geotechnics authors'] extensive use of external sources to keep closer ties of research to the particular topics under discussion" (p. 21). The results, however, are in contrast to Keshavarz and Kheiri's (2011) findings on the use of evidentials in Civil Engineering RAs where they report a low frequency of the use of such metadiscourse markers.

Code glosses as the last subcategory of interactive markers had the highest frequency of use in Engineering Geology variation. This is in line with Hyland and Jiang's findings (2018) on the use of code glosses in the Electrical Engineering and Biology disciplines which show a tremendous increase (52%,

122%, respectively) in the past 30 years. On the other hand, the results are inconsistent with the results on the use of code glosses in Civil Engineering where Keshavarz and Kheiri (2011) report on its low level of frequency in such RAs.

Regarding interactional metadiscourse features, hedges were demonstrated to be the most frequently used in the Palaeontology corpus. This shows that Palaeontology authors are the most judicious authors, as they allow themselves to mark their claims as provisional and subject to current objections and future revisions (Hyland & Jiang, 2018). Although the research results on Palaeontology sub-discipline are in line with Estaji and Vafaimeher's (2015), Hyland and Jiang's (2018), Gholami and Ilgamit's (2016), and Farzannia and Farnia's (2016) findings, they are, nevertheless, contrary to Kehavarz and Kheiri's (2011) discoveries on the use of hedges in Civil Engineering RAs. In a study on 120 Civil Engineering RAs, they discovered that hedges are the least common discourse markers used in such articles. This may be due to the Palaeontology, Electrical Engineering, Mining Engineering and Biology authors' orientation to what Hyland and Jiang (2018) call "scientism" compared to authors in Sedimentology, Seismology, Petrology, Geotechnics, Engineering Geology and Civil Engineering.

Boosters as the next subgroup were found to have their highest use in Geotechnics' RAs, which is in agreement with Hyland and Jiang's (2018) findings on the use of boosters in Electrical Engineering articles, in which the use of boosters is said to have gradually increased during the past 50 years. This demonstrates the Geotechnics' authors preferences in shifting from commitments expressed as personal beliefs towards those which seek to convey more objective, data supported assurances (Hyland & Jiang, 2018), which is less observed in Civil Engineering (Keshavarz & Kheiri, 2011) and other Geology variations.

The third subcategory, attitude markers, possess their highest rankings in Palaeontology RAs. This illustrates the writers' preferences for writing more based on the facts, employing a strong tone (Estaji &Vafaeimehr, 2015) compared to other Geology sub-disciplines. As a variation of hard sciences, this contradicts the results reported by Kehshavarz and Kheiri (2011) on Civil Engineering, Estaji and Vafaeimehr (2015) on Mechanical and Electrical Engineering, and Farzannia and Farnia (2016) on Mining Engineering where they indicated that the least amount of metadiscourse markers used in Mechanical, Electrical, and Mining Engineering RAs belong to attitude markers. Further, the finding is in contrast to Hyland and Jiang's (2018) findings on the two disciplines of Electrical Engineering and Biology where they reported a tremendous fall in Electrical Engineering and Biology RAs' use of attitude markers in the past 50 years. This, in their view (2018), shows the authors' tendency for strong authorial standpoints on issues.

The fourth subgroup, engagement markers, show their most frequencies in Sedimentology, Seismology and Palaeontology RAs, with the Sedimentology variation holding the first position in the ranking. This, according to Hyland and Jiang (2018), demonstrates the three sub-disciplines authors' ability to explicitly step into the text to focus readers on a particular aspect of the data or argument and guide their interpretations. While the

findings are in line with Hyland and Jiang's (2018), and Gholami and Ilgamit's (2016) results on the use of engagement markers in Electrical Engineering and Biology RAs, they do not confirm the results gained by Keshavaraz and Kheiri (2011) on the use of engagement markers in Civil Engineering RAs. More importantly, there is a slight contrast between the study's results and Sahragard and Yazdanpanah's (2017) findings on the use of engagement markers in Geology RAs. They report that Science RAs, including Geology, contain fewer engagement markers. According to the present study, the findings on the use of engagement markers in the three sub-disciplines of Sedimentology, Seismology, and Palaeontology do not agree with Sahragard and Yazdanpanah's (2017) results. Nonetheless, their results confirm the present study's findings on the use of engagement markers in the three other variations of Geology including Geotechnics, Petrology, and Engineering Geology. The contradiction might be due the small number of samples (16) from the Geology RAs chosen for Sahragard and Yazdanpanah's study (2017) which clearly had not embraced all the six main variations of Geology.

The last subgroup of metadiscourse markers, i.e., self-mentions, possess the highest frequency of use in Geotechnics' RAs which represent a significant aspect of rhetorical persuasion in Geotechnics' academic writing through which they gain credit for their research claims (Hyland, 2004). The undistinguishable application of the self-mention marker 'we' across all Geology variations showcases the authors' tendency for explicit presence of themselves in the discourse (Gholami & Ilgamit, 2016) which is the highest among Geotechnics' authors. This is in line with Hyland and Jiang's (2018) findings on the use of self-mentions in Electrical Engineering and Biology RAs, the frequency of which, according to them, has risen up to 50% during the last 50 years.

Overall, the results from interactive and interactional metadiscourse markers investigated in the study showed that the interactive features were used more frequently in Petrology, Engineering Geology, and Sedimentology RAs. This illustrates their writers' understanding of the importance of providing the propositional information to their readers through an organized text (Gholami & Ilgamit's, 2016). On the other hand, their Geology counterparts, i.e., Seismology, Palaeontology, and Geotechnics writers demonstrated a higher use of interactional metadiscourse features. It seems that, according to Gillaerts and De Velde (2010), the authors in these variations are more oriented towards dropping the role of an 'omniscient' academic, and instead act as a scholar who deliberately expresses his/her scientific claims.

Conclusion and Implications

The study, adopting an intradisciplinary perspective, was conducted to fill in the gap of genre research on the type and frequency of metadiscourse markers within Geology discipline. The results approved that experts practicing in different sub-disciplines may have different priorities and rhetorical norms which could vary depending on the size of their discourse community, the gatekeepers in that community, and how conventionalized the community is (Swales, 1990). In addition, the findings revealed that the same field of study, either Science or Engineering, does not prescribe the use of the same type of

metadiscourse features in all neighboring disciplines. As Trowler et al. (2012) note "disciplines have real epistemological characteristics that knowledge structures do condition practices in quite real ways" (p. 246). Therefore, disciplinary writers should be admonished on the correct use of metadiscourse features applied both within their disciplines and in related disciplines.

The findings also have pedagogical implications. Overuse or misuse of metadiscourse features can make the text long-winded and clumsy (Crismore & Abdollahzadeh, 2010). Thus, designing authentic exercises by ESP instructors and materials developers geared to the students' specialties can raise students' awareness on the correct use of both metadiscourse categories. Our results will be further refined by research on the type and frequency of metadiscourse features in Geology abstracts as 'mini-articles'. Moreover, research on the effect of cultural factors on the use of metadiscourse elements in Geology context will improve our understanding of the diversity of metadiscourse employment in the six main variations of Geology.

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A Triangulated Analysis of the English Language Needs of Iranian EAP Undergraduate Physiotherapy Students

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Abstract
Considering the leading role of needs analysis (NA) in English for Academic Purposes (EAP) courses and the necessity of reconsidering such courses in Iran, this study was designed to investigate the present and target academic English language needs of undergraduate physiotherapy students through triangulation of sources and methods. To this aim, data were elicited from 132 undergraduates, 20 graduates working as physiotherapists, 20 content teachers, and 9 language teachers at four medical universities in Tehran. The quantitative and qualitative data were gathered through two versions of an NA questionnaire and semi-structured interview protocols, respectively. The findings indicated that, although most of the skills and sub-skills in target needs were considered important or very important by all the stakeholders, there were differences in the preferences and priorities of different groups. The results of the self-assessment section also revealed the skills in which the students need improvement. The findings also signified some issues and options in EAP courses for physiotherapy students and promise implications for refining and enhancing EAP courses and materials through triangulating the multiple points of view on the students' target needs and demands of their present situation.

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Introduction

Considering the leading role of needs analysis (NA) in English for Academic Purposes (EAP) courses and the fact that the content and goals of EAP course are specifically designed to meet the exclusive needs of the students, the focus of EAP courses is on the language, skills, and genres related to the specific activities the students need to carry out in English (Paltridge & Starfield, 2013). Hence, Needs Analysis (NA) plays a vital role in gathering information for developing reliable and valid courses, syllabi, and materials (Brown, 2009; Dudley-Evans & St John, 1998). Literature (e.g., Bocanegra-Valle, 2016; Long, 2005) considers need perception as a multidimensional issue which is better to be determined from different views and advocates taking in to account multiple voices, including students' (Long, 2005), in the process of investigating the students' needs.

Review of Literature

Sifgnificance of NA has stimulated many researchers to conduct NA studies worldwide. Among NA studies in medical contexts, reference can be made to Holme and Chalauisaeng (2006) who considered EAP course development for pharmacology students using Participatory Appraisal (PA) and found that PA techniques could enhance the development of a learner-centered classroom, create a more positive attitude to language learning, improve motivation, and help students achieve the greater self-direction that may support the future acquisition of academic reading skills.

Having analyzed the needs of Iranian nursing and midwifery students, Mazdayasna and Tahririan (2008) found that the goals of the course were impractical and scant to nurture the students' skills for the introduced goals by their specialist departments, and the students 'greatly' needed to increase their General English Proficiency (GEP). All four skills were considered needed for the students' medical studies according to most of the students and nearly all content teachers.

Atai and Nazari (2011) conducted a triangulated study to investigate reading comprehension needs of Iranian students of Health Information Management (HIM) in EAP courses using four questionnaires, a General English Proficiency (GEP) test, self-assessment, semi-structured interviews, and non-participant observations. The results indicated that skimming texts, using bilingual general dictionaries, scanning texts, knowledge of HIM terminologies, guessing meanings of words, and understanding main ideas were perceived as either important or very important to students' success, and suggested improving students' GEP through remedial courses.

Lu (2018) analyzed English language needs and challenges of Taiwanese nurses in the workplace and probed the nurses' ideas about the effectiveness of their ESP courses in preparing them for the workplace. Interviewing and observing the nurses working in the international care center of a large-scale hospital, Lu found that they needed effective communication skills in English. It was also found that the courses were not successful in equipping the nurses with workplace needs in terms of vocabulary, pronunciation, and accent.

EAP in Iran

The history of teaching English for specific purposes (ESP)/EAP in Iran has been divided into three eras (Atai, 2002). In the first era, before 1979 (the Islamic revolution), the ESP/EAP textbooks for tertiary education which were provided by the British Council were designed to meet the needs of the multidisciplinary fields of studies by focusing on Reading Comprehension (RC). During the second phase (in 1980s) the Iranian Center for Studying and Compiling University Books of Humanities (SAMT) revised and planned a number of textbooks for macro disciplines. In the third era, the present status, there has been a focus on developing materials for narrow disciplines.

ESP courses target meeting the needs of specific groups of learners through analyzing their target and present needs (Dudley-Evans & St John, 1998; Hutchinson & Waters, 1987). However, the insufficient literature of EAP programs at Iranian Universities implies that such programs have practically failed to achieve the predetermined results in developing language related abilities of the students (Atai & Tahririan, 2003). Considering the significance of EAP "programs in Iran as a major part of the ELT curriculum with noticeable educational and financial investments", Atai and Nazari (2011) suggest "the course designers should reassess the needs of students and improve the current status quo" (p. 31). However, identifying the present and target language needs of students of physiotherapy seems as an under-researched area and this gap leaves designing EAP courses and developing materials for this group unsystematic. Hence, this study attempted to provide a comprehensive profile of present and target language needs of Iranian ESP undergraduate physiotherapy students at medical universities in Tehran through integrating qualitative and quantitative research design. To this aim, the following research questions were set forth:

1. What are the target and present academic English needs of Iranian undergraduate students of physiotherapy?

2. What are the differences and preferences among different stakeholders regarding their perceptions of undergraduates' target and present academic English needs?

Method
Participants

To triangulate the perceptions of different stakeholders (Bocanegra-Valle, 2016), four different groups including 132 undergraduate students, 20 graduates working as physiotherapists, 20 content teachers, and 9 language teachers were randomly selected through cluster sampling procedure from the state medical universities of Tehran, Iran, Shahid Beheshti, and Social Welfare and Rehabilitation Sciences (USWRS), Tehran, Iran (Table 1). The participants were male and female and the undergraduates either had passed or were attending EAP courses and their age ranged from 20-24. The size of the sample for the undergraduates was determined using Morgan's table which is based on Cochran's formula. The language teachers and content teachers were randomly selected via convenience sampling from the corresponding English and content departments of the same universities.

Table 1
Demographics of the Participants

Undergraduates				Graduates	Content teachers	Language teachers
I	B	T	W	20	20	9
29	21	32	50			

I: Iran University
S: Shahid Beheshti University
T: Tehran University
W: USWRS

Instrumentation

Bocanegra-Valle (2016) emphasizes conducting NA adopting a mixed-methodology "that makes use of systematic data collection procedures, takes into account the views of different stakeholders, and is based on a triangulation of data collected from multiple research methods and sources" (p. 568). Hence, aiming at methodological triangulation, we employed both quantitative and qualitative instruments. As for the qualitative instruments, also in order to involve various sources, four different versions of a researcher-made questionnaire were developed to probe the perceptions of four different groups including undergraduates, graduates, language teachers, and content teachers. Qualitative instruments also included two different interview protocols developed for eliciting the viewpoints of content and language teachers.

The undergraduate students' questionnaire (Appendix A) included six parts, the first of which elicited the participants' demographic information. It was followed by two parts of questions concerning Target Situation Analysis (TSA) (including forty-six items) and Present Situation Analysis (PSA) (with fifty items). While the fourth section, including eleven questions, investigated the extent to which the students were satisfied with the status of their EAP classes, the methodology, and the textbooks and materials, the fifth section, including five questions, investigated the students' attitudes towards language instruction, the length of the course, the content of the course and the materials, syllabus, and methodology of their EAP courses. All the items included in sections 2-5 were on a five-point Likert scale. Two open ended questions on the problematic issues and probable solutions were also included in the last part. It deserves mentioning that the language teachers' questionnaire contained all the six sections with items similar to the undergraduate students' questionnaire while content teachers' and the graduates' questionnaires just included the TSA part of the undergraduates' questionnaire.

Procedure

This study involved developing the researcher-made instruments including questionnaires and interview protocols. To do so, the first drafts of the questionnaires were developed based on the theoretical and empirical literature on NA and preliminary exploratory interviews with language and content teachers and undergraduate and graduate physiotherapy students. To assess the content validity of the questionnaires, a panel of EAP experts

familiar with the construct was consulted with to consider the clarity and relevance of the items. Also, piloting undergraduate students' questionnaire on 50 participants and running Cronbach's alpha assured the reliability of the questionnaire (section 1 = 0.89; section 2 = 0.99, and section 3 = 0.96). To estimate the construct validity of the questionnaire for undergraduates, exploratory (EFA) and confirmatory (CFA) factor analyses were run and seven factors were extracted from each of the first and second parts of the questionnaire. Specifically, TSA part included factors on "listening comprehension (LC)", "reading comprehension (RC)", "vocabulary knowledge", "using English at workplace", "oral communication", "writing and translation", and "general language skills in English" and the second part which was on PSA included factors on "LC", "RC", "using English at workplace", "oral communication", "writing and translation", "study skills", and "general language skills in English".

Developing the interview protocols also involved scrutinizing the exiting theoretical and empirical literature, exploratory interviews with the four groups of stakeholders (i.e., language teachers, content teachers, graduates, and undergraduate students), and revising the first draft upon considering the opinions of the panel of experts (Appendix B).

Data Collection

This study involved gathering data through semi-structured interviews and questionnaires during spring semester (2017) in four medical universities in Tehran. The undergraduate students' questionnaires were distributed and gathered in their classes while the content teachers, the language teachers, and the graduates working as physiotherapists were asked to complete the questionnaires in their offices. Data collection was done by the first researcher and all the questionnaires were gathered right after the completion. Moreover, the language teachers and content teachers were interviewed in their offices and all the interviews were tape-recorded.

Data Analysis

This descriptive study adopted a mixed methodology through triangulating different sources and instruments to analyze the needs of EAP courses for undergraduate physiotherapy students. The data were analyzed descriptively and inferentially using the Statistical Package for the Social Sciences (SPSS) 22.0.0.0 software. While the results of the interviews and open-ended questions included in the questionnaires were analyzed descriptively to answer the first research question, investigating the second research question involved using non-parametric inferential tests of Kruskal Wallis and Mann Whitney U. Moreover, Cronbach's Alpha and EFA were used to estimate the reliability and validity of the undergraduate students' questionnaire. CFA was also run through Lisrel 8 to confirm the results of EFA.

Results
Target and Present Needs of the Students

Descriptive statistics were run to probe the first research question to determine the target and present academic English language needs of Iranian undergraduate students of physiotherapy.

Undergraduates' Target Needs. As for the target needs, while the stakeholders agreed on the importance of almost all factors, in descending order, RC was either very important (content teachers: 80%, language teachers: 66.7%, and graduates: 76.7%) or important (students: 39.4%). LC was regarded very important by language teachers (68.1%) and graduates (46.9%) and important by undergraduates (42.7%) and content teachers (36.3%). The next important factor was general language skills in English which was considered either very important (content teachers: 41.7%, language teachers: 48.1%), or important (undergraduates: 39.2%, graduates: 43.3%). Similarly, vocabulary knowledge and oral communication were considered very important (language teachers, 54.4%, 42.2%) or important (undergraduates, 40.4%, 36.7%; graduates, 51%, 52%; content teachers, 51.5%, 47%). While writing skill was considered very important by all stakeholders (undergraduates: 39.2%, content teachers: 42.5%, language teachers: 48.6%, graduates: 62.5%), using English at workplace, the least important factor to the participants, was considered important (undergraduates: 36.4%, content teachers: 43.6%, graduates: 46%) and rather important (language teachers: 55.6%).

Most Important Items. As for the items included in this part, most of them were either important or very important to two or three groups. However, all four groups agreed on few items as being important or very important. Specifically, they considered "note-taking from English textbooks" (language teachers: 44.4%, content teachers: 45%, undergraduates: 53%, and graduates: 65%), "note-taking from English lectures in international professional seminars and workshops" (language teachers: 66.7%, content teachers: 50%, undergraduates: 39.4%, and graduates: 80%), "writing a report about patients conditions to the specialized physicians" (language teachers: 44.4%, content teachers: 50%, undergraduates: 40.2%, and graduates: 65%), and "writing emails in English to non-Persian content teachers" (language teachers: 88.9%, content teachers: 45%, undergraduates: 43.2%, and graduates: 60%) as very important. It is worth mentioning that all these very important items are related to writing and translation.

Moreover, all the groups considered "guessing the meaning of new words using prefixes and suffixes" (language teachers: 44.4%; content teachers: 70%; undergraduates: 48.5%; and graduates: 60%), "understanding the meanings of technical medical vocabularies used in patients' prescription" (language teachers: 44.4%; content teachers: 65%; undergraduates: 42.4%; and graduates: 55%), and "reading the adjustments and instructions on the apparatus" (language teachers: 55.6%; content teachers: 50%; undergraduates: 35.6%; and graduates: 50%) as important.

Less Important Items. As for items of less significance, "reading patients' files" was relatively important to language teachers (55.6%) and content teachers (50%) and graduates (40%), and can be considered as the least important one. "Reading medical reports" (language teachers: 44.4%, content teachers: 50%, and graduates: 40%), and "reading medical consultations" (language teachers: 55.6%, content teachers: 40%) were also relatively important. All such items are related to using English at workplace.

Furthermore, "listening to lectures in physiotherapy conferences" and

"listening to lectures and presentations in classes" were relatively important to 45% and 50% of content teachers, while they were very important to language teachers (55.6% and 55.6%, respectively) and graduates (55% and 45%, respectively). In much the same vein, "interpreting English instructions written in brochures and on specialized tools and devices of physiotherapy", "reading the monitors on devices" and "Reading the abbreviations on devices" were relatively important to language teachers (55.6%, 66.7%, and 77.8%, respectively), while they were important to other three groups.

Undergraduates' Present Needs. To assess the present situation needs of the students, the language teachers and undergraduates reflected on undergraduates' abilities in different skills included in the questionnaire. Considering the factors of the questionnaire, while 36.6% of undergraduates believed they need improvement in "LC", 40.3% of language teachers deemed that students can relatively perform listening tasks. Both undergraduates (36.8%) and language teachers (38.9%) construed that the undergraduates need improvement in "RC"; however, they believed students can relatively "use English at workplace" (undergraduates: 43%, language teachers: 54.4%), and perform "oral communication tasks" (undergraduates: 36.5%, language teachers: 38.3%) and "general language skills in English" (undergraduates: 34.1%, language teachers, 37%). Undergraduates believed they are relatively able to perform "writing tasks" (38.4%) and "study skills" (37.7%) and language teachers thought undergraduates can easily perform "writing tasks" (41.3%) and need improvement in "study skills" (35.6 %).

As for the items of the questionnaires, the results of the language teachers' and undergraduates' questionnaires regarding the present needs of the students can be classified into three groups considering the degrees of similarities and differences of their responses. The first group, the items about which both groups have the same ideas, along with their related factors and percentages of responses of each group are represented in Table 2. Considering the items with their related factors indicates that both groups believed that the students can relatively do some tasks mostly related to oral communication and using English at workplace. They also agreed that the undergraduates need improvement in a few items mostly related to LC and RC.

Table 2
Similarities in Language Teachers' and Undergraduates' Perceptions on Undergraduates' Abilities

Items both groups believed undergraduates can do Relatively	language teachers	undergraduates
Listening to and understanding professionals and hospital staffs in real situations using English physiotherapy expressions (oral communication)	44.4%	34.1%
Giving class presentations in English (oral communication)	44.4%	37.1%
Having oral communication in English in academic conferences (oral communication)	44.2%	37.1%
Knowing the pronunciations of technical English vocabularies (oral communication)	33.3%	36.4%

Participating in technical conversations (oral communication)	44.4%	33.3%
Knowing the pronunciations of general English vocabularies (oral communication)	33.3%	36.4%
Having conversations with professionals and hospital staffs in real situations using English physiotherapy expressions (oral communication)	33.3%	36.4%
Having conversations with non-Persian lecturers and /or content teachers (oral communication)	33.3%	34.8%
Using English physiotherapy expressions in a way understandable for other colleagues (oral communication)	33.3%	41.7%
Reading and interpreting English instructions written in brochures and on specialized tools and devices of physiotherapy (using English at workplace)	55.6%	48.5%
Reading the abbreviations (using English at workplace)	55.6%	45.5%
Reading the monitors (using English at workplace)	77.8%	40.2%
Reading the adjustments (using English at workplace)	66.7%	45.5%
Reading medical reports (using English at workplace)	55.6%	47%
Reading medical consultations (using English at workplace)	66.7%	45.5%
Reading medical tests (using English at workplace)	55.6%	47.7%
Listening to and understanding lectures and presentations in classes (LC)	88.9%	57.6%
Listening to and understanding English lectures in international seminars (LC)	55.6%	34.1%
Reading original physiotherapy textbooks (RC)	55.6%	47.7%
Using bilingual technical dictionaries (study skills)	33.3%	38.6%
Using knowledge of general English vocabulary (study skills)	33.3%	36.4%
Taking class exams (general language skills)	33.3%	37.1%
Using knowledge of grammar (general language skills)	33.3%	37.1%
Items both groups believed undergraduates Need improvement in		
Guessing the meaning of unknown words using prefixes and suffixes (RC)	66.7%	42.4%
Listening to and understanding lectures in physiotherapy conferences (LC)	55.6%	43.9%
Listening to and understanding films and documentaries on physiotherapy (LC)	55.6%	40.9%
Listening to and understanding colleagues' conversations using English physiotherapy expressions (LC)	55.6%	39.4%
Reading papers in professional journals (RC)	33.3%	36.4%
Guessing the meanings of unknown words from context while reading (RC)	44.4%	39.4%

Undergraduates and language teachers had different ideas regarding the items that the students need improvement in. Such items, their related factors, and percentages of different groups believing the undergraduates' need for improvement are provided in Table 3. While language teachers believed in the need for improvement in 7 items, undergraduates believed they need improvement in 11 items, mostly related to RC and writing and translation,

skills which language teachers believed the students can do either relatively or easily.

Table 3
Differences in Language Teachers' and Undergraduates' Perceptions on the Items Undergraduates Need Improvement in

Items language teachers believed the students Need improvement in
Exploiting international English workshops (LC), (44.4%)
Analyzing scientific texts for understanding (RC), (55.6%)
Understanding the meanings of technical medical vocabularies used in patients' prescriptions (using English at workplace), (55.6%)
Preparing and writing medical reports (using English at workplace) (44.4%)
Knowledge of technical English vocabulary (study skills), (35.6%)
Writing diagnosis and prescriptions about patients (writing and translation), (44.4%)
Items undergraduates believed the students Need improvement in
Listening to and understanding instructions in the workplace (LC), (39.4%
Listening to and understanding teachers' lectures in English (LC), (40.9%)
Understanding technical vocabularies in textbooks and papers on physiotherapy (RC), (37.9%)
Scanning English texts (RC), (41.7%)
Reading and searching in English texts (RC), (41.7%)
Translating technical texts and papers from English to Persian (writing and translation), (34.8%)
Translating technical texts and papers from Persian to English (writing and translation), (36.4%)
Using monolingual technical dictionaries (study skills), (38.6%)
Taking international English examinations (e.g. IELTS) (general language skills), (30.3%)
Writing emails to non-Persian lecturers and field experts (study skills), (36.4%)

According to the results of the questionnaires, there were items on which language teachers and undergraduates had different perceptions as undergraduates believed they can do them relatively, while language teachers believed the students can do them easily/relatively (Table 4). It is worth mentioning that most of such items about which undergraduates underestimated their abilities are related to writing and translation.

Table 4
Differences in Language Teachers' and Undergraduates' Perceptions on the Items Undergraduates Can Do

Items	Langauge teachers	Undergraduates
Note-taking from English lectures	can do easily (44.4%)	(39.4%)
Note-taking from English lectures in international professional seminars and workshops	can do easily (44.4%)	(43.9%)
Writing term projects and term papers for classes	can do relatively (44.4%) and easily (44.4%)	(44.7%)
Note-taking from English textbooks	can do relatively (44.4%) and easily (44.4%)	(42.4%)
Note-taking from English lectures	can do easily (44.4%) and relatively (44.4%)	(43.9%)

Stakeholders' Differences and Preferences Regarding their Perceptions of Undergraduates' Target and Present Academic English Needs

Inferential statistics were run to answer the second research question concerning the stakeholders' differences and preferences regarding the target and present academic English needs of Iranian undergraduate students of physiotherapy.

Stakeholders' Differences in Perceptions on Undergraduates' Target Needs. To answer the second research question on the differences among the stakeholders regarding their perceptions of undergraduates' target academic English needs, non-parametric inferential tests of Kruskal Wallis were employed (Table 5). The results showed the participants did not differ in their perceptions on target academic English needs in general (p = 0.01). To be more specific, there were no significant differences in the stakeholders' perception of the importance of the following factors of the questionnaires: vocabulary knowledge, oral communication, general language skills in English, and writing and translation. However, there were significant differences in LC, RC, and using English at workplace.

Table 5

Differences in Stakeholders' Perceptions of Undergraduates' Target Academic English Needs

	Group	Mean Rank	Chi-Square	Df	p-value
LC	Undergraduates	84.20	15.886	3	.001
	Graduates	118.88			
	Content teachers	86.13			
	Language teachers	139.56			
RC	Undergraduates	78.10	31.367	3	.000
	Graduates	136.08			
	Content teachers	118.00			
	Language teachers	120.00			
Vocabulary Knowledge	Undergraduates	86.44	4.341	3	.227
	Graduates	102.38			
	Content teachers	98.73			
	Language teachers	115.39			
Using English in the Workplace	Undergraduates	96.29	7.905	3	.048
	Graduates	81.18			
	Content teachers	84.33			
	Language teachers	50.06			
Oral Communication	Undergraduates	89.95	.322	3	.956
	Graduates	95.68			
	Content teachers	90.73			

	Language teachers	96.67			
Writing and Translation	Undergraduates	85.73			
	Graduates	118.60			
	Content teachers	96.15	7.184	3	.066
	Language teachers	95.50			
General Language Skills	Undergraduates	85.76			
	Graduates	106.75	5.046	3	.168
	Content teachers	104.68			
	Language teachers	102.50			
TSA	Undergraduates	83.92	10.051	3	.018
	Graduates	119.43			
	Content teachers	101.98			
	Language teachers	107.33			

There was a statistically significant difference among stakeholders regarding their perceptions of LC factor (x^2 = 15.886, p = .01) with graduates and language teachers having the highest mean ranks and undergraduates and content teachers having the lowest mean ranks. Specifically, most of the language teachers and graduates considered all and some of the items very important, respectively. However, undergraduates thought all of the items in this factor were important and content teachers considered some items as being important to some extent or of little importance.

As for the differences in RC (x^2 = 31.367, p = 0.00), graduates and undergraduates had the highest and lowest mean ranks respectively and the mean ranks of content and language teachers were close to each other. Undergraduates had different ideas and considered all items important, except "translating English text to Persian" which was very important to them, whereas content teachers and graduates thought all items were very important. Likewise, language teachers considered all items to be very important, and just "reading and searching in English texts" was important to them.

As for using English at workplace, undergraduates, graduates, and content teachers considered all items important (except reading patients files which was ranked relatively important by the content teachers), while language teachers believed "reading the adjustments and instructions of the apparatus" was important and considered other items as relatively important. Generally, the results of the ad hoc test reported significant differences in undergraduates' and graduates' perceptions regarding undergraduates' target needs.

Stakeholders' Differences in Perceptions on Undergraduates' Present Needs. Mann_Whitney tests run for probing the differences between the opinions of language teachers and undergraduates regarding their perceptions of undergraduates' present academic English needs indicated no statistically significant differences between these two groups (Table 6) (u= 439 and p > 0.05) in this regard.

Table 6

Differences in the Stakeholders' Perceptions on Undergraduates' Present Academic English Needs

Variable	Group	Mean Rank	Mann-Whitney U	Asymp. Sig. (2-tailed)
LC	Undergraduates	69.83	440.000	.193
	Language teachers	88.11		
RC	Undergraduates	69.98	459.500	.256
	Language teachers	85.94		
Using English in the workplace	Undergraduates	72.04	456.500	.245
	Language teachers	55.72		
Oral communication	Undergraduates	69.89	447.000	.214
	Language teachers	87.33		
Writing and translation	Undergraduates	69.11	344.500	.035
	Language teachers	98.72		
Study skills	Undergraduates	69.66	417.000	.134
	Language teachers	90.67		
General English language skills	Undergraduates	69.89	447.000	.211
	Language teachers	87.33		
PSA	Undergraduates	69.83	439.000	.191
	Language teachers	88.22		

Stakeholders' Preferences on Undergraduates' Target and Present Needs. To investigate the preferences among the stakeholders regarding the target needs of the students, Friedman test was run and the results indicated no significant preferences among undergraduates (p = .21) (Table 7). Nevertheless, as for the graduates, the results (x^2 = 31.60; p = 0.01) ranked their preferences for the skills in a descending order: RC (5.83), writing and translation (4.63), L.C (4.33), general language skills in English (3.93), vocabulary knowledge (3.50), oral communication (3.48), and using English at workplace (2.33). The results for undergraduates (x^2 = 8.317; p = .216) conveyed their preferences for writing and translation (4.27), oral communication (4.23), RC (4.16), general language skills in English (3.94), vocabulary knowledge (3.86), LC (3.71), and using English at work (3.23). Among the content teachers (x^2 = 25.69; p = 0.01), the results indicated preferences for RC (5.70), general language skills in English (4.68), writing and translation (4.10), LC (3.57), vocabulary knowledge (3.78) and oral communication (3.43), and using English at work (2.58). Language teachers also ranked the skills in a descending order of (x^2 = 17.49; p = 0.01) RC and LC (5.33 and 5.28, respectively), general language skills in English (4.56), vocabulary knowledge (3.78), writing and translation and oral communication, (3.44), and using English at workplace (1.83). Accordingly, RC is the most

important skill for all groups, and using English at workplace was the least important one for all stakeholders except for undergraduates who considered it as the second least important one and ranked LC as the least important one.

Table 7
Stakeholders' Preferences Regarding Target Needs of Physiotherapy Students

	Group	Mean Rank	Chi-Square	Df	p-value
Undergraduates	LC	3.71			
	RC	4.16			
	Vocabulary Knowledge	3.86			
	Using English at Workplace	3.83	8.317	6	.216
	Oral Communication	4.23			
	Writing and Translation	4.27			
	General Language Skills	3.94			
Graduates	LC	4.33			
	RC	5.83			
	Vocabulary Knowledge	3.50			
	Using English at workplace	2.33	31.605	6	.000
	Oral communication	3.48			
	Writing and translation	4.63			
	General language skills	3.93			
Content teachers	LC	3.75			
	RC	5.70			
	Vocabulary Knowledge	3.78			
	Using English at workplace	2.58	25.697	6	.000
	Oral Communication	3.43			
	Writing and Translation	4.10			
	General language skills	4.68			
Language teachers	LC	5.28			
	RC	5.33			
	Vocabulary Knowledge	3.78			
	Using English at workplace	1.83	17.498	6	.008
	Oral communication	3.44			
	Writing and Translation	3.78			
	General Language Skills	4.56			

Furthermore, the results of Friedman tests run for examining the significant preferences of language teachers and undergraduates regarding the present needs of undergraduate physiotherapy students (Table 8) (x^2 = 62.11; p > 0.05) indicated undergraduates' preferences for using English at workplace (5.14), RC and writing and translation (4.06), oral communication (3.86), study skills (3.85), LC (3.82), and general language skills in English (3.20), using English language at workplace in a descending order. However, language teachers did not have any preferences and considered all items at the same level of importance (p < 0.05).

Table 8

The Preferences among Stakeholders Regarding Present Needs of Physiotherapy Students

Group		Mean Rank	Chi-Square	df	p-value
Undergraduates	LC	3.82	62.116	6	.000
	RC	4.06			
	Using English in the workplace	5.14			
	Oral communication	3.86			
	Writing and translation	4.06			
	Study skills	3.85			
	General language skills	3.20			
Language teachers	LC	3.89	2.446	6	.874
	RC	4.11			
	Using English in the workplace	4.00			
	Oral communication	3.44			
	Writing and translation	4.83			
	Study skills	4.00			
	General language skills	3.72			

The Amount of the Stakeholders' Satisfaction from the EAP Courses

According to the results of the third part of the questionnaire, both undergraduates and language teachers were satisfied to a moderate extent with "using English in manipulating the instruments and tools in the workplace" (31.1%, 44.4%, respectively), and "not offering EAP courses to students having lower than average level of GEP" (30.3%, 33.3%, respectively). Moreover, undergraduates and language teachers were respectively satisfied to a large extent and to a moderate extent with "the number of the students" (42.4%, 44.4%), "the materials and the content of the book" (34.1%, 44.4%), "the teaching methods" (36.4%, 55.6%), "the assessment methods" (43.2%, 44.4%), "using source books" (37.9%, 44.4%), "using technology in EAP classes" (44.7%, 55.6%), and "the importance given to EAP courses" (38.6%, 33.3%). While "the amount of English language usage in EAP classes" (34.1%), and "the number of credits given to EAP courses" (37.9%) were satisfactory to a great extent to undergraduates, equal number of language teachers (33.3%) stated they were satisfied with them either a little or to a moderate extent, respectively.

Stakeholders' Opinions about the Issues of EAP Courses

The fourth part of the questionnaire contained 5 items on the undergraduates' and language teachers' viewpoints about various issues of EAP courses. The results showed that both undergraduates and language teachers agreed respectively to a great extent and a large extent with "studying the original English subject-specific sources" (39.4%, 44.4%) and "taking a placement test before the EAP courses" (36.4%, 66.7%). Moreover, while undergraduates completely agreed with "EAP courses being taught by content teachers" (57.6%), language teachers agreed with it to a large extent (66.7%). However, undergraduates (29.5%) completely agreed with "omitting the

general English courses for the students with high ranks in English test in UEEI (the University Entrance Exam of Iran)", whereas language teachers (44.4%) completely disagreed with it. While undergraduates (34.8%) agreed to a great extent with "paying more attention to GEP", language teachers (33.3%) agreed with it a little or to a moderate degree.

Undergraduates' Perceptions of Problems with Teaching and Learning EAP and the Probable Solutions

The open-ended questions at the end of the questionnaires probed any problematic issues and probable solutions in teaching and learning EAP courses. Some students referred to EAP textbooks being outdated, inauthentic, and demotivating (18%). Moreover, they deemed that translated papers and textbooks, being weakly interpreted and usually outdated, could not replace the original ones. They also referred to the time limitation in EAP classes (13.8%), and complained about the type and amount of assignments (11.5%) and activities (7.8%) in EAP classes which did not challenge their knowledge as they were not related to their workplace needs. It is worth mentioning that the students stated their dissatisfaction with the lack of audio-visual facilities in their EAP classes (9%).

As for the probable solutions, they suggested using updated original textbooks (16%) and more films and documentaries to improve their LC (11%). Furthermore, they (9%) preferred learning vocabularies or structures through reading original texts rather than out of context.

Qualitative Results of Semi-Structured Interviews with ESAP Teachers

To triangulate the results of the questionnaires, content teachers and language teachers were interviewed, the results of which are presented in this part.

1. Concerning the most important skills needed by physiotherapy students, most of the language teachers believed, despite the significance of improving all four skills, considering the time limitation, RC and translation should be prioritized in EAP courses. However, if the time allotment or the number of credits given to the EAP courses were changed, they could work on other skills (87%). Most of the content teachers, however, believed different skills were needed in different educational levels, for example, at BSc level, students mostly need translation and RC skills, but in higher education, LC and writing and translation are also important. They also stated that, if the students wanted to communicate more and use the updated knowledge that is usually in English, they needed to improve all four skills.

2. Concerning the types of activities used in EAP classes, language teachers stated that the classes are in Persian (51%) and mostly translation-based, they usually start with grammar and then translation aiming at enabling students to translate or at least understand the academic texts autonomously. They (43%) believed that focusing on other skills and speaking English during the class can waste their time. However, 36% of them believed listening to, watching, and presenting lectures and other related class activities in English could have been effective, if time allowed.

Regarding this question, 30% of the content teachers stated, as using

English language and also materials in English are not defined in the syllabi of the undergraduate level, they used Persian textbooks as far as they are available. However, 70% of them believed that Persian translated or developed textbooks do not fulfill the need of the students to the latest knowledge of the world, so they preferred to use authentic and original papers, texts, and materials which foster the students' language abilities and are practical for their further studies in higher levels.

3. To identify the obstacles and problems in the way of teaching or learning EAP, most of the language teachers (89%) referred to the students' low GEP level due to the failure of educational system at high schools. Inadequate learning strategies (e.g. memorizing the vocabulary out of context) and students' unfamiliarity with academic genre were also counted as utmost obstacles (30% and 13.3%, respectively). On the other hand, most of the content teachers (80%) claimed the students are neither aware of the importance of EAP in their studies nor motivated to learn it due to their low GEP level.

4. About the relationship between students' level in EAP courses and their GEP level, the majority of the language teachers (96%), despite referring to their bilateral relationship, stated that GEP will not help the students foster the specific and academic genre in their field of study and it is possible to train EAP skills without focusing merely on GEP. Moreover, content teachers (90%) believed that GEP courses, being the prerequisite for EAP courses, affect the level of students' knowledge of EAP. It is also believed that their GEP level will help the students to exploit their knowledge in a practical way (e.g. reading papers and textbooks).

5. Regarding the number of credits given to EAP courses, while language teachers (95.8%) pointed that it does not suffice to meet the needs of all students, content teachers (97%) reckoned that the number is sufficient if language teachers can manage the time and resources. To compensate, both groups suggested EAP and content teachers to exploit the given opportunities as much as they can by availing authentic texts, enriching the input, going beyond the books and materials, and motivating the students.

6. Regarding the more qualified person to teach EAP courses, 66% of language teachers stated language teachers are more qualified than others because they are familiar with the structure of the language. However, they stated if content teachers foster their GEP, they can provide rich amount of language teaching activities in their courses. Conversely, content teachers (98%) believed content teachers are more qualified than others as they are familiar with the subject specific genre and vocabularies. Moreover, they also contended on the necessity of fostering content teachers' GEP level.

7. Referring to the type of the sources, 80% of language teachers believed that the current books are not practical and appropriate enough for all the students and recommended using up-dated and authentic papers to assure that students are familiarized with the academic genre. On the other hand, 60% of the content teachers stated that the current books are practical and appropriate for all students. However, 40% stated they have to use authentic materials to compensate for the shortcomings of the EAP textbooks.

Discussion

This study investigated the present and target academic English language needs of physiotherapy undergraduate students via the triangulation of sources and methods. An analysis of all stakeholders' viewpoints conveyed that most of the participants perceived the following as important or very important target needs in their field of study: listening to teachers' lectures, listening to films and documentaries on physiotherapy, translating English academic texts to Persian, reading original textbooks, analyzing scientific texts to understand them, reading papers in professional journals, scanning English texts, understanding technical vocabularies in textbooks and papers on physiotherapy, guessing the meanings of unknown words from context, using technical monolingual dictionaries, using bilingual dictionaries, knowing and using general and technical vocabularies, reading the adjustments and instructions on the apparatus, reading medical reports, writing medical consultations, having technical conversations, having oral communication in academic conferences, having conversations with non-Persian lecturers and content teachers, note-taking from English texts and lectures, writing medical reports, writing emails to non-Persian lecturers and field experts, translating professional texts from Persian to English, and using the internet.

The findings of the study are consonant with most of the NA studies carried out in Iran in introducing RC as the main skill for university students (Atai & Tahririan, 2003). Although most of the skills and sub-skills in target needs were considered important or very important by all the stakeholders, there were differences in the preferences and priorities of the stakeholders. The existence of such differences highlights the significance of triangulation (Bocanegra-valle, 2016; Hyland, 2006; Long, 2005; Paltridge & Starfield, 2013) to provide "a more complete picture of the needs" (Bocanegra-Valle, 2016, p. 568). Similarly, most of the language teachers (66.7) agreed to a large extent with the idea that "the EAP courses be taught by content teachers"; however, in the interview, 66% of them were in favor of EFL teachers due to their higher GEP level. This difference in the findings also indicates one-dimensionality of questionnaires as the single instrument for data collection (Hyland, 2006).

Our findings, unlike Amerian and Marefat's (2018), did not show significant differences between the academia and workplace professionals regarding their perceptions of the target needs of the students. This can be justified by the differences in the medical and business studies as English, not Persian, textbooks used in most of the non-EAP courses for physiotherapy students to have access to updating knowledge of the field. However, the preferences of the participants indicating using English at workplace as the least preferred factor by all groups signify the gap in the participants' perceptions on the necessity of focusing on workplace needs of the students in EAP courses.

The results on the present needs of the students revealed their need to improve their LC, RC, the techniques of analyzing the text, technical medical vocabularies, using dictionaries and recognizing the academic genre in their field of study. It was found that the students were not aware of their problems or they might have underestimated their abilities (Robinson, 1991). Moreover, differences between the viewpoints of undergraduates and other groups

suggest the doubts in considering them as "the reliable source, the best source or the only legitimate source" in analyzing their needs (Long, 2005, p. 26). Specifically, undergraduates' perceptions on RC were different from the views of other groups. This can be explained by Robinson's (1991) opinion that if "there is a discrepancy between students' specialist course of study or job and the one which they would prefer …we might expect students…and …teachers to have different views of the goals and content of the ESP course" (p. 8).

Regarding the students' and language teachers' satisfaction and the problematic issues in EAP classes, in line with Amerian and Marefat's study (2018), most of them referred to the ignored importance of EAP courses and inadequacy of time and the number of credits allocated to them. Also, undergraduates' preference on EAP courses being taught by content teachers reveals language teachers' lack of social acceptance and collegiality from students (Johns, as cited in Hutchinson & Waters, 1987). This in turn may explain language teachers' reluctance to teach EAP courses and their preference for delegating EAP courses to content teachers (Hutchinson & Waters, 1987; Nazari et al., 2017).

Problems suggested in the open-ended question, e.g., outdated materials, translated papers, not using enough English language-related activities in classes, and impractical homework and tasks (in line with Amerian & Marefat, 2018) can be considered as the instances of the problems caused by Iranian materials developers' and EAP curriculum developers' failure in considering students' initial GEP level (Robinson, 1991). Such problems signify the unsystematic status of curriculum design, syllabus design, and material development in Iranian EAP context and the findings of the study also suggest the need for a more coherent, systematic, and research-based design of EAP courses in Iranian context (Atai, 2002) through defining the needs operationally to be used as the basis for developing the curriculum, designing the syllabus, developing materials, and evaluating the courses and materials (Dudley-Evans & St John, 1998; Hutchinson & Waters, 1987).

Conclusion

The aim of this study was to address the present and target needs of physiotherapy students via using researcher-made questionnaires and semi-structured interview protocols through triangulating the viewpoints of four different groups of stakeholders from the different levels of participants identified by Bocanegra-Valle (2016) to provide valid and reliable information on the target situation demands and the present situation lacks of physiotherapy students.

Considering the financial investment of EAP courses (Atai, 2002), the findings of this NA study may assist curriculum developers in reconsidering the status of EAP courses in the curriculum in terms of number of credits and time allotment. The findings also suggest that syllabus and course designers should evaluate and improve the goals and objectives of such courses and reconsider the syllabi and teaching methodologies and activities based on the students' needs. Similarly, material developers may use the findings of the study in updating and improving the materials used by physiotherapy students in EAP courses in terms of content and activities (Brown, 2009; Dudley-Evans & St

John, 1998; Hutchinson & Waters, 1987; Hyland, 2006; Long, 2005).

Moreover, with regard to the specificity of the challenges faced by content and language teachers, it is suggested that both content and language teachers be familiarized and equiped with skills necessary for teaching such courses in pre/in-service courses specifically defined for each group. Furthermore, considering the lack of cooperation between content and language teachers, it seems fruitful to ease the communication and cooperation between these two camps.

The results also provide a basis for language teachers, content teachers, and physiotherapy students to tailor their activities accordingly to define and achieve the goals of EAP courses for physiotherapy students. In so doing, they may consider their target needs for defining the necessary skills the students may need to develop and may focus on the students' present needs to work on their weaknesses including their low GEP level in such courses.

Not unlike most investigations, this study also had some limitations which can be considered in future research. Despite considering the viewpoints of different stakeholders, this study does not include "educational authorities, policy makers and decision-takers" (Bocanegra-Valle, 2016, p. 560) and considering their views could give a more comprehensive view of the needs of these students. Moreover, due to practicality reasons, the subjects of the study were chosen only from medical universities in Tehran and students in other universities around the country were not included. Thus, the numbers of graduate students and content and language teachers who took part in the study were limited. Also, using a greater range of qualitative instruments in gathering data may enrich the findings of future studies.

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Appendix A
Undergraduate Students' Questionnaire

1. Demographic information:
University: Gender:

2. Please indicate the degrees of importance of the following skills or activities by circling the related number.

1. Not important at all 2. Slightly important 3. Relatively important 4. Important 5. Very important

1. Listening to lectures in physiotherapy conferences…………………………………1 2 3 4 5
2. Listening to lectures and presentations in classes………………………………..1 2 3 4 5
3. Listening to instructions in the workplace …………………………..………………1 2 3 4 5
4. Listening to the films and documentaries related to their field of study …..1 2 3 4 5
5. Listening to teachers' lectures in English ………………………………………….....1 2 3 4 5
6. Listening to colleagues' conversations using English physiotherapy expressions …………………………………………………………………………………………………1 2 3 4 5
7. Listening to English lectures in international seminars……………………………1 2 3 4 5
8. Understanding technical vocabularies in textbooks and papers in physiotherapy ……1 2 3 4 5
9. Reading original physiotherapy textbooks ……………………………………………1 2 3 4 5
10. Reading papers in professional journals……………………………………………..1 2 3 4 5
11. Scanning English texts ………………………………………………………………………1 2 3 4 5
12. Guessing the unknown words from the context ……………………………………1 2 3 4 5
13. Guessing the meaning of the new words using prefixes and suffixes ……….1 2 3 4 5
14. Understanding the meanings of technical medical vocabularies used in patients' prescriptions ………………………………………………………………………………………1 2 3 4 5
15. Reading patients' files………………………………………………………………………1 2 3 4 5
16. Interpreting English instructions written in the brochures and on the specialized tools and devices of physiotherapy ……………………………………………………1 2 3 4 5
17. Reading the abbreviations on the physiotherapy devices…………..……………1 2 3 4 5
18. Reading monitors on devices ……………………………………………………………1 2 3 4 5
19. Reading the adjustment on the apparatus …………………………..………………1 2 3 4 5
20. Reading medical reports ……………………………………………………..……………1 2 3 4 5
21. Reading medical consultations …………………………………………………………1 2 3 4 5
22. Having oral communication in English in academic conferences…………….1 2 3 4 5
23. Having conversations with professionals and hospital staff in real situations using English physiotherapy expressions……………………………………………………1 2 3 4 5
24. Having conversation with non-Persian lecturers ……………………………………1 2 3 4 5
25. Using English physiotherapy expressions with other colleagues …………..1 2 3 4 5
26. Note-taking from professional lectures ………………………………………………1 2 3 4 5
27. Note-taking from English textbooks …………………………………………………1 2 3 4 5
28. Writing term projects and term papers for classes ………………………………1 2 3 4 5
29. Writing diagnosis and prescriptions about patients……………………..…………1 2 3 4 5
30. Note-taking from professional lectures   ………………………………………..…1 2 3 4 5
31. Analyzing and understanding scientific texts ………………………………………1 2 3 4 5
32. Exploiting international physiotherapy workshops …………………………………1 2 3 4 5
33. Writing reports about patients' conditions to specialized physicians …….1 2 3 4 5

34. Translating English text to Persian 1 2 3 4 5
35. Translating Persian texts to English 1 2 3 4 5
36. Using the internet for research 1 2 3 4 5
37. Writing emails 1 2 3 4 5
38. Using technical monolingual (English) dictionaries 1 2 3 4 5
39. Using technical bilingual dictionaries...1 2 3 4 5
40. Knowing and using general English vocabularies 1 2 3 4 5
41. Knowing and using technical English vocabularies 1 2 3 4 5
42. Learning technical conversation 1 2 3 4 5
43. Learning English grammar 1 2 3 4 5
44. Participating in English examinations in universities 1 2 3 4 5
45. Knowing the pronunciations of general English vocabularies 1 2 3 4 5
46. Knowing the pronunciations of technical English vocabularies 1 2 3 4 5

3. Please identify your present level of ability in using the following skills or activities.

1. Can not at all 2. Slightly can 3. Need improvement 4. Relatively can 5. Easily can

1. Listening to and understanding lectures in physiotherapy conferences ..1 2 3 4 5
2. Listening to and understanding lectures and presentations in classes 1 2 3 4 5
3. Listening to and understanding the instructions in the workplace.......... 1 2 3 4 5
4. Listening to and understanding films and documentaries on physiotherapy 1 2 3 4 5
5. Listening to and understanding teachers' lectures in English.................... 1 2 3 4 5
6. Listening to and understanding colleagues' conversations using English physiotherapy expressions 1 2 3 4 5
7. Listening to and understanding English lectures in international seminars
8. .... 1 2 3 4 5
9. Listening to and understanding professionals and hospital staffs in real situations using English physiotherapy expressions 1 2 3 4 5
10. Understanding technical vocabularies in textbooks and papers on physiotherapy 1 2 3 4 5
11. Reading original physiotherapy textbooks.. 1 2 3 4 5
12. Reading papers in professional journals 1 2 3 4 5
13. Scanning English texts 1 2 3 4 5
14. Guessing the meanings of unknown words from context while reading ..1 2 3 4 5
15. Guessing the meaning of unknown words using prefixes and suffixes 1 2 3 4 5
16. Understanding the meanings of technical medical vocabularies used in patients' prescriptions.. 1 2 3 4 5
17. Reading patients' files... 1 2 3 4 5
18. Reading and interpreting English instructions written in the brochures and on the specialized tools and devices of physiotherapy 1 2 3 4 5
19. Reading the abbreviations 1 2 3 4 5
20. Reading the monitors 1 2 3 4 5
21. Reading the adjustments... 1 2 3 4 5
22. Reading medical reports........ ....1 2 3 4 5
23. Reading medical consultations 1 2 3 4 5
24. Reading medical tests 1 2 3 4 5
25. Giving class presentations in English 1 2 3 4 5
26. Having oral communication in English in academic conferences.................1 2 3 4 5
27. Having conversation with professionals and hospital staffs in real situations using English physiotherapy expressions 1 2 3 4 5

28. Having conversation with non-Persian lecturers and /or content teachers 1 2 3 4 5
29. Using English physiotherapy expressions in a way understandable for other colleagues 1 2 3 4 5
30. Note-taking from English lectures..1 2 3 4 5
31. Note-taking from English textbooks 1 2 3 4 5
32. Writing term projects and term paper for classes.. 1 2 3 4 5
33. Writing diagnosis and prescriptions about patients 1 2 3 4 5
34. Note-taking from English lectures in international professional seminars and workshops 1 2 3 4 5
35. Analyzing scientific texts for understanding 1 2 3 4 5
36. Exploiting international English workshops 1 2 3 4 5
37. Preparing and writing medical reports.. 1 2 3 4 5
38. Translating technical texts and papers from English to Persian..................1 2 3 4 5
39. Translating technical texts and articles from Persian to English..................1 2 3 4 5
40. Using the internet for research 1 2 3 4 5
41. Writing emails to non-Persian lecturers and field experts...........................1 2 3 4 5
42. Using monolingual dictionaries..1 2 3 4 5
43. Using bilingual technical dictionaries 1 2 3 4 5
44. Using knowledge of general English vocabulary 1 2 3 4 5
45. Knowledge of technical English vocabulary 1 2 3 4 5
46. Participating in technical conversations 1 2 3 4 5
47. Using Knowledge of grammar..1 2 3 4 5
48. Taking international English examinations (e.g., IELTS)...............................1 2 3 4 5
49. Taking class exams 1 2 3 4 5
50. Knowing the pronunciations of general English vocabularies 1 2 3 4 5
51. Knowing the pronunciations of technical English vocabularies 1 2 3 4 5

4. If you have already passed EAP courses, please indicate your level of satisfaction or dissatisfaction with the following items.

1. Not satisfied at all 2. Slightly satisfied 3. Satisfied to a moderate extent 4. Satisfied to a large extent 5. Completely satisfied

1. The number of the students 1 2 3 4 5
2. The materials and the content of the book...1 2 3 4 5
3. The teaching methods...1 2 3 4 5
4. The assessment methods..1 2 3 4 5
5. Using source books...1 2 3 4 5
6. The amount of English language usage in EAP classes 1 2 3 4 5
7. Using English in manipulating the instruments and tools in the workplace 1 2 3 4 5
8. Using technology in EAP classes 1 2 3 4 5
9. The importance given to pre-sessional English courses.................................1 2 3 4 5
10. The number of credits given to EAP course..1 2 3 4 5
11. Not offering EAP courses to students having lower than average level of GEP 1 2 3 4 5

5. Please indicate your level of agreement or disagreement with each of the following statements.

1. Completely disagreed 2. A little agreed 3. Agreed to a moderate extent 4. Agreed to a great extent 5. Completely agreed

1. EAP courses being taught by content teachers 1 2 3 4 5
2. Studying the original English subject-specific sources 1 2 3 4 5
3. Paying more attention to GEP...1 2 3 4 5
4. Taking a placement test before the EAP courses.......................................1 2 3 4 5

5. Omitting the general English courses for the students with high ranks in English test in UEEI (the University Entrance Exam of Iran)................................. 1 2 3 4 5

Please mention any other problematic issues in teaching and learning EAP courses if there are any.
Please offer some probable solutions for improving the quality of EAP courses or resolving problematic issues.

Appendix B
Semi-Structured Interview Protocol

1. In your opinion, what are the most important skills needed by physiotherapy students?
2. What types of activities are usually used in your EAP classes?
3. In your opinion, what obstacles and problems obstruct or hinder progress of teaching or learning EAP?
4. In your opinion, how are students' level in EAP courses and their GEP level related?
5. Do you think the number of credits given to EAP courses is sufficient?
6. In your opinion, who is more qualified to teach EAP courses? Language teachers or subject specific teachers?
7. What are your views about the practicality and appropriacy of the source books?

Effect of Computer-Mediated vs. Face-to-Face Peer Feedback on L2 Introverted vs. Extroverted Learners' Writing Ability and Language-Related Episodes

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Abstract
This study investigated the effect of face-to-face and computer-mediated peer feedback on L2 introverted and extroverted learners' writing ability and language-related episodes. Eighty-six L2 intermediate English language learners were randomly assigned to two different treatment groups: computer-mediated and face-to-face peer feedback. In computer-mediated classes, the participants exchanged peer feedback and discussed comments using Google Docs platform. Meanwhile, in the face-to-face group, the participants exchanged comments on paper; they also gathered once a week to discuss comments face-to-face. The results revealed that the introverts in the computer-mediated group improved more significantly than the introverts in the face-to-face group. However, the extroverts of both face-to-face and computer-mediated groups improved equally. The findings also indicated that both introverts and extroverts in the computer-mediated group produced more language-related episodes than their counterparts in face-to-face group. Further, the pairing patterns of introverted and extroverted learners were found to have effects on the number of language-related episodes generated by them.

Keywords: computer-mediated peer feedback, language-related episodes, introversion, extroversion, L2 writing

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Introduction

L2 (referring to both second and foreign language) learners' difficulty in writing is well-documented in the literature (Hoomanfard & Meshkat, 2015; Hyland & Hyland, 2019; Teng, 2019; Teng & Zhang, 2020). This difficulty necessitates the employment of different scaffolding tools to assist learners reach the intended writing ability (Rosalina, 2010). One of these scaffolding tools, which has widely been employed in L2 writing classes, is peer feedback. A large volume of research on feedback has shown that peer feedback significantly contributes to improving L2 learners' writing (Chen, 2016; Storch, 2019; Yu & Hu, 2017; Yu & Lee, 2016). However, differential writing improvement of L2 learners with the same writing ability level within peer feedback-powered classes seems to imply this fact that other factors, rather than provided instruction plus peer feedback, might influence the process and product of their learning. Two influential factors are textual and learners' individual differences. Prior studies (Ellis, 2010; Ferris, 2010; Rahimi, 2015) highlighted the significance of these factors and declared feedback research to be incomplete without considering these variables as they can influence the effect of feedback-powered instruction.

One of the individual differences variables, mentioned in several personality models, is learners' introversion/extroversion level. This variable is relevant to peer feedback since prior studies (see below) have shown that learners' introversion/extroversion level can affect their active participation in group work activities, which can result in differential learning outcomes. As a result, the efficacy of peer feedback, as a kind of group work, can be influenced by the extent to which different participants engage actively in both providing feedback and discussing them in follow-up discussions.

The current study addresses this issue by investigating the effect of face-to-face and computer-mediated peer feedback on introverted and extroverted L2 learners' number of Language-related Episodes (LREs) in feedback exchange discussions and writing improvement.

Literature Review
Theoretical Underpinnings

The theoretical framework of this study is based on meditational artifacts (e.g. computers) as well as learners' individual differences, which are the two main factors that shape the learning process and product (Kormos, 2012). Following the tenets of sociocultural theory, the context of learning is always mediated by different symbolic, cultural, and physical mediational tools that can transform human activities (Erben et al., 2009). These mediational tools are social facilitators that make the traverse between the social plane to the psychological level possible (Vygotsky, 1978). Human cognition, as a social product, is affected by mediational tools through which an individual moves from other-regulation toward self-regulation. Another offspring of sociocultural theory is the concept of languaging (Swain & Lapkin, 2000), referring to learners' use of language as a mediator to objectify their knowledge, which can be assessed, negated and added, or modified. Languaging is an integral aspect of human's thinking, meaning-making self and the basis of his higher mental processes such as consciousness or rehearsing information to be learnt (Swain

et al., 2015). To analyze learners' engagement in languaging, language-related episode (LRE) has been suggested as the unit of analysis. LRE is defined by Swain and Lapkin (2000) as "any part of a dialogue where the students talk about the language they are producing, question their language use or correct themselves and others" (p. 263), and consequently, help them improve their language ability. In the present study, the effect of peer feedback conditions (face-to-face *vs.* computer-mediated) on the number of LREs generated by introverted and extroverted learners is examined.

Learners' acquisition of a specific item or ultimate success is reported to be highly affected by their individual differences (Dörnyei, 2005; Manchon, 2011). Foreign/second language learners encounter the learning situation with a social, cognitive, linguistic, and affective background. These factors can determine the success or failure of a learning endeavor since they function as mediators between the cause (input) and the effect (the extension in the interlanguage) (Skehan, 1998). The role of individual differences in L2 language learners' achievement has been investigated in the realm of speaking and reading; however, little attention has been paid to the writing skill (Kormos, 2012). In the same vein, within L2 feedback literature, Ellis (2010) has highlighted the significant effects of contextual factors (e.g., the context of learning) and individual difference factors (cognitive and affective factors) on learners' engagement with feedback activity and their uptake level.

Based on these theoretical considerations, this study investigates how computer-mediated environment (artifact mediator) as well as a learners' individual factor (introversion/extroversion, here) contribute to the efficacy of peer feedback (social mediator) in improving EFL learners' engagement with feedback (through generating LREs) and writing improvement.

Computer-Mediated Peer Feedback

Like other areas in education, in line with the boom in technology in the last two decades, L2 writing classes have benefited from computerized technologies. The employment of computers as mediating tools to exchange comments between students has become a common practice throughout the globe. As Wu (2005) states, the advent of computer-mediated communication in writing classes can noticeably facilitate the process of exchanging different drafts and comments in no time. Tuzi (2004) enumerated time independency, place independency, the absence of pressure to quickly respond as some advantages of computer-mediated peer feedback. The decrease in the authority of teachers in a network-based writing environment can also lead to the empowerment of students. This empowerment makes writers more creative and autonomous (Cooper & Selfe, 1990). Ware and Warschauer (2006) have also encouraged the use of computer mediated peer feedback because of its benefits such as students' facilitated access to texts and comments, fostered sense of community, improved linguistic literacy, and escalated motivation and participation. Other benefits of computer-mediated peer feedback documented in the literature are improved teachers' monitoring (Kamhi-Stein, 2000), better interaction context for students of those countries in which reticence is admired (Lie & Hansen, 2018), decreased apprehension of second language use (Pellettieri, 2000), increased sociolinguistic proficiency (Belz & Kinginger,

2003), perceived sense of community and audience (Ware, 2004), and students' increased level of comprehension and accuracy of comments (Hoomanfard & Rahimi, 2020). Furthermore, several studies have shown the positive effect of computer-mediated peer feedback on students' writing ability (e.g., Abuseileek & Abualshar, 2014; Song & Usaha, 2009; Storch, 2017).

Individual Differences and Written Corrective Feedback

While several scholars (Bitchener, 2017; Ellis, 2010; Ferris, 2010; Kormos, 2012; Rahimi, 2015) have underlined the role of individual differences in the success of written corrective feedback, a few studies, reviewed here, have addressed this issue.

The investigation on individual differences affecting the efficiency of feedback is highly limited. Putting perception studies aside, which make up a noticeable part of second and foreign language writing literature, the paucity of studies on individual differences and feedback is easy to notice. Sheen (2007), for example, has investigated the extent to which language aptitude could affect language learners' uptake of corrective feedback. The findings of her study revealed that those with a higher level of analytic ability benefited from corrective feedback. Sheen also reported that L2 learners' analytic ability and aptitude had significant effects on written feedback. In another study, Sachs and Polio (2007) found that the accuracy of students' subsequent revisions was highly correlated with the students' noticing the comments. In 2010, Storch and Wigglesworth found that L2 learners' goals affected their uptake. Similarly, Hyland (2011) found that students' level of engagement with the provided corrective feedback was a function of their learning goal. Hyland (2011) also found that those with higher levels of motivation were more successful in improving the accuracy of their writing. In another study, Rahimi (2015) examined the extent to which students' field dependency and writing motivation could predict their uptake of corrective comments. The findings of his enquiry indicated that field independent students retrieved comments in the short and long run; however, writing motivation could affect the short-term item retrieval.

Extroversion/ Introversion Factor, L2 Writing, Corrective Feedback

Extroversion/introversion, a concept conceptualized in the 1960s, has remained a popular factor in the realm of psychology. These labels are associated with a set of qualities. For instance, extroversion is characterized with sociability, warmth, gregariousness, assertiveness, and passion (Dörnyei, 2005); extroverts also welcome interactions and take conversational risk (Brown, 2000). However, introverts are usually quiet, reserved, and withdrawn (Dörnyei, 2005); they usually prefer not to participate in conversations and are self-sufficient (Wakamoto, 2009). Similarly, Richards and Schmidt (2010) consider extroverts as those who are after social contacts and introverts as those who prefer solidarity. Learners' personalities are believed to influence their information achievement. Extroversion-introversion is one of these characteristics that are believed to affect learners' achievement (Murray & Mount, 1996).

A few studies have investigated the relationship between students'

introversion/ extroversion tendency and their writing achievement. The findings showed two main categories. Some studies (Jafarpour et al., 2015; Layeghi, 2011; Qanwal & Ghani, 2019) found that introverts were more successful writers than their extroverted counterparts. However, some others (Alavinia & Hassanlou, 2014; Nejad et al., 2012) found no significant relationship between students' writing achievement and their introversion/extroversion personality type.

To the best of the researchers' knowledge, the only study examining the role of extroversion/introversion on L2 students' oral feedback engagement was conducted by Matsidi (2019) who examined the effect of oral feedback on students' attitudes toward different feedback types. She found that both introverts and extroverts reported receiving feedback satisfying. She also reported that extroverted and highly introverted learners expressed their positive attitude toward recast feedback.

Extroversion/Introversion Factor, Group Work, Online Environment

Armchair conceptualizations and empirical studies have provided information on the way students' extroversion/introversion tendencies can affect their satisfaction with and success in group work. Here is a brief review of the most recurrent propositions on this issue. A significant factor that can determine the success of cooperative learning is the extent to which different interactants participate in a task (Johnson et al., 1998). However, some individual differences/features can affect the quantity and quality of students' participation. Hancock (2004), for instance, named students' level of extroversion as one of the characteristics determining the success of group work. Juxtaposing the necessities of success in face-to-face cooperative learning activities and the characterizing features of introverts, one can easily notice that they are at odds. This can make expecting introverted students to benefit fully from these activities to be far-fetched, if not impossible.

To solve this problem, some scholars have resorted to online communication and have examined the performance of introverted and extroverted learners in computer-mediated conditions. Palloff and Pratt (2001), for instance, found that online media benefited those who required time to reflect before saying or doing anything. They found that introverted students benefited from online media since they participated more actively in activities. Several prior studies (Amichai-Hamburger et al., 2002; Daughenbaugh et al., 2002; Harrington & Loffredo, 2010) have indicated that while introverts preferred online courses, extroverts showed their inclination to take on campus courses. Downing and Chim (2004), too, argued that the online medium gave introverted students the chance to function as reflector interactants who can act like an extrovert in the real world. Voorn and Kommers (2013) found that introverted students preferred online media in their learning situations; they found computer-mediated communication a good means to improve their self-confidence and learning performance.

The Present Study

As this brief literature review indicates, no prior study has investigated the effect of face-to-face and computer-mediated peer feedback on L2

introverted and extroverted learners' number of LREs and writing ability. To the best of the researchers' knowledge and as stated by Tigchelaar and Polio (2017) and Teng (2019), the study of the effect of several peer feedback conditions on LREs has remained underexplored. In addition to these gaps, the significance of the role of individual factors in the success of feedback practice, highlighted by key figures in feedback studies (Bitchener, 2017; Ellis, 2012; Ferris, 2010; Hyland & Hyland, 2019; Storch, 2018), and the need for further research investigating the effect of different computer-mediate tools "on the nature of the feedback provided, on how learners engage with that feedback, and ultimately on L2 learning outcomes" (Storch, 2018, p. 270) motivated the researchers to conduct this study. This study was designed to answer the following research questions:

Research question one: Do face-to-face and computer-mediated peer feedback conditions have the same effect on L2 introverted and extroverted learners' writing accuracy?

Research question two: Do face-to-face and computer-mediated peer feedback conditions result in equal number of LREs generated by L2 introverted and extroverted learners?

Method
Participants

Eighty-six foreign EFL learners, both males (N = 41) and females (N = 45) at an intermediate level of English language ability participating in an IELTS writing preparation course, took part in the present study. They ranged from 18 to 25 years of age. These participants had enrolled in six intact classes. Three classes were randomly assigned to computer-mediated peer feedback treatment and three to face-to-face peer feedback treatment. In order to check the homogeneity of the participants with regard to their writing ability, they were given an argumentative prompt selected from the writing section (task 2) of an IELTS practice test. The acquired mean score was 6.2, with a standard deviation of 0.8. The scores of the participants fell within ± one standard deviation from the mean score. These participants had passed three courses covering four skills prep content. In all prior courses, they had only received teacher feedback on their texts.

We also administered two questionnaires to identify introverted and extroverted students. We employed two measures to minimize the chances of wrong categorization. The findings of the two questionnaires showed that six participants were categorized differently by the questionnaires, so they were excluded from the study. Based on the results, out of 42 students in the online group, 22 (52.4%) were introverts and 20 students (47.6%) were extroverts and in the face-to-face group, 23 students were introverts (54.03%) and 21 extroverts (45.8 %).

Materials and Instruments

Google Docs. Google Docs is a user-friendly word processor provided by Google Company. This program is similar to Microsoft Word and several users can modify a text either simultaneously or at different times. The users can either key directly in their text or paste a text already written in another

word processor. The texts written in Google Docs are stored in Google Drive and all revisions can be tracked to identify the editor and the edition time. The users can correct items, provide marginal comments, and respond to comments easily. A video clip showing different features of this program was played back in the first session to make sure all participants can work with it smoothly.

Writing Tasks and Rating Scale. Two argumentative tasks were employed to examine the participants' writing ability at the beginning and the end of the study. The participants were asked to write at least 250 words in 40 minutes. The topics were:

Pre-test task: Does the use of computer/technology in class benefit the educational process?

Post-test task: Should students be allowed to use computers and tablets in classes?

In order to score the participants' texts, an analytic rating scale developed by Jacobs et al. (1981) was employed. This scale includes 5 dimensions which are content, organization, vocabulary, language use, and mechanics. In order to ensure the consistency of the scoring process, half of the papers were rated by another rater who was familiar with the scale and the inter-rater reliability value of .86 was achieved.

Introversion/Extroversion Questionnaires. The researchers employed Eysenck Personality Questionnaire (Eysenck et al., 1985) and the Sixteen Personality Factor Questionnaire (Cattell, 2001) to categorize their participants into two groups of introverts and extroverts. Two measures were employed to increase the construct validity of the whole measurement process (Johnson et al., 2000).

The extended version of Eysenck Personality Questionnaire includes 100 yes-no questions, 23 of which are related to extroversion/introversion. To ensure the integrity, validity, and reliability of the measure, the participants answered all items, but just these 23 items were analyzed. The reliability of the whole measure in this administration was .84 and that of the extraversion subcomponent was .78. Since the personality style (extrovert/introvert), as shown by the questionnaire, is a matter of degree rather than type, it is evaluated by the score that the respondent receives on the questionnaire. In other words, the higher the score, the more extrovert the respondent is. Based on the questionnaire manual, to categorize the learners into extroverted and introverted groups, they were arranged based on the scores they received from the highest to the lowest scores. Then the high and the low 40% were considered extrovert and introverts, respectively. Twenty percent of the participants with the closest scores to the mean score were excluded to minimize the occurrence of mis-categorization of the participants.

The second measure employed was the Sixteen Personality Factor Questionnaire, which is a well-known measure with acceptable evidence of construct validity in different contexts (Cattell, 2001. It is a forced choice seven-point bipolar scale and examines 16 different traits, one of which is extraversion. This trait is assessed using five primary scales and 14 items. The reliability of the whole measure in this administration was .87 and that of the extraversion subcomponent was .81. The scoring procedure of this measure automatically categorized the participants into two groups of introverts and extroverts.

Class Procedure

The data were collected between October and December, 2019. Both groups were given a 30-minute peer feedback workshop by a TEFL PhD candidate, and different features of high-quality peer feedback were reviewed. Those in the face-to-face group exchanged peer feedback on paper, but those in the online group used the online platform to exchange the comments.

The students in the online group had three days to write and upload the first version, then they had one day to read their peers' papers and exchange comments through the website. Afterwards, they had three days to upload the second version of the assignment and applied the comments. This procedure continued during the whole semester. The nature of communication within the employed platform was asynchronous; however, with a fifteen-second delay (varying based on the Internet speed), the students could discuss with each other. It was their own choice to respond immediately or discuss the feedback provider with a delay. All comments and versions could be stored within the online platform.

Just like computer-mediated group, the students in the face-to-face group had three days to write their first draft and attend the feedback discussion session. In the face-to-face group, in addition to the usual class session, which was similar to that of the online group, the participants met an extra 45-minute session a week. This extra session was planned as an attempt to assimilate the interactive nature of computer-mediate peer feedback activity, where the participants gathered to discuss the provided comments. They, then, had four days to revise their texts and submit both their first and revised versions to the teacher in the upcoming session. The students were asked to keep a copy of both versions of their texts (and their peers' comments) and submit a portfolio at the end of the semester.

In both online and face-to-face groups, the students were paired purposefully by the instructor so that they could work with different introverted and extroverted students. It should be noted that each student gave and received feedback to and from a different classmate on each text. In both treatments, the main language used in follow-up discussions was English; however, a few sentences in Persian were tolerated. The instructor was an in-the-background facilitator. Totally, the students were required to write ten papers in ten weeks. The topics on which students had to write were basically expository and argumentative (the two genres normally used in IELTS). The word count of their essays had to be no less than 250 words (the minimum length in the IELTS writing test). It should be noted that all students had a very short experience of computer-mediated communication and were familiar with the platform. The writing loop was closed in a week in the majority of cases (96%); however, in a few cases, the students went on exchanging comments and submitted their texts after the deadline

Data Collection and Analysis

The independent variables of this study were peer feedback condition with the two levels of face-to-face and computer-mediated and the dependent variables were L2 students' writing ability and generated LREs. In this study, a 2x2 between-within RM ANOVA and a series of independent-samples t-tests

were run to answer the research questions.

In order to answer the first research question, the extroversion-introversion questionnaires were given to the participants of the study. The questionnaires and the writing pre-test were administered in the first session of the semester. The treatment took 10 weeks. And in the twelfth week, the writing post-test was given to check the improvement of the writing ability of the participants. The same task was used in both groups. In order to make the pre- and the posttest comparable, they both used argumentative prompts. The writing tasks were scored based on the rating scheme provided by Jacobs et al. (1981).

Another part of this study was the examination of LREs created by students in their peer feedback activities. Language-related episode is considered to be a well-known tool to analyze learner-learner interactions (Ellis, 2012; Scott & Fuente, 2008; Storch, 2007). In order to analyze LREs, the researchers audio-recorded and transcribed the discussions in the fifth and ninth sessions. To have sufficient data to answer the second research question, the researchers decided to record and analyze the data in these two sessions. The sessions at the beginning of the study were not included since the first four sessions focused on familiarizing the students with the online system as well as giving them enough time to get accustomed with the treatments and show unmarked performance. Although the examination of all sessions would have provided more data, due to practicality issues, the researchers decided to record and analyze a sample including the fifth and ninth sessions.

All LREs were identified and tallied to reach the mean scores of LREs created in different discussions and groups (Two LREs taken from the data are provided in the Appendix.

In order to make sure about the coding procedure, an instructor with a PhD in TEFL, who is familiar with the analysis of LREs, reviewed half of the analysis and the reliability index found to be .91. After extensive discussions, the consistency was raised to .96.

Results

Descriptive statistics for the performances of the four groups (online introverts, online extroverts, face-to-face introverts, and face-to-face extroverts) on the pre- and posttest have been presented in Table 1. The table also presents the results of four paired t-tests run to find out if the differences between the pre- and posttests were significant.

Table 1
T-test Results for the Difference between the Pre-test and Post-test Writing Scores of the Four Groups

Group	Pre-test		Posttest			
	M	SD	M	SD	t	Sig
Online Introverted	60.22	8.02	70.27	6.74	14.10	0.001
Online Extroverted	59.85	8.08	71.10	7.62	15.51	0.001
Face-to-face Introverted	60.79	9.16	65.25	7.48	7.37	0.001
Face-to-face Extroverted	61.45	6.30	67.15	6.28	9.73	0.001

The results presented in Table 1 show that all the four groups

significantly improved their writing performances at the end of the experiment. Since the feedback targeted both content and form, we also analyzed the students' scores on these two aspects to see if both feedback types have been effective in both online and face-to-face forms. Based on the ESL Composition Profile rubric used to evaluate the students' texts in this study, 50% of a writing score is assigned to content and organization and 50% to vocabulary, language use, and mechanics, which can all be categorized as form. Table 2 illustrates the results. In order to answer the first research question, we first ran a 2x2 between-within RM ANOVA. The results indicated a significant effect for *Time* (F = 2.16.64, *p* = 0.013) and for *Personality Factor* (F = 5.77, *p* = 0.038), but no effect for the class type (face-to-face or online) (F = 1.24, *p* = 3.23). The results also showed no significant effect for the interaction of *Time* and *Personality trait* (F=.74, *p*=7.43) as well as *Time* and *Class type* (F = 1.53, *p* = 3.15).

In order to show where the differences between the four groups lie, a number of follow-up independent t-tests were run. As far as the differences between the writing performances of extroverts and introverts in each mode (online and face-to-face) are concerned, Table 2 indicates that there is no significant difference between the performances of the introverts and extroverts in online group on the pre-test (t = 0.15, *p* = 0.88); similarly, no significant difference is observed between the pre-test scores of introverts and extroverts in the face-to-face group (t=0.27, *p* =0.78).

Table 2
T-test Results for the Difference between the Writing Scores of Introverts and Extroverts in each Group

Test	Group	Mean	t	Sig.
T1	Online introverted	60.22	0.15	0.88
	Online extroverted	59.85		
T2	Online introverted	70.27	0.37	0.71
	Online extroverted	71.10		
T1	Face-to-face introverted	60.79	0.27	0.78
	Face-to-face extroverted	61.45		
T2	Face-to-face introverted	65.25	2.07	0.04*
	Face-to-face extroverted	67.15		

The posttest results for the online group show that both groups made more or less the same amount of improvement and, hence, no significant difference was observed between these introverts and extroverts (t = 0.37, *p* = 0.71). However, the results of the posttest for the face-to-face group showed that extroverts made more improvement than the introverts (t = 2.07, *p* = 0.04); the Cohen's d value was .63 showing a medium to high effect size.

To provide a more precise picture of students' performance on the two writing tasks (pre- and posttest) we calculated their content and form scores separately and ran t-tests between them. Table 3 presents the results.

Table 3
T-Test Results for the Difference between the Pre-test and Post-test Content and Form Scores of the Introverts and Extroverts in Each Group

Group	M(Pre) Content	M(Post) Content	t	Sig	M(Pre) Form	M(Post) Form	t	Sig
Online Introverted	29.31	34.86	14.16	0.001	30.90	35.40	9.89	0.001
Online Extroverted	30.10	36.45	4.73	0.001	29.75	34.65	8.14	0.001
Face-to-face Introverted	29.79	31.16	16.76	0.001	31.04	34.08	12.15	0.001
Face-to-face Extroverted	30.05	33.05	8.75	0.00	31.40	34.10	9.12	0.001

Table 3 illustrates that, similar to overall writing scores, all the four groups have improved both their content and form scores on the posttest. This is indicative of the fact that peer comments whether online or face-to-face have improved the participants' texts both in terms of language and content.

We also compared the content scores and the form scores of the extroverts and introverts in online and in face-to-face groups. Table 4 illustrates the results.

Table 4
T-test Results for the Difference between the Content and the Form Scores of Introverts and Extroverts in each Group

Time	Group	Mean Content	t	Sig.	Mean Form	t	Sig
T1	Online Introverted	29.31	0.60	0.54	30.90	0.85	0.39
	Online Extroverted	30.10			29.75		
T2	Online Introverted	34.86	1.36	0.18	35.40	0.60	0.54
	Online Extroverted	36.45			34.65		
T1	Face-to-face Introverted	29.79	0.20	0.83	31.04	0.28	0.78
	Face-to-face Extroverted	30.05			31.40		
T2	Face-to-face Introverted	31.16	2.28	0.03*	34.08	0.63	0.53
	Face-to-face Extroverted	33.05			34.10		

As illustrated in Table 4, none of the differences are significant except for the difference between the posttest content scores of introverts and extroverts in the face-to-face group. That is, peer CF helped the extroverts improve the content and organization of their writing more than the introverts (M= 33.05 for extroverts and M = 31.16 for introverts, t = 2.28, p = 0.03). We also compared the performance of the introverts and extroverts in face-to-face and online groups. Table 5 presents the results.

Table 5
T-test Results for the Difference between the Writing Scores of the Four Groups

Time	Group	Mean	T	Sig.
T1	Online Introverted	60.22	0.22	0.82
	Face-to-face Introverted	60.79		
T2	Online Introverted	70.27	2.38	0.02*
	Face-to-face Introverted	65.25		
T1	Online Extroverted	59.85	0.69	0.49
	Face-to-face Extroverted	61.45		
T2	Online Extroverted	71.10	1.78	0.08*
	Face-to-face Extroverted	67.15		

As Table 5 illustrates, only the difference between the posttest performance of introverts in the face-to-face and online groups is significant (t = 2.38, *p* = 0.02). The results also showed a high effect size (d = 0.84) verifying the superiority of the computer-mediated treatment for the introverts. The same groups were compared with respect to their content and form scores. Table 6 illustrates the results.

Table 6
T-test Results for the Difference between the Form and Content Scores of the Four Groups

Time	Group	Mean Content	t	Sig.	Mean Form	t	Sig
T1	Online Introverted	29.31	0.34	0.72	30.90	0.10	0.91
	Face-to-face Introverted	29.79			31.04		
T2	Online Introverted	34.86	3.24	0.001*	35.40	1.19	0.23
	Face-to-face Introverted	31.16			34.08		
T1	Online Extroverted	30.10	0.04	0.96	29.75	1.24	0.22
	Face-to-face Extroverted	30.05			31.40		
T2	Online Extroverted	36.45	3.76	0.001*	34.65	0.11	0.90
	Face-to-face Extroverted	33.05			34.10		

The results show that both introverts and extroverts in the online group had significantly higher posttest scores than their counterparts in the face-to-face group (t = 3.24, *p* = 0.001, for introverts; and t = 3.76, *p* = 0.001, for extroverts).

Number of Comments and LREs

The second section of this study dealt with the analysis of quantity and quality of LREs initiated by learners. This question was raised to have a better understanding of the differences between introverted and extroverted writing scores in computer-mediated and face-to-face conditions. The findings showed that the participants in computer-mediated group provided 1476 comments (M = 35.14, SD = 4.53, $M_{introvert}$ = 26.36, SD = 4.21, & $M_{extrovert}$ = 28.1, SD = 4.86) and those in the face-to-face group gave 1105 (M = 22.95, SD = 3.65, $M_{introvert}$ = 22.95, SD = 3.65, & $M_{extrovert\ t}$ = 27.2, SD = 3.68) on the two examined texts. The analysis of comments showed that the learners in the computer-mediated group provided 637 content feedback (56.17%) and 497 form (43.82%) comments and those in the face-to-face group gave 568 content feedback

(51.4%) and 537 form (48.60%) feedback. The comparison of these mean scores indicated that the computer-mediated group students provided significantly more comments (t = 4.57, p = 0.03), more content feedback (t = 5.38, p = .02), and fewer form feedback (t = 5.43, p = .02).

The higher posttest scores of the introverts in the online group than those of the introverts in the face-to-face group can be attributed, though partially, to the higher number of comments the students in computer-mediated group. We also calculated the number of LREs of the two groups. Similar to the comments, here, too, both the introverts and the extroverts in the online group had significantly more LREs than their counterparts in the face-to-face groups. Table 7 presents the results.

Table 7
T-test Results for LREs

	Mean	SD	t	Sig
Online Introverted	32.18	3.81	5.94	0.001*
Face-to-face Introverted	25.75	3.49		
Online Extrovert	38.4	3.6	2.50	0.017*
Face-to-face Extrovert	34.9	4.98		

As the results show, the number of LREs for online introverts (M = 32.18) was significantly higher than that of face-to-face introverts (M = 25.75) (t = 5.94, *p* = 0.001); similarly, the number of LREs for the online extroverts (M = 38.4) was higher than that of face-to-face extroverts (M = 34.9) (t = 5.75, *p* = 0.001). Moreover, the means of content and form LREs were computed (Table 8).

Table 8
T-test Results for Content and Form LREs

Group	Mean Content	t	Sig.	Mean Form	t	Sig
Online Introverted	18.81	4.75	0.001*	13.36	1.89	0.07*
Face-to-face Introverted	14.33			11.41		
Online Extrovert	29.8	3.22	0.003*	8.6	.197	0.87
Face-to-face Extrovert	27.9			8.3		

As Table 8 shows, the introverts in computer-mediated group initiated significantly more content (t = 4.75, p=001) and form (t = 1.89, p = .007) LREs than the introverts in face-to-face group. Regarding the extroverts, those in computer-mediated group started significantly more LREs (t = 3.22, p = .003); however, the means of form LREs were not significantly different across the two conditions (t = .197, p = .87).

The last set of data examined in this study was the means of LREs produced by different pairs under different conditions (Table 9).

Table 9
T-test Results for LREs Generated by Different Pairs

Group	LREs Mean	t	sig
Online Introverted-Introverted	16.14 (SD= 2.4)	2.85	.008*
Face-to-face Introverted-Introverted	13.85 (SD= 1.8)		
Online Extrovert-Extrovert	56.07 (SD=4.75)	5.41	.000*
Face-to-face Extrovert-Extrovert	46.5 (SD= 4.61)		
Online Extrovert-Introverted	33.21 (SD= 2.8)	.04	.067
Face-to-face Extrovert-Introverted	33.71(SD= 3.4)		

As shown in Table 9, the means of LREs produced in different conditions seems to be influenced by the introversion/extroversion profile of the pairs. The findings showed that LRE means of introverted-introverted and extrovert-extrovert pairs in the online group were significantly more than those of these pairs in the face-to-face group (t = 2.85, t = 5.41, p = .008). But the mean of LREs produced by extrovert-introverted pairs were not significantly different in online and face-to-face conditions (t = .04, p = .067).

Discussion and Conclusion

Although L2 feedback literature has called for the examination of the role of individual differences in the success of feedback practices (Bitchener, 2017; Ellis, 2010; Ferris, 2010; Kormos, 2012; Rahimi, 2015), several niches have not been occupied yet. The present study addressed the effect of computer-mediated peer feedback on L2 introverted and extroverted learners' writing ability and LREs to fill one of these gaps.

The results of this study showed that computer-mediated peer feedback seemed to benefit both introverted and extroverted learners equally since there was not any significant difference between their posttest mean scores. The results also showed that both introverts and extroverts in computer-mediated groups received significantly higher scores on the content and organization of their writing than their counterparts in the face-to-face group.

One of the reasons that might have benefitted introverts in the computer-mediated condition is the better affective condition, which matches their personality characteristics. Dawley (2007) argues that, in asynchronous computer-mediated learning conditions, where learners are not tightly confined with external forces, introverts interact more freely, engage in different activities, foster their intrinsic motivation. Furthermore, it can also provide a less threatening condition for those who are less competent or less self-confident and enable them to participate more actively in learning activities (Pu, 2020). The higher scores of the computer-mediated group might have developed out of the higher number of enthusiastic follow-up discussions (LREs), which could be integrated into introverted students' cognitive set more easily because of low affective and cognitive pressures.

The findings regarding the first research question were in line with those of Lin and Overbaugh (2009), which asserted the extroverts' advantage over introverts in face-to-face classes where learners are engaged in face-to-face communication with the teacher and other students. Nonetheless, these

results are in contradiction with the ideas of Amichai-Hamburger et al. (2002) and Downing and Chim (2004) who found introverts in an online condition more successful than the extroverts. A likely explanation for the non-significant difference between the two groups can be the presentation of a condition which aligned with the personality characteristics of both groups. The literature has reported the extroverts' satisfactory performance in collaborative learning activities (e.g., DiTiberio, 1996) and the asynchronous nature of the interactions in this study, which has been reported to be the right condition for introverted learners (Amichai-Hamburger et al., 2002; Daughenbaugh et al., 2002; Downing & Chim, 2004; Harrington & Loffredo, 2010; Palloff & Pratt, 2001) have resulted in a synergic condition in which both groups benefited from the activity with no significant difference.

The examination of the quantity and quality of comments and LREs generated by introverted and extroverted learners in different conditions, which was addressed in the second research question, showed that the computer-mediated condition led to significantly more content feedback, and fewer comments on form. The results also indicated that both introverted and extroverted students in the computer-mediated group initiated significantly more LREs than their counterparts in face-to-face groups. Further analysis indicated that, except for the form LREs provided by extroverted learners, the rest of comparisons (content and form LREs by introverts and content LREs by extroverts) showed significant differences, indicating the superiority of computer-mediated condition.

These findings can also explain the higher writing performance of the participants in the computer-mediated group. It seems to be attributable to the higher number of comments and LREs made in the follow-up discussions. Swain (2013) argues that the amount of languaging, through LREs, can determine the success of language learners' improvement as they will have more opportunities to assess and modify their interlanguage through positive and negative evidence. Interestingly, the results of this study showed that, while the numbers of comments and LREs in the face-to-face group were so close, the number of LREs made in the computer-mediated group was noticeably higher than the number of comments. This finding suggests that computer-mediated condition provides the learners with more languaging opportunities than face-to-face interactions.

In addition to the quantity of LREs, the quality of LREs seems to be an effective factor in forming the superiority of the computer-mediated condition. While the participants in the computer-mediated group employed written LREs, those in the face-to-face group made oral LREs. The superiority of the former condition can be due to the mode of these LREs (oral vs. written). Muñoz and Muñoz (2006), in a non-writing context, has found that learners' quality of reasoning is higher when they write their thoughts than when they express them orally. Similarly, Suzuki (2017) found written languaging to be more efficacious in improving L2 learners' writing ability and learners' revisions than oral languaging. He argued that the lower cognitive demand due to the absence of time pressure resulted in higher and deeper interactions. This can also justify the higher number of content LREs in the computer-mediated condition, which can be one of the main reasons for the significantly higher

content scores.

The findings also showed that the participants in the online group provided significantly more LREs. This may explain why both the introverts and the extroverts in the online group received higher posttest scores on the content of their essays than their counterparts in the face-to-face group. Webb (1989) argues that introverted students prefer to work alone, at least with their own principles; however, it seems that, due to the safer and more relaxing internet environment for discussion and asking questions (Caspi et al., 2006), the introverts in computer-mediated group generated more LREs than their counterparts in the face-to-face group. Regarding the extroverts, although extroversion is positively correlated with classroom participation and student-teacher interaction (Furnham & Medhurst, 1995), online courses can be adapted to the needs of extroverts and make them as effective as usual face-to-face classes through forming small group discussions (Offir et. al., 2007). The extensive interactions in the form of high number of comments and LREs made by the extroverts in the computer-mediated condition seems to compensate for their penchant for interacting with others.

Finally, the findings indicated that the pairing of the participants based on different introversion/extroversion profiles resulted in significantly different quantities of LREs. In the findings, the lowest amount of languaging belonged to introverted-introverted interactions in face-to-face condition; however, the LRE frequency of the same group in computer-mediated condition was significantly higher. The same pattern was seen for the extroverts, although no significant difference was seen for extrovert-introverted pairs within face-to-face and computer-mediated conditions. These findings suggest that the extroversion/introversion of participating students can determine the number of LREs they generate. While the computer-mediated condition helped introverted-introverted and extroverted-extroverted pairs create more LREs, the LRE means of introverted-extroverted pairs showed that the feedback exchange mode did not significantly affect the amount of their languaging. Nevertheless, the scrutiny of the LREs made in this pair showed the dominance of extroverts in the interactions. The introverts were marginalized in both computer-mediated and face-to-face conditions when they were paired with extroverts. Although the LRE means of the extroverted-introverted pairs in both conditions were higher than those of the introverted-introverted pairs, the majority of these LREs were initiated by the extroverts. In a non-linguistic study, Sohn and Jo (2003) have found that, in group activities, the best pairing strategy is to group learners based on their personality factors; otherwise, the discrepancies between their characteristics are likely to generate difficulties in both learning and task completion. In the case of peer feedback, a problem which can arise is the dominance of the extroverted person over the introverted one, which can result in negative feelings and learning experience.

Implications and Further Studies

Based on the findings of this study, the researchers of this study invite foreign language practitioners to employ computer-mediated peer feedback to enable both their introverted and extroverted learners to engage in more languaging, which has been reported to affect learners' language improvement

(Swain, 2013). The computer-mediated peer feedback seems to create a condition which matches the needs and wants of both introverted and extroverted learners; thus, no one is left behind in this condition. Otherwise, if language teachers stick to face-to-face peer feedback condition, a significant percentage of the learners who are introverted will be deprived of many languaging opportunities. Even though learners' overemphasis on form while providing comments has been reported as one of the drawbacks of peer feedback (Hyland, 2003), the higher number of content comments and LREs within the computer-mediated condition, which seems to be the result of written mode of languaging (Suzuki, 2017), can be another motivation to employ computer-mediated peer feedback design.

In addition, language teachers are recommended to have a profile of their learners' personality, measured simply by questionnaires, and pair their students carefully to maximize the number of LREs in interactions; however, the extroverted-introverted pairs should be kept to a minimum level as the risk of negative feelings and learning experience caused by the subordination of the introverts can have detrimental effects in the short and long run.

Regarding further studies, other researchers may replicate the present research with a more populated sample to confirm or reject the findings of the present study. Moreover, the study can be replicated with the students of a lower proficiency level, to see if they can still produce a higher number of LREs in the online environment and if the EFL learner's feedback at this level is still helpful. Further research can employ genetic analysis to uncover the role of LREs produced in different pairs (introverted-introverted, introverted-extroverted, extroverted-extroverted) in learners' language development.

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Appendix
LREs

LRE1: Asking for explanation

Comment provided by Learner A: "You have used *will* in this sentence but this is not correct."

Learner B: Which part of this sentence is not grammatical?

Learner A: This is a conditional type-two sentence. You should use *would* in the second part.

Learner B: So, it should be *I would buy a luxurious house.* Am I right?

Learner A: That's right.

LRE2: Further explanation by feedback provider

Comment provided by Learner C: "This paragraph is not strong."

Learner D: "What do you mean by it is not strong?"

Learner C: "I meant you should have backed up your main idea more strongly."

Learner D: "OK, but how?"

Learner C: "Give some examples and personal experiences to make it better."

Learner D: "Is really writing about what happened to me in relation to this issue ok?"

Learner C: "Of course! Why not?"

Learner D: "Sure. I will add it. Thanks."

Foreign Language Vocabulary Learning: Interactive Whiteboard-Mediated vs. Paper-Based Corrective Feedback

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Abstract
This study sought to probe the efficacy of interactive whiteboard-mediated corrective feedback versus conventional corrective feedback for Iranian EFL learners' target language vocabulary development. To this end, a sample of 80 EFL learners at the intermediate proficiency level was selected based on scores obtained from a language proficiency test. The participants were then randomly divided into three groups: two experimental and one control. The first experimental group (n = 30) was taught the target vocabulary items while receiving interactive whiteboard-mediated corrective feedback, and the second experimental group (n = 25) was taught the target vocabulary items while receiving conventional corrective feedback; the control group was taught the target words receiving no feedback of either kind. The ANOVA test results indicated that conventional corrective feedback slightly improved target vocabulary learning by the participants. Interactive whiteboard-mediated corrective feedback, however, proved to be significantly effective in this respect. The findings can be said to provide innovative insights into the area of CALL and new techniques in L2 pedagogy.

Keywords: interactive whiteboard, corrective feedback, interactive whiteboard-mediated corrective feedback, conventional corrective feedback, vocabulary learning

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Introduction

Today, computer technology is a significant part of good quality education (Becker, 2000, as cited in Ahmadi, 2018). According to Crystal (2001), technology is a kind of revolution to change the teaching and learning process. Any educational program can be said to benefit a lot from technological advancements, of which the interactive whiteboard (IWB) is a modern example. Interactive whiteboards, or smart boards, have begun to act as an important factor in this regard. They help in providing learning input, improving teaching and learning processes, using multimedia, increasing the amount of conversation/student talk in the classroom, clarifying concepts and ideas and contributing to an interactive and motivating learning environment, and engaging the learners in cooperative learning activities (Alshaikhi, 2017; Levy, 2002; Souhila & Khadidja, 2013). According to Adigüzel et al. (2011), if teachers use this technology properly, they will provide a contributive context for their learners to develop their interaction with the course. As Lewin et al. (2008) claimed, in order to have a lively class, whiteboards with touch-screen qualities can grab learners' attention and make learning fun; also, classroom management would be easier for instructors. In a report by Smart Technologies (Q), it has been stated that the IWB can help bring about an interactive learning environment.

As the core variable of this study, corrective feedback (CF) has a significant role to play in SL/FL teaching and learning. It helps language learners to become aware of certain features of the target language (Han, 2001). As reported in the related studies below, different types of CF have been studied by researchers to explore its role in second language learning. These studies, however, have mostly focused on writing skill among the other language skills and on the grammar component out of all the other components of language. Only a few studies (e.g., Henderson, 2019; Nakata, 2015; Sippel, 2019) have dealt with CF in promoting vocabulary knowledge. It seemed to the authors of this paper that the role of computer-mediated CF, specifically its IWB-based modality, in helping second/foreign language learners to build up an appropriate vocabulary in the target language still remained to be further investigated. Thus, the current study was meant to help fill this gap in the literature, though partially.

Review of Related Literature
Theoretical Background

Corrective Feedback Definition. By definition, CF is regarded as any piece of feedback offered to learners about their errors in L2 productions (Loewen, 2012; Sheen, 2007). As Ellis et al. (2006) put it:

> Corrective feedback is a response to a learner's utterance that contains an error. The response consists of an indication that an error has been committed, provision of the correct target language form, or metalinguistic information about the nature of the error, or any combination of these. (p. 340)

CF has been classified into different categories each of which lies somewhere within the continuum moving from indirect to direct CF. Further details about different types of CF are given below.

Explicit vs. Implicit Corrective Feedback. This explicit feedback falls towards the end of the CF explicit/implicit continuum (Ellis et al., 2006). In this type, the teacher as the last resort overtly alerts the learners to the errors they produce. Implicit CF, however, gives no overt indication of the error produced by the learner.

Clarification Request. In this type of CF, questions are raised in order to indicate that the uttered language form is not well-formed nor is it properly understood, and that there is a need for repetition or reformulation of the respective form. The problems in this type has to do with "comprehension, accuracy or both" (Lyster & Ranta, 1997, p. 47).

Metalinguistic Feedback. Similar to explicit CF, this feedback occurs at the end of the CF continuum. Lyster and Ranta (1997) refer to it as sets of comments, information and questions regarding the extent to which the learners' utterances are well-formed. In this kind, the correct form is not provided. They also subcategorized this feedback type into *metalinguistic comments*, *information* and *questions*. Metalinguistic comments merely indicate that an error has occurred. This feedback category highlights the existence of an error or identifies its location and contains some metalanguage that indirectly refers to the nature of the error as well. The last subdivision is concerned with metalinguistic questions. These questions "point to the nature of the error but attempt to elicit the information from the student" (Lyster & Ranta, 1997, p. 47).

Elicitation. As stated by Panova and Lyster (2002), this feedback is meant to motivate learners to correct themselves. In a face-to-face interaction, elicitation can be practiced through three strategies with varying degrees of implicitness or explicitness: (1) reformulation request for an ill-formed utterance, (2) using open questions and (3) using strategic pauses to leave a room for the learner to finish up an utterance. Since the latter strategy is the least communicatively intrusive, it can be concluded that it is the most implicit one. Accordingly, elicitation does not belong to either extremes of the implicit/explicit CF continuum, and it is commonly presented independently, without being associated with other types of CF.

Repetition. Since repetition is less communicatively intrusive, it stands at the implicit end of the CF continuum. Panova and Lyster (2002) defined repetition as "repeating the ill-formed part of the student's utterance, usually with a change in intonation" (p. 584).

Translation. As stated by Lyster and Ranta (1997), translation is a subcategory of recast. Recast differs from translation in that that the former comprises a feedback to the learner's defective L2 utterance, whereas the latter is a feedback to his/her perfect L1 utterance.

Recast. In Lyster and Ranta's (1997) definition, recast is "the teacher's reformulation of all or part of a student's utterance, minus the error" (p. 47). Long (1996) also considers it as "utterances that rephrase a child's utterance by changing one or more components (subject, verb, object) while still referring to its central meaning" (p. 434). Other scholars consider recast effective in the learners' interlanguage progress (Lyster, 1998a; Lyster, 1998b; Panova & Lyster, 2002). According to Long (2006) and Sheen (2006), recast involves reformulating the entire or a portion of the leaner's utterance carrying an error

through replacing some non-target looking words or phrases with their equal forms in the target language while the interlocutors' intent is to emphasize the communicative meaning without highlighting the linguistic form. In their elaborate taxonomy of CF types, Sheen and Ellis (2011) introduced *conversational* versus *didactic* recasts. The former is an implicit recast which refers to a student's utterance reformulated by the teacher to help avoid a breakdown in communication, while the latter is an explicit recast consisting of a student's utterance with no communication hindrance involved. On the significant role of recast, Lyster et al., (2013) state that "because, in some foreign language settings, recasts have even been found to lead to learner repair as frequently as explicit correction, they have been considered tantamount to explicit correction in those contexts" (p. 3).

Target Language Vocabulary Learning. Scholars have highlighted the importance of learning L2 vocabulary (Barcroft, 2004; Laufer & Nation, 1995; Nation, 2001; Schmitt, 2000). According to McCarthy (1990), many English teachers feel that vocabulary is the most crucial language component. Allen (1983) believes the reason for emphasizing learning vocabulary is the fact that, despite the remarkable time dedicated to teaching vocabulary in English classes, the result is dissatisfying since there are too many other words that have not yet been acquired.

The Role of Technology in Education. Today, the role of Information and Communication Technology (ICT) is evident in our lives. ICT helps both teachers and learners in education (Selwyn, 2003). As a new ICT advancement, the IWB can be said to be influential in teaching/learning and supporting various learning styles (Bacon, 2011). Turel (2011) has cited researchers/scholars (BECTA, 2003; Beeland, 2002; Schmid, 2008; Slay et al., 2008; Wall et al., 2005) who believe that the IWB is a modern board, a beneficial technological advancement at teachers' disposal to promote learning achievement. According to Ertan et al. (2011), teachers who use the IWB provide an opportunity for most of the learners to use electronic books and academic materials that exist on the teachers' computer. Hall and Higgins (2005) suggest different potential uses of the IWB in the classroom like modeling software use, presenting learners' activity, digital lessons, using web-based resources, displaying video clips, etc.

The following can be mentioned as the benefits of IWB-mediated instruction (see Brown, 2009; Swan et al., 2008):

- Persuading teachers to generate digital resources
- Motivating learners by permitting them to demonstrate their knowledge
- Enabling teachers to build a collection of learning materials
- Facilitating interaction with websites in in the way directed by the teacher
- Providing an electronic flipchart
- Promoting collaborative learning
- Demonstrating the usage of educational software.
- Providing an opportunity for teachers to monitor their learners
- Running tests and providing instant feedback for learners
- Catering learners with special needs

Computer-Mediated CF. Given the role of CF in L2 teaching/learning along with the technological advancements, researchers have tried to link this area of research to that of CALL, focusing on the possible effects of computer-assisted CF in L2 learning. Research findings have indicated that CF that is provided by various CALL systems influence learning (Bull, 2000; Hulstijn, 2000; Sachs & Suh, 2007). According to Ware and Warschauer (2006), software-based CF is potentially useful and effective; therefore, it can be replaced by human CF. To Yeh and Lo (2009), computer-mediated CF can significantly aid in raising metalinguistic awareness of learners, annotating the text with different colors and attracting learners' attention on restricted information. However, it seems that this research is still experiencing infancy and its emaciated related literature requires further enrichment. Thus, in order to help complete the outlook of research findings in this area, this study has been an attempt to explore the role of the IWB-mediated CF in English vocabulary learning by EFL learners in the Iranian EFL context.

Computer-Mediated Vocabulary Learning. As also cited by Cojocnean (2015), some researchers (Abraham, 2008; Basoglu & Akdemir, 2010; Groot, 2000; Ma & Kelly, 2006; Oberg, 2011; Yun, 2011) believe that development in CALL has led to the emergence of a technology-based system for effective vocabulary learning. According to Coady et al. (1993), the computer with its graphic and external stimulation provides a rich setting for learning vocabulary. Lu (2010) believes that technological advancements have resulted in the better employment of instructional and educational technology. In this regard, the IWB as a new technological achievement can be said to help L2 learners to better improve their L2 vocabulary learning.

Empirical Study Findings

The Role of Interactive Whiteboard (IWB). Given the increasing popularity for the use of IWBs across the globe, referring to some research endeavors (Amolo & Dees, 2007; Beeland, 2002; Hall & Higgins, 2005; Levy, 2002; Moss et al., 2007; Somyürek et al., 2009; Torff & Tirotta, 2010; Wall et al., 2005), Turel (2011) reiterates that both qualitative and quantitative studies have addressed the role of IWB in educational contexts.

Wall et al. (2005) aimed to investigate students' rate of achievement as well as students' and teachers' views and attitudes with respect to installing an IWB in a primary school in the UK. The result of the study indicated a positive change in classroom interaction and teachers' practices. In another study, Wood and Ashfield (2008) investigated 10 lessons in Literacy and Numeracy in primary schools of the UK where IWBs were used regularly. Their results demonstrated that learners were required to engage more in process-oriented discussions. However, teachers tended to display information via the IWB by easy-level questioning and evaluative feedback. Kennewell et al. (2007) believed that teachers seek to persuade their students to ask questions or provide detailed answers at a fast pace in their lessons. Therefore, using an IWB can facilitate learners' active participation in the classroom and, hence, flourish their thinking and learning skills.

As for the place of IWB in language education, several studies have been conducted. Albaaly and Higgins (2012) examined the effectiveness of IWBs in

ESL leaners' English essay writing development in Egypt. The results did not reveal a greater efficacy for IWB in affecting the learners' writing ability.

Katwibun (2013) examined the question how IWBs might impact learners' vocabulary learning; the setting was a public high school in Thailand. The data was gathered by observing students' participation, a questionnaire, and a vocabulary test. The results revealed that using the IWB led to a significant achievement in learning vocabulary.

Mechling et al. (2007) examined the efficacy of the IWB in improving mildly disabled learners' ability to read the sight words. They found that learners' reading level increased via using the IWB. The researchers believed that the IWB could make the target information more visible and increase learners' attention. Gatlin (2007) investigated the role of the IWB in student learning progress. The result showed that using the IWB during the instructional process led to a significant achievement. In another study, Shen and Chuang (2009) attempted to find out how attitudes and behaviors could impact the IWB use. The participants were fifth and sixth grade students in Taiwan. They reported that using an IWB in the classroom is significantly correlated with attitudes concerning interactivity, ease of use, and ideas of usefulness.

Some studies have addressed the role of IWBs in EFL learning in Iran. Amiri and Sharifi (2014) explored the impact of IWBs on Iranian EFL learners' writing proficiency. They found that using an IWB effectively raised the amount of accuracy in the use of adverbs by the learners. Ghaniabadi et al. (2016) studied the impact of IWBs on reading comprehension ability of EFL learners at Iranian high-schools. The results revealed that IWBs could help improve performance on reading comprehension tasks. In the same vein, Shams and Dabaghi (2014) launched a study on the role of online annotation via IWBs in developing Iranian EFL learners' reading comprehension. Their results revealed that online annotation via the IWB significantly enhanced the learners' reading comprehension ability. Having investigated the attitudes and views of Iranian EFL teachers concerning the deployment of IWBs in EFL classrooms, Dashtestani (2019) concluded that "the teachers believed that the IWBs can be employed to teach different language skills and sub-skills" (p. 207).

The Role of Computer-Mediated CF. Given the importance of providing corrective feedback (CF) in L2 teaching/learning contexts, researchers have found interest in the electronic mode of providing CF. In view of the fact that this method offers remote feedback, it can encourage those reluctant learners who feel under pressure to be given feedback in a direct encounter setting. Therefore, computer-mediated feedback provides flexibility and convenience for the learners (Ho & Savignon, 2007).

Some studies have addressed the efficacy of computerized and internet-based CF in learning a second/foreign language. Kim et al. (2020), studying the role of task repetition and synchronous written CF in learning Korean grammar, concluded that this kind of feedback has a facilitative impact on grammatical accuracy of the learners of Korean as a second/foreign language. Sarré et al. (2019) discovered that indirect CF associated with computerized micro tasks over a specified time interval could be the most efficient type of CF in fostering L2 writing accuracy. Rassaei (2019) studied the efficacy of the dual

modality of computerized CF (text-based versus audio-based) in learning how to use the English articles by EFL learners in Iran. The study also corroborated the learners' preferred perceptual style as the moderating variable. The results were indicative of positive effects for both CF types on developing appropriate use of English articles by the learners. Also, it was found that CF mode when matched with preferred perceptual style resulted in the increased efficacy of computer-mediated CF. Ghufron (2019) studied the comparative roles of Grammarly CF (software-mediated CF) and teacher CF in EFL writing assessment. His results revealed that the frequency of lexical, grammatical, and spelling and punctuation errors declined due to the effect of Grammarly CF. In a study by Shaqaqi and Soleimani (2018), it was found that computer-mediated written CF significantly enhanced intermediate EFL learners' use of verb tense compared to the conventional written CF. S and El-Sakka (2017) found that computer-mediated indirect-direct CF significantly contributed to the writing accuracy of the Egyptian EFL learners in the target population of the study. Ghazi and Zamanian (2016) studied the impact of computer-mediated versus conventional CF on EFL learners' writing accuracy in Iran. Their results displayed that computer-mediated CF was more effective in the intake of grammatical feedback than the conventional CF modality.

AbuSeileek and Abualsha'r (2014) probed into the question whether peer-offered computer-mediated CF would result in enhanced writing ability of the participants. The participants who were 64 EFL learners at the intermediate level of proficiency were randomly divided to three groups, each receiving a different type of CF. The first group received the feedback via track changes, a kind of electronic feedback using Microsoft Word 2010. The second group was provided with recast and the third group experienced metalinguistic feedback types. The study took eight weeks. Each individual received CF on drafts written by a member of the other group, and then discussed it with the group members. Accordingly, the learners who were treated to computer-mediated CF outperformed those who were exposed to recast and metalinguistic feedback.

Faghih and Hosseini (2012) attempted to explore whether asynchronous and e-mail assisted CF would promote the correct use of articles and prepositions. They reported significant improvement in the participants' performance on the use of articles. Elsewhere, Razagifard and Rahimpour (2010) explored the effect of chat-based CF on learners' grammar achievement. They used both meta-linguistic CF and recast methods. Consequently, they found that meta-linguistic CF more effectively contributed to learners' noticing of the gap and to enhancing their ability to use correct grammatical structures. Elola and Oskoz (2010) studied the effect of computer-mediated CF on peer-writing and individualized writing performance. They used wikis and chat environment. They found no significant difference regarding complexity, accuracy, and fluency between individual (wikis) and collaborative (chat) practices.

Henderson (2019) probed the role of feedback timing in vocabulary development by the learners who were learning Spanish as a foreign language. The feedback was presented via synchronous computer-mediated interaction. The participants experienced error repetition (either immediate or delayed)

plus recast, or received no feedback on their vocabulary errors. Both CF groups outperformed the comparison group on the picture description task. Feedback immediacy, however, did not prove to have a moderating effect in this research context.

As understood from the studies reviewed above, a great majority of researchers have addressed the impact of computer-mediated CF in the writing skill of the learners; fewer studies, however, were found to focus on other language skills and components. In general, there exists a gap regarding studies on the efficacy of CF in L2 vocabulary development. More specifically, this gap seems to be much wider with reference to the role of a new technological advancement like IWBs in L2 vocabulary learning. Given this, the researchers meant to examine the effect of IWB-mediated CF on English vocabulary learning by EFL learners in the Iranian EFL context. To this end, the researchers posed the research questions as follows: (1) Does conventional CF make a difference in L2 vocabulary learning by Iranian intermediate EFL learners? (2) Does IWB-mediated CF make a difference in L2 vocabulary learning by the participants? (3) Does IWB-mediated CF contribute to L2 vocabulary learning more than conventional CF?

Methodology
Participants
A group of 200 female subjects were selected randomly among a population of EFL learners at a language learning institute in Sanandaj, Iran. They were given the Oxford Quick Placement Test (OQPT), and 80 intermediate learners were chosen, based on the scoring scheme described below.

All the learners were homogenous. Their ages varied between 13 and 16 years old. They had similar learning background and all of them had studied English at school for several years. The study was conducted in three classes, one of which was equipped with an IWB. The participants were randomly assigned to three groups. Group A consisting of 30 members received indirect electronic elicitation feedback via the IWB. Group B, 25 in number, received indirect elicitation feedback through conventional methods, and Group C, also 25 in number, received no feedback of either kind.

Materials
The two main materials that were used in this study included an interactive whiteboard and a proper software. The interactive whiteboard was used as a technological device for teaching L2 vocabulary, and the Oxford Word Skills (intermediate) software was chosen as the appropriate software for this research context. It was installed on a laptop attached to the board; then, the board acted like a touch screen monitor.

Instruments
The Oxford Quick Placement Test (OQPT) and Target Vocabulary Test. The instruments included two kinds of tests, namely, the Oxford Quick Placement Test (OQPT) and the researcher-developed target vocabulary test. To screen the participants for the same language proficiency level, the researchers employed the OQPT. The test was designed in 2004. The test

designers reported a reliability index of .90 for this test. The test contains 60 multiple-choice items in two parts. In the first part, there are 40 items (1 through 40), and the second part includes 20 items (41 through 60). Based to the scoring scheme of the test, the test takers who scored between 0 and 29 were to be consider as elementary EFL learners; those scoring between 30 and 47 were regarded as the intermediate learners, and the learners whose test scores fell within the range of 48-60 were labeled as advanced learners. The time allocated to answering all the test items was 30 minutes, which was in accordance with the test rubrics.

The researchers also designed a vocabulary test as the main instrument for pretest and posttest purposes. It comprised 20 multiple-choice items based on the 20 target words selected from Oxford Word Skills (intermediate) units. Learners had 20 minutes' time to answer the test items. The Cronbach alpha value for the instrument was calculated at .80, which is indicative of a high reliability rate. The test validity was also accounted for in this study. To this end, the researchers asked three field experts to confirm the content validity of the test. They commented on some items, and the researchers modified them based on the experts' comments. Finally, the expert judges confirmed the content validity of the test and deemed it appropriate for measuring the participants' vocabulary knowledge.

Procedure

As the first step, the proficiency test was administered to 200 female EFL learners in Abidar English Language Center in Sanandaj, Iran. Then, based on the scores obtained and according to the screening criteria mentioned above, 80 intermediate EFL learners participated in the study; they were then divided to three groups: the control group (n = 25), the conventional CF group (n = 25) and the IWB-mediated CF group (n = 30). Thus, the study included one control group and two experimental groups.

The first experimental group received the IWB-mediated CF while learning the target words and the second experimental group was given the conventional CF for the same purpose. However, the control group was made to learn the target words with no CF of either kind. All the participants in the three groups were given the pretest on the target vocabulary items to ascertain that they were homogeneous prior to the treatments. After receiving the treatment for eight sessions (each session lasting for 90 minutes), all groups took the same test as the posttest.

For the experimental group receiving indirect conventional elicitation CF, the target words were presented within 10-15 minutes. The learners with the help of the teacher defined each word and looked for several other synonyms for the new words. While the participants were doing the exercises, the teacher monitored each individual, offering indirect conventional elicitation CF, indicating the wrong answer by putting a cross next to them without revealing the correct form. Therefore, based on the first strategy of elicitation, i.e., eliciting reformulations of the learners' ill-formed utterances, the teacher provided an opportunity, allowing learners to rely more on their own knowledge and redo the exercises in order to gain the correct form, with this opportunity being offered to the individual learner several times to correct

his/her response. Meanwhile, the experimental group who received the IWB-mediated indirect, electronic elicitation CF was taught the same target words via the IWB. This group learned the target words via the Oxford Word Skills CD-ROM, which is the software specifically designed for Oxford Word Skills books. The software presents the new words one by one with proper images and pronunciations. After presenting the new words, each individual comes to the board to do an exercise. In some exercises, the new words are presented in the form of pictures. The software reads the new words and the learners are required to provide the correct answer by touching the right picture or word on the board. If any incorrect responses are detected by the software, some guidelines and opportunities, like reminding the learners to use the correct part of speech in the blank and highlighting the cues in the text in order to guide them to find the correct answers, are provided for the learners to redo the exercises. There is another type of exercise in the form of a dialogue or sometimes a text. A list of the new words and some sentences are provided. The learners should read the sentences and select the correct word from the list to drag it (by means of touching the board) into the blank. The moment the learners finish the exercises, the software will give them an indirect, electronic elicitation CF of their performance by putting a check next to correct responses or a cross next to wrong ones in order to guide the students to reformulate the ill-formed response. To this end, it is necessary to press a box, which is designed on the software, labeled as GET THE ANSWER. By doing this, the software will immediately give feedback on their performance. Following this, the learners can either see the correct answers or do the exercises again. The software and the IWB provided the learners with about 10 opportunities for each exercise to redo and correct their mistakes. Finally, the third group, i.e. the control group, was taught the target words according to the conventional method of vocabulary teaching while receiving no corrective feedback of either kind (neither conventional nor the IWB-mediated). After the completion of the instruction, all groups were given the vocabulary posttest, the results of which were statistically compared with those of the pretest to investigate the respective research questions.

Data Analysis

For data analysis, both descriptive and inferential statistical analyses (one-way ANOVA) were applied by the researchers. Employed to find any differences among the three independent groups, the one-way ANOVA was meant to establish that they were homogeneous before the treatments. In addition, it was conducted in order to compare the three groups after the treatments for any significant differences. All the analyses were performed via the SPSS software (version 22).

Data Analysis Results
Pre-Test Results

In order to determine the normality of the data, a one-sample Kolmogorov-Smirnov test was used. The results indicated that the data obtained from the target vocabulary pre-test was normally distributed. Also, Levene's test results indicated the homogeneity of variances. Thus, normality

and homogeneity assumptions as prerequisites to ANOVA test were established (Tables 1 and 2).

Table 1
Results for the Normality of the Distribution for the Pre-test

N		80
Normal Parameters	Mean	9.76
	Std. Deviation	4.31
Most Extreme Differences	Absolute	.09
	Positive	.09
	Negative	-.09
Test Statistic		.09
Sig. (2-tailed)		.06

Table 2
Levene's Test for the Homogeneity of the Variances

Levene Statistic	df1	df2	Sig.
1.092	2	77	.34

To ensure that the participants did not differ significantly before applying the treatments to the experimental groups, the researchers conducted a one-way ANOVA analysis on the target vocabulary pretest. The results are presented in Tables 3 and 4 below.

Table 3
Statistics for One-way ANOVA on the Vocabulary Pretest

Groups	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	25	9.12	5.06	1.01	7.02	11.21	.00	19.00
3	25	9.32	3.44	.68	7.89	10.74	2.00	16.00
5	30	10.66	4.03	.73	9.15	12.17	3.00	18.00
Total	80	9.76	4.23	.47	8.82	10.70	.000	19.00

Note: 1. Pre-test control group 3. Pre-test Conventional group 5. Pre-test IWB-mediated group

Table 4
ANOVA Results for Performance on Target Vocabulary Pretest

	Sum of Squares	Df	Mean Square	F	Sig
Between Groups	39.74	2	19.87		
Within Groups	1374.74	77	17.85	1.11	.33
Total	1414.48	79			

As shown in the table above, the results revealed no significant difference across the three groups concerning their performances on the target vocabulary pretest [F (2, 77) = 1.11, p = .33]. Thus, the researchers could ensure that the groups were not significantly heterogeneous in their knowledge of the target words before treatment application.

Results for the Research Questions of the Study

To answer the research questions, the researchers conducted a one-way ANOVA analysis. Descriptive statistics, ANOVA results, and post-hoc test results are presented in Tables 5, 6, and 7 below. Since the same table (Table 7) was used to investigate each research question, the table was not repeatedly provided in reference to the second and third research questions in order to save space. It is worth mentioning that, as done for pretest scores, the normality and homogeneity tests were also run for the posttest scores to establish that the assumptions for the ANOVA test persisted for the data.

Table 5
Statistics for One-way ANOVA on the Vocabulary Posttest

Groups	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Control	25	9.32	3.44	.68	7.8965	10.74	2.00	16.00
Conventional	25	9.96	4.00	.80	8.3068	11.61	3.00	18.00
IWB	30	15.70	2.96	54	14.5943	16.80	9.00	20.00
Total	80	11.91	4.52	.50	10.9053	12.91	2.00	20.00

To probe the first research question, the researchers tested the following null hypothesis: **conventional corrective feedback has no effect on L2 vocabulary learning by Iranian intermediate EFL learners.** As shown in Table 6 below, a significant difference was found among the three mean scores (p = .000). Post-hoc comparison revealed a significant difference between the control group and conventional groups [MD = .64, p = .001] (Table 7). Therefore, the researchers were able to reject this hypothesis.

Table 6
ANOVA Results for Performance on Target Vocabulary Posttest

	Sum of Squares	Df	Mean Square	F	Sig
Between Groups	693.68	2	346.84	28.88	.000
Within Groups	924.70	77	12.00		
Total	1618.38	79			

Table 7
Tukey's HSD Test Results for the Group Differences on Posttest Mean Scores

(I) g	(J) g	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Control	Conventional	-.64*	.98	.001	2.98	1.70
	IWB	-6.38*	.93	.000	-8.62	-4.13
Conventional	Control	.64*	.98	.021	1.70	2.98
	IWB	-5.74*	.93	.000	-7.98	-3.49
IWB	Control	6.38*	.93	.000	4.13	8.62
	Conventional	5.74*	.93	.000	3.49	7.98

*The mean scores were different at .05 level of significance

For the answer to the second research question, the researchers tested the null hypothesis below: **IWB-mediated corrective feedback has no effect on L2 vocabulary learning by Iranian intermediate EFL learners.** Likewise, based on Table 7 above, the post-hoc test results displayed a significant difference between the performance of the control group and the IWB group [MD = 6.38, p = .000]. Thus, this hypothesis could also be rejected.

Finally, in their attempt to investigate the third question, the researchers tested the hypothesis below: **IWB-mediated corrective feedback is not more effective than conventional corrective feedback in L2 vocabulary learning by Iranian intermediate EFL learners.** By the same token, post hoc test results (Table 7) revealed that the conventional and the IWB CF groups were significantly different [MD = 5.74, p = .000]. The effect size for IWB CF turned out to be quite large (Eta squared = 0.42). Thus, the last hypothesis was likewise rejected.

Discussion

This study was designed to explore the effect of IWB-mediated CF versus conventional CF on L2 vocabulary learning by Iranian intermediate EFL learners. The results confirmed the significant effect of IWB-mediated CF on L2 vocabulary learning of the participants. As mentioned earlier, several studies have been conducted, focusing on computer-mediated CF (e.g., AbuSeileek & Abualsha'r, 2014; Seiffedin & El-Sakka, 2017; Elola & Oskoz, 2010; Faghih & Hosseini, 2012; Ghazi & Zamanian, 2016; Ghufron, 2019; Henderson, 2019; Kim et al., 2020; Loewen & Erlam, 2006; Rassaei, 2019; Sachs & Suh, 2007; Sarré et al., 2019; Shaqaqi & Soleimani, 2018). Some studies have dealt with CALL and L2 vocabulary learning (Barani, 2013; Katwibun, 2013), and very little research was done on CF and L2 vocabulary learning (e.g., Henderson, 2019; Nakata, 2015; Sippel, 2019). As far as the researchers of this study have searched, no

study has been done regarding the effect of IWB-mediated CF. Therefore, this research tends to be mostly exploratory by nature than confirmatory from this perspective.

The results for the first research question revealed that conventional methods of providing CF slightly improved the learners' performance with regard to L2 vocabulary learning. This finding can be said to give credit to those findings by other researchers indicating that teachers' CF facilitates language learning and has a major influence on learners' writing performance (e.g., Caws, 2006; Ho & Savignon, 2007; Pan, 2010; Rabiee, 2010). On the other hand, the finding is not consistent with that of Tafazoli et al. (2014), which indicated that conventional written CF did not reveal any significantly positive effect on the grammatical accuracy of Iranian ESP students' writing. This discrepancy might be due to the fact that grammatical accuracy requires more consciousness-raising and adequate practice by the learners in addition to providing CF. Thus, CF alone might not suffice for this purpose.

In view of the findings for the second research question, it became apparent that IWB-mediated CF had a significant effect on learning second language (L2) vocabulary. This finding can be said to support those obtained by other studies on the efficacy of computer-mediated CF in learning different language skills and components (e.g., Bull, 2000; Caws, 2006; Hodge & Anderson, 2007; Faghih & Hosseini, 2012; Ghufron, 2019; Hulstijn, 2000; Kim et al., 2020; Rassaei, 2019; Razagifard & Rahimpour, 2010; Razagifard & Razzaghifard, 2011; Sachs & Suh, 2007; Sarré et al., 2019; Sauro, 2009; Seiffedin & El-Sakka, 2017; Yeh & Lo, 2009). More specifically, this finding supports the findings by some other studies (e.g., Amiri & Sharifi, 2014; Ghaniabadi et al., 2016; Shams & Dabaghi; 2014) which revealed that IWBs could significantly develop EFL learners' grammatical knowledge, writing ability, and reading comprehension skills.

The third research question revealed that the IWB-mediated feedback surpasses conventional CF when it comes to second vocabulary learning. This finding corroborates the study conducted by Shaqaqi and Soleimani (2018), who found that computer-mediated written CF had a significantly greater effect on the intermediate EFL learners' use of verb tenses than the conventional written CF. Likewise, it conforms to the finding by Ghazi and Zamanian (2016), indicating that computer-mediated CF was more effective in the intake of grammatical feedback than conventional CF modality. Similarly, the finding is in line with another study by AbuSeileek and Abualsha'r (2014) in which they investigated the use of peer-generated computer-mediated CF to enhance EFL learners' writing ability. Their finding indicated that the overall score of the learners who received computer-mediated CF was better than those who received recast and metalinguistic feedback.

As mentioned above, as the nature of this research was mostly exploratory rather than confirmatory, almost no directly related findings in the related literature could be traced, which means that comparing and contrasting the findings of the study with other genuinely relevant findings in the literature is not readily feasible from this perspective. This, in turn, can mean that this line of research is experiencing its initial infancy stage; many other quantitative and qualitative studies are to be conducted in order to throw more light on the

issues and help offer a comprehensive picture of the possible conclusive findings in the literature.

Conclusion

This study revealed that IWB-mediated CF was a highly effective and efficient recent advancement in language learning. The IWB provides feedback to individuals indirectly; therefore, implementing it in classrooms can lead to improved learning and active engagement of the learners. The IWB-mediated CF has mostly been used to improve learners' acquisition of grammar and writing skill. This study confirmed that using an IWB to provide CF can significantly promote L2 vocabulary learning as well. Consequently, it can be suggested that IWB-mediated teaching/learning can be incorporated into L2 teaching/learning contexts. Computer-assisted CF, however, can be offered in different types and modalities across other language proficiency levels. Thus, further studies are required in order to probe into the problem in a much wider scope. Also, employing elaborately-designed software, including interactive whiteboards, exclusively for providing CF, can yield more conclusive results and complete the picture of findings in the related literature in a more comprehensive way.

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Mapping Political Strategies Over Rhetorical Devices in 2008 U.S. Pre-Presidential Debates: A Political Discourse Study

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Abstract
In this research, it was tried to follow the recent Political Discourse Analysis (PDA) approaches that map text over relevant context as supported by Van Dijk (2006). The main intention is to look at political discourse via the lenses of PDA to see whether ideologies and power relations of interlocutors in the target setting of this study could have possibly been aligned with linguistic elements -here rhetorical devices- and to see to what extent such text-context mapping is recognized as relevant to language tools within the selected datasets. Accordingly, the researcher tried to follow a sample of political talk -live 2008 US presidential debates- between two republic vs. democratic campaigns. To do so, some political strategies for argumentation including Van Dijk's model representing 'Authority', 'Topos or burden', 'Future Representations', 'Comparison', 'Consensus', 'Counterfactuals', 'Populism', 'Generalizations', and 'Number Games' were mapped over some linguistic rhetorical devices such as 'Metaphor', 'Hyperbole', 'Irony', 'Euphemism', etc. The common discoursal moves in Obama's vs. McCain's speech statements were compared and contrasted among similar strategies to find any emergent rhetorical devices. Findings indicate that 1) the political candidates had made use of rhetorical and political moves in tandem within the same propositional units, 2) some of the employed discourse devices were paralleled with the majority of political strategies like Repetition and Metaphor, and 3) some political strategies had been used to excess like 'Comparison', 'Populism', and 'Future Representation'.

Keywords: contrastive discourse analysis (CDA), political discourse analysis (PDA), political strategies, rhetorical devices, US pre-presidential speech

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Introduction

Within political discourses, language, no doubt, plays an indispensable role (Pennycook, 2017). Many prominent leaders in history have made best use of linguistically rich speeches through which they have gained success in attracting the related political parties. In nearly all forms of political discourses, genres such as propaganda, political advertising, political speeches, media interviews, parliamentary debates, presidential campaign speeches, etc., language plays its role in giving the prominent leaders the essential resources to various socio-political goals (Chilton & Schaffner, 2002). Van Dijk (1997), as one pioneering figures in analyzing political discourses, contended that, in each speech delivered by a politician, there is a realization of his/her intentions and it has its own functions. Matlock (2015) put forth a similar argument to signify *'how something is said may be as important as what is said'* (p. 3).

In political discourses, certain linguistic assets available to the interlocutors can achieve persuasion of the audience towards certain points in discussion, including literary rhetorical devices. Such strands might help politicians to argue well and cause a better transmission of key ideas to the audience. Literary rhetorical devices, which convey meaning and intentions in certain ways, may include 'anaphora', 'direct address', 'hyperbole', 'parallelism', 'metaphor' among others. As Burke (1969) once said, "Wherever there is persuasion, there is rhetoric. And wherever there is meaning, there is persuasion" (p. 72).

Discourse analysts use a variety of techniques to detect the rhetorical devices in texts and talks. Via CDA techniques, scholars can identify the discursive strategies, which have consistently been employed by speakers for meaning construction practices in many social confronts like commercial business settings, social speeches by prominent leaders, as well as sociopolitical contexts (Rahimi et al., 2010; Van Dijk, 1997).

Context of the Problem

With respect to the applied techniques in CDA for political contexts and discourses, Van Dijk (1997) believes that techniques in CDA could not lead to sound findings since each proposition must be dealt with in its own context with various rules for analyses. Ideologies and power relations in the discourse of politics, for example, must be dealt with in a new domain of inquiry as he termed as political discourse analysis (PDA):

> PDA is both about political discourse, and it is also a critical enterprise. In the spirit of contemporary approaches in CDA, this would mean that critical-political discourse analysis deals especially with the reproduction of political power, power abuse or domination through political discourse, including the various forms of resistance or counter-power against such forms of discursive dominance. (p. 11)

Van Dijk (2006) has proposed eight political strategies and formulated them as some models for argumentation purposes in political contexts, which many political actors make best use of as useful strategies to support their case, including 'Authority', 'Topos', 'Future Representation', 'Comparison', 'Consensus', 'Counter-Factuals', 'Populism', and 'Number Game'. In 'Authority',

politicians refer to organizations or people who are supposedly above the fray of party politics, or who are generally recognized as experts or moral leaders. International organizations such as the United Nations (UN), the church, the courts, or other governmental organizations are, for instance, are referred to by politicians. "Topos" (burden) refers to premises taken for granted as self-evident and sufficient reasons to accept a conclusion. For example, one of the topoi of anti-immigration discourse is that asylum seekers are 'a financial burden for us'. 'Future Representation' is another noted strategy used by political figures, in which case it is used as a legitimizing device to signify near-term policies and actions to persuade the audiences. 'Comparison', as another political strategy, typically occurs in talks about minorities like refugees when speakers compare in-groups with out-groups or insiders with outsiders with positive self and negative other orientations. 'Consensus', as another political strategy, refers to claims made by political actors to defend their territories by focusing on cross-party or national unanimities in situations where their country is at stake, for instance by an outside attack. In this way, they might even abandon or sacrifice some of their political values to save the country at large. 'Counterfactuals', is another mostly utilized persuasive political strategy in which professional politicians arise empathies within audience by typical expressions referring to as 'what would happen if' terms. In 'Populism', as another eminent strategy in Van Dijk's model, one of the well-known argumentation fallacies is used in conservative talks specifically on matters that the general public is concerned with like immigration, war, financial corruptions, etc. And finally, 'Number Game' is a kind of tactic used by politicians to accredit their arguments by objectifying their assertions. Statistics, records, numbers, and figures are the primary means here to persuasively display interlocutors' objectivity in political speeches.

Background of the Study

Debates on the underlying realizations of texts vs. contexts have always been current in CDA lines of research. On the one hand, some scholars believe that a text only displays tangible aspects of oral and written documents (Wodak, 2001), while discourse constitutes the system of knowledge and memory, which is more abstract then. Other figures such as Van Dijk (1988) have put one step forward by saying that discourse is not an isolated textual or dialogical structure but a complex communicative event also embodying a social situation involving participants and their belongings. There are grave debates among eminent scholars in the field of discourse analysis on this issue (Fairclough, 2013; Van Dijk, 2011). Critics of CDA mostly view the link and connection between hegemonic ideologies and language not to be compatible in meaning frameworks (Blommaert & Bulcaen, 2000; Krzyzanowski, 2005; Wodak, 2001). On the other hand, recent theoreticians in PDA campaigns like Van Dijk (2006) and Barton (2002) claim that conjoint processing analyses that combine text and context together might better achieve hidden meanings. Concerning PDA, hidden aspects in multidisciplinary studies comprise knowledge on audience as (recipients) and political presenters as (actors) as well as the activities and practices as (functions) within an interactional framework. Barton (2002) put forward a similar argument by saying: *'Every*

study in the field is based implicitly or explicitly on the analysis of texts and/or talk in their various contexts" (p. 1). For instance, common and proper context media where political events take place for such analyses might include cabinet meetings, parliamentary sessions, election campaigns, rallies, interviews with the media, bureaucratic practices, protest demonstrations, and so on, and only when elected politicians are debating or interacting in parliament buildings, do they mostly reveal their ideologies on various topics like governmental issues, economical matters, socio-political stance, etc. Accordingly, if CDA specialists map texts on the proper ideological context, they can probably reveal many hidden aspects of power relations, which can be achieved through proper using of language between the participants as such.

In a recent study, Biria and Mohammadi (2012) explored inaugural speech by two US presidents: George Bush and Barack Obama. Through CDA techniques, they finally revealed how the two presidents had possessed some discursive mechanisms including the positive self and negative other-presentation strategies, which are a characteristic of political discourses to conquer rivals and a proper means in politicians' hands in order to influence their audience.

In still another research by Rahimi et al. (2010), the discursive structures of the 2008 presidential campaign speeches of Hillary Clinton and Barrack Obama were sought and it was found that significant discoursal elements marked by gender and race within the analyzed speeches of the two presidential candidates were hidden.

Gowhari et al. (2014) did a similar study on two main Iranian political parties including Principalists vs. Reformists and concluded that the two selected nominees in their study had used language as a means of promoting their own social, political, and personal interests and as an effective means for power struggle.

Persuasion Analysis in PDA Studies

In studies pertaining to discourse analysis where the intention is to reveal power relations rarely have scholars employed PDA techniques.

Higgins and Walker, (2012) referred to three key types of persuasion, which have long been claimed to be in action from Aristotle's' time: ethos, pathos and logos. In ethos, credibility of the presenters makes them acceptable characters. If the speech stirs the audience's emotions, it has 'pathos' pertaining to it, and finally by 'logo', it is meant that persuasion can be said to be effective only when the speakers are able to prove a truth or a fact by means of persuasive arguments. It seems that in pathos and logos, linguistic elements play a more pivotal role since they are directly involved with language as a critical means for transmitting ideas by the interlocutors.

Similar approaches implemented by other scholars who had taken PDA frameworks supported this issue. In another study, Johnstone and Eisenhart cited a very interesting study by Deciu Ritivoi (2008) from Mellon University on how this scholar had explicated the roles of stylistic moves and variations used by a Romanian would-be government to constitute political actions and agents during the Cold War. She explained then how modality reinforced by transitivity had been used by this political actor to depict his power in unifying

his companions to fight against communism. Micro-rhetorical devices as such have been claimed to be conjoined with macro-rhetorical norms of successful leaders like power, responsibility appreciation, political independence and blaming antithesis ideologies among many other higher-order characteristics.

This Study

In this study, the main intention was to look at political discourse via the lenses of PDA to see whether ideologies and power relations of interlocutors in the target setting of this study could have possibly been aligned with linguistic elements- here rhetorical devices- and to see to what extent such text-context mapping is recognized as relevant within the interlocutors' speeches. This could denote text-context balance within CDA lines of inquiry as a novel undertaking to be sought by future researchers as well. In other words, the argument that is going to be explored in depth is seeing textual elements within proper contexts of use, i.e., political speeches, which might depict a better and more concise picture of the realities in recent PDA.

The researchers tried to shed more light on the roots of another political discourse by giving access to many other dimensions hidden in political genres, which have rarely been considered by discourse analysts through a PDA framework. Hence, to fill in the research gap as to examine PDA frameworks for analyzing the political speech, the present researchers drew on precise methodological techniques for PDA.

To this aim, the US presidential debates of 2008 were chosen to reveal the relevant discoursal moves that each candidate from two political parties of Democrats vs. Republicans had probably used to persuade the public and the related electoral.

The questions that were posed for this research are:
1. Which rhetorical devices had been additionally used in the two individual speeches given by Obama and McCain?
2. Which political strategies had been additionally used in the two individual speeches given by Obama and McCain?
3. Were detected rhetorical devices used in tandem with political strategies by the two US presidential candidates of 2008 or not?

Method

In this study, the main intention was to critically analyze the rhetorical structure of a political talk using PDA techniques, which, as Van Dijk (2006) recommended, might best reveal the politicians' capability in persuading their intended electoral teams to receive more votes.

Documentation

The required corpus data were retrieved from Wikisource international library at http://en.wikisource.org/. The debate talks chosen for this study had occurred four times at various locations around the United States in September and October 2008. In all, three of the 90-minute debates involved the presidential nominees, and one involved the vice-presidential nominees. The debates were mainly a confrontation of two political Senators, i.e., John McCain from the Republican party and Barack Obama from the

democratic counterpart, but the other present nominees were also Sarah Palin, an Alaskan governor from the Republican campaign, and Joseph Biden from Democratic counterpart. The present research relied on the data from the third debate held on September 26, 2008 at Belmont University in Nashville, Tennessee and moderated by Tom Brokaw of NBC news broadcast.

In this study, argumentation skills of the presidential candidates were analyzed through politically ideological perspectives using Van Dijk's model (2006). In this model, the approach for analyzing rhetorical devices for political contexts focused on some eight main political strategies for argumentation, including 'Authority', 'Topos or burden', 'Future Representations' (FR), 'Comparison', 'Consensus', 'Counterfactuals', 'Populism', and 'Number Games' as explicated in the previous sections. In this study, above-cited political strategies were mapped over linguistic rhetorical devices such as metaphor, hyperbole, irony, euphemism, and the like. For identifying common rhetorical devices used by the two interlocutors, a complied list of common rhetorical devices used in public speaking for persuading the audience from http://www.speaklikeapro.co.uk/ was used. In this list, some thirty-five rhetorical devices which had generally been used by famous political figures in history like Martin Luther King, Abraham Lincoln, Franklin D. Roosevelt, etc. have been exemplified. Largely, these devices have been reported to be useful for persuading the public and mainly various linguistic strategies are described to have been at work like 1) rearranging the order of sentences for emphasizing a point like Anastrophe in which a departure from normal word order is seen in the speakers' speech; 2) repeating certain words or phrases at different parts of the statement to reach an effect; 3) assimilating sensible events or things for the sake of persuasion such as 'metaphor', 'simile' and 'eponym'; 4) deleting some parts of the sentences such as Asyndeton which denoted a lack of conjunctions (e.g. 'and') between successive phrases or words, and 5) reversing the elements of a sentence to achieve more influence by associating two contrasting ideas. A clear reference to all these rhetorical devices and the coding procedures of the rhetorical devices cited above can be found in http://phrontistery.info/rhetoric.html.

Data Analysis

Randomly chosen scripts from a total of three existent US presidential debates were taken from 2008 inventory of talks and went under rigorous content analysis techniques to disclose the hidden discoursal moves used by the presidential candidates from both republican and democratic parties. The reason why random selection was performed on the first two debates was two-fold. Firstly, these two debates were divided into nine 9-minute issue segments which allowed all four candidates to discuss some selected topics which kept ideation constant, and secondly, the authors were better able to analyze the political moves across unified topics to check the nominees' persuasive skills.

Following PDA techniques for content analysis of the present research required close consideration of some connection between ideological considerations in political contexts and linguistic discourses.

Using MaxQda (ver. 11) for qualitative data analysis, initially, six codes pertaining to detected rhetorical devices were assigned through open coding

strategy and then segmented under 1) Repetition with Alliteration, Assonance, Parallelism Amplification, Anadiplosis, Anaphora, Antistrophe, Parallelism and Diascopy as its sub codes, 2) Displacement, consisting of three sub codes as Anastrophe, Antithesis and Chiasmus, 3) Deletion (asyndeton), 4) Assimilation involving Metaphor, Simile and Eponym, 5) Reference to events involving allusion and Hypophora and 6) Parallelism, denoting parallel structures. To find possible responses to the three proposed research questions in this study, rhetorical devices above were mapped over eight political strategies coded with 'Authority', 'Topos or Burden', 'FR', 'Comparison', 'Consensus', 'Counterfactuals', 'Populism', and 'Number Games'.

The data analysis took place in two succeeding stages. In the first step, an account of the events in the selected debate script was first recorded, through which existing political strategies could be mapped on linguistic devices. After also extracting the political strategies implemented in their speech statements, the common discoursal moves in their speech statements were compared and contrasted to find any emergent patterns for juxtaposition of rhetorical devices with political strategies. To scrutinize the internal validity of the results from content analyses, inter coding was cross-checked through inter-rater coder for reliability check. Apart from the present researcher, a language teacher having a PhD in Applied Linguistics who had 15 years of teaching experience was invited to code one third of the corpus. Agreement index between the two coders in this research was calculated by inter-coder features in Maxqda and showed a sound overlap (0. 89%).

Responses to the first two questions were mainly undertaken through quantitative content analysis by counting the number of cases for rhetorical devices (textual uses) vs. political strategies (contextual uses), while in case of the third question, the author catered for text-context mapping through qualitative interpretive approaches as Yin (2011) remarked by following the issues through more rigorous interpretive undertaking.

Findings

In this study, the intention was to find any instances of the political strategies mapped across rhetorical devices by the US presidential nominees.

To reiterate the intended research questions, the author decided to inspect the issue by seeing through the nature of rhetorical devices mostly used in tandem with political strategies by two major political parties - Barack Obama and John McCain- and checking if there was a relationship between the discoursal moves of their speech in terms of linguistic (rhetorical devices) and non-linguistic elements (political strategies).

Response to the First Research Question

In response to the first question as to the kind of rhetorical device(s) in Obama's vs. McCain's two individual speeches, coded categories for rhetorical devices were tallied in Maxqda for all sampled speech scenes. Table 1 displays the results of descriptive statistics including the frequency counts and rates for each rhetorical device used within the two individual speeches by the two political figures, i.e., Obama vs. McCain, separately.

Table 1

Frequency Rates of Extracted Rhetorical Moves within Pre-residential Debates of Obama and McCain

	Reference to events	Displacement	Parallelism	Assimilation	Repetition	Deletion
Obama Frequency rates	11 22.91%	9 18.75%	2 4.16%	10 20.83%	15 31.25%	1 2%
McCain Frequency rates	17 35.41%	5 10.41%	3 6.25%	8 16.6%	14 29.16	1 2%

According to Table 1, the frequency counts of each rhetorical device indicated that within the two speeches, Obama had mostly taken benefit of 'repetition' with 31.25% and McCain had mainly made use of 'reference to events' with 35.41%.

Response to the Second Research Question

A closer look at the dataset could indicate among other things that the two political figures, though approximately similar in their overall adoption of linguistic elements, were different in terms of preference towards rhetorical devices. For example, in using 'reference to events', Obama had made use of this device only 22.91% compared with McCain (35.41%), or in case of 'displacement', Obama had used it 18.75%, while McCain had employed it 10.41%. Specific cases of rhetorical device uses as mapped with the targeted political strategies have been depicted in the later parts of this research. At this phase of the study, in line with the second research question, the same procedures for question one were replicated with the datasets to retrieve the frequency rates/counts of the tallied codes, this time for political strategies. To reiterate, the aim at this stage was to specify which political strategies had been mostly used in the two Obama's vs. McCain's individual speeches.

Table 2

Frequency Rates of Extracted Political Strategies within Pre-Presidential Debates of Obama and McCain

	Authority	Future representation	Populism	Disclaimer	Number game	Comparison
Obama Frequency rates	2 6.25%	10 31.25	8 25%	2 6.25%	2 6.25%	8 25%
McCain Frequency rates	0 0%	5 15.1%	8 24.2%	5 15.1%	7 21.2%	8 24.2%

The datasets in table 2 for strategy adoption by the two presidential candidates indicated that Obama had mostly preferred to use 'FR' with 31.25%, while McCain was different in this respect. He had mostly adopted 'populism' and 'comparison' with the same 24.2% for each strategy type. Obama had taken these two strategies after 'FR'. This second dataset also was evidence for the fact that the two political figures had different preferences.

Response to the Third Research Question

In the third research question of this survey, the intention was to clarify if the rhetorical devices used in the debate talks had been used in tandem with political strategies by the targeted US presidential candidates. Here, it was attempted to find any identified political strategies used in juxtaposition with the extracted rhetorical devices. In fact, the main aim was to make it clear to what extent the two political figures had used the two rhetorical devices and political strategies together to influence their talk for persuading their audience to accept their arguments. To answer this question, a rigorous qualitative content analysis was undertaken for the first three scenes of the sampled debate. Below, the occurrence of each political strategy with a probable rhetorical device has been analyzed and the retrieved categories are interpreted for each scene. In each scene in the following sections, coded rhetorical devices have been marked with "underlying entries" through word processor displays, while noticed cases for coding political strategies have been specified with "bold underlying" in the analyzed corpus Tables 3-15.

Speech Events, Scene One

The debate session started with a ritualistic welcoming message by the moderator, Brokaw of NBC News in Belmont University in Nashville, Tennessee. The first randomly selected question from the audience was concerned with the then current economic recession in American societies and Barak Obama was the first candidate to answer. Alan Schaefer -a candidate among the audience- proposed his question and Obama's response is given afterwards:

Alan: "With the economy on the downturn and retired and older citizens and workers losing their incomes, what's the fastest, most positive solution to bail these people out of the economic ruin?"

Obama initiated his talk over the issued question on economic status of the US at that time as verified below in Table 3 from Maxqda document tables.

Table 3
Excerpt Quotes 1 by Obama from Speech Events, Scene One

Document:	no. 1
Weight: 0	
Position:	15 - 15
Code:	repetition/populism/metaphor

*"…And a lot of you I think are worried about your jobs, your pensions, your retirement accounts, your ability to send your child or your grandchild to college…**The middle-class** needs a rescue package. And that means tax cuts for **the middle-class**. It means help for homeowners so that they can stay in **their homes**. It means that we are helping state and local governments set up road projects and bridge projects that keep **people** in their jobs.*

As clear in Table 3, Obama then suggested three solutions with reference to tax, energy, and health care system with an emphasis on refraining pressure esp. from the middle class citizens. Regarding political strategies, this could initially show, among other things, not only an allusion to the then

current economic status as given by Obama by addressing the middle class' immediate concerns, but also this signified an evidence of 'populism' since this could arise feelings among the involved target group regarding their jobs, homes, children's education, and family conditions. As to rhetorical devices, in this first scene, a detected rhetorical device was coded for "repetition" when Obama evidently used 'middle-class' (two entries) and 'your' (six entries) to strengthen commitments that he had decided to establish among a specific group of social class that signified "populism" as explicated above. These could be interpreted as evidence for the presence of 'amplification' by repeating those parallel insertions along with a proposition for strengthening his accounts.

Within the same paragraph, sporadic cases of metaphor were also detectable like the people he was addressing needed <u>"a rescue package"</u> {Obama: "<u>The middle-class</u> needs a rescue package"}. Successively with this device, then Obama used "comparison" as another political strategy this time along with "metaphor" {would rain down on...} probably to strengthen his arguments in the same paragraph (Table 3).

Table 4
Excerpt Quotes 2 by Obama from Speech Events, Scene One

Document:	**no. 1**
Weight:	**0**
Position:	**15 - 18**
Code:	**comparison/deletion/metaphor**

*Obama: "...**strongly promoted by President Bush and supported by Senator McCain**, that essentially said that we should strip away regulations, consumer protections, <u>let</u> the market run wild, and prosperity <u>would rain down on all of us</u>..."*

In another case in the first speech scene, "populism" had been again paralleled with a metaphor as displayed by "a rescue package" as seen in Table 5 below.

Table 5
Excerpt Quotes 3 by Obama from Speech Events, Scene One

Document:	**q no. 1**
Weight:	**0**
Position:	**18 - 18**
Code:	**populism/metaphor**

Obama: "...But that's only step one. **The middle-class** need <u>a rescue package</u>."

In the succeeding paragraph, another overlapping discoursal move was detected where Obama was providing some future measures using 'FR' strategy and "populism", in which again he used "repetition" as a rhetorical device concurrently in the same utterance:

Table 6
Excerpt Quotes 4 by Obama from Speech Events, Scene One

Document:	**q no. 1**
Weight: 0	
Position:	**20 - 20**
Code:	**future representation/repetition**

Obama:…" ...And then long-term we've got to ***fix our health care system***, we've got to ***fix our energy system*** *that is putting such **an enormous burden on families**. You need somebody **working for you** and* you've got to *have ..".*

These four occurring cases from the first scene urged the present researcher to still continue finding more evidences this time by McCain as the probable recurring indications of both dependability and trustworthiness in this research through which the spotted political figures had made use of both political strategies and rhetorical devices simultaneously to reinforce their talks. In the following, speech cases by McCain are brought from the first scene. The first evidence was the co-occurrence of populism with assimilation in the two successive sentences in the first analyzed scene.

Table 7
Excerpt Quotes 1 by McCain from Speech Events, Scene One

Document:	**q no. 1**
Weight: 0	
Position:	**22 - 22**
Code:	**populism/ assimilation**

McCain: "… And, Alan, thank you for your question. You go to the heart of **America's worries** tonight. Americans are angry, they're upset, and they're a little fearful.."

As table 7 displays, in McCain's speech, "populism" had been used with "assimilation". Further on, in another case, "populism" was used by McCain this time along with "repetition" from among rhetorical devices.

Table 8
Excerpt Quotes 2 by McCain from Speech Events, Scene One

Document:	**q no. 1**
Weight: 0	
Position:	**23 - 23**
Code:	**populism/ repetition**

McCain: "…We have to keep **Americans' taxes low. All Americans' taxes low**.

In cases where both political strategies and rhetorical devices were concurrent in the examined speech scenes, the example evidences in the table are displayed with both underlying and bold typing in the same utterance like the above utterance by McCain.

In the first scene, other political strategies were also discernible like "Number Game" by Obama. But it was interesting to note that no rhetorical device had been used in parallel with this strategy (Table 9).

Table 9
Excerpt Quotes 5 by Obama from Speech Events, Scene One

Document:	**q no. 1**
Weight: 0	
Position:	**17 - 17**
Code:	**number game**

Obama: "..And, in fact, we just found out that AIG, a company that got a bailout, just a week after they got help went on a **$400,000 junket**."

In order to find more evidences/counter evidences, the present researcher still continued with the rest of this talk to explore more rebuttals that co-occurrence of political strategies and rhetorical devices were managed randomly by the targeted political figures in this research. In the following section, other examples are brought as evidence from the second selected scene in the corpus under the study.

Speech Events: Scene Two. In the second scene, a question was posed by the coordinator as who the two candidates had in mind to appoint for their treasury secretary. The coded political strategies used by the two candidates here were also worthy of note since again they had been paralleled with some rhetoric for persuasion aims. This time first McCain was to initiate the talk.

Two strategies were conspicuous in McCain's response that could signify his tactic to bring confidence and trust on his part by suggesting some candidates. He first made use of 'populism' strategy by using the term {qualified Americans}, which was abundant in number. Here, "repetition" by McCain's use of the word *'immediately'* in this following utterance twice was noticeable, which most probably indicated his urgency towards his fellow citizens on the face of it (Table 10).

Table 10
Excerpt Quotes 4 by McCain from Speech Events, Scene Two

Document:	**q no 2**
Weight: 0	
Position:	**6 - 6**
Code:	**populism/ repetition**

*MCCAIN: "...You know that's a tough question and **there's a lot of qualified Americans**. But I think the first criteria, Tom, would have to be somebody who <u>immediately</u> Americans identify with, <u>immediately</u> say, we can trust that individual..."*

In response to this second question, Obama's response was conspicuous when he used two political moves along with one rhetorical move in tandem within the same propositional unit (Table 11).

Table 11
Excerpt Quotes 6 by Obama from Speech Events, Scene Two

Document:	**q no 2**
Weight: 0	
Position:	**11 - 12**
Code:	**populism/ metaphor**

Obama: *"…Well, Warren would be a pretty good choice, Warren Buffett, and I'm pleased to have his support. But there are other folks out there. The key is making sure that the next treasury secretary understands that **it's not enough just to help those at the top.** Prosperity is not just going to trickle down. We've got to help **the middle class**…"*

As evident in Table 11, first, he attacked McCain's assertions through 'Comparison' when he reflected on some certain flaws in McCain's utterances {that it's not enough just to help those at the top} and by 'Populism' as he advocated his fellow Americans again here by having recourse to metaphor as a rhetorical device. Afterwards, in the succeeding paragraph unit, Obama used populism along with "repetition" to defend himself (Table 12).

Table 12
Excerpt Quotes 6 by Obama from Speech Events, Scene Two

Document:	**q no 2**
Weight: 0	
Position:	**12 - 12**
Code:	**populism/repetition**

For many of you, it is getting harder and harder to save, harder and harder to retire.

Afterwards, Obama mixed "comparison" this time with "repetition" when he said: { *…But underlying that is loss of jobs and loss of income}* as evident in Table 13 below:

Table 13
Excerpt Quotes 7 by Obama from Speech Events, Scene Two

Document:	**q no 2**
Weight: 0	
Position:	**14 - 14**
Code:	**comparison/repetition**

Obama: "**Senator McCain is right that we've got to stabilize housing prices. But underlying that** is loss of jobs and loss of income…"

For brevity reasons, and to bring evidences from other diverse speech scenes, some other examples are brought from the third scene to strengthen the arguments put forward in favor of juxtaposed text-context moves.

Speech Events: Scene Three. For the next question, a person from the audience- Oliver Clark- asked about the efficiency and the mechanism of bailout package formerly proposed by the nominees to rescue American people out of the economic crisis. McCain initiated the talk on this issue, and "comparison" along with "disclaimer" were paralleled with a "metaphor" {a match that lit this fire} to strengthen his arguments on defending a case in which he had been innocent:

Table 14
Excerpt Quotes 5 by McCain from Speech Events, Scene Three

Document:	**q no.3**
Weight: 0	
Position:	**7 - 7**
Code:	**disclaimer/comparison/metaphor**

McCain: *"...one of the real catalysts, <u>really the match that lit this fire</u> was Fannie Mae and Freddie Mac. I'll bet you, you may never even have heard of them before this crisis. **<u>But you know, they're the ones that, with the encouragement of Senator Obama and his cronies</u>** and his friends in Washington..."*

'Comparison' strategy was also obviously used in McCain's talk when he referred to some famous responsible institutions, organizations, or people who had created the crisis pertaining to Obama's team in the past when Obama had had responsibilities in Washington. The pronouns 'us', 'we' and 'they' below are just some examples to imply positive self vs. negative other used by McCain as Table 15 below verifies.

Table 15
Excerpt Quotes 6 by McCain from Speech Events, Scene Three

Document:	**q no.3**
Weight: 0	
Position:	**9 - 9**
Code:	**comparison/metaphor**

McCain: "...There were some of **<u>us</u>** that stood up against it. There were **<u>others</u>** <u>who took a hike."</u>

Here, he continued his defense again using comparison with his competitor. The pronouns 'us' and indefinite pronoun of 'others' here are evidences to this strategy. Immediately, another metaphor was issued 'who took a hike'. This was said to mean that the rival team had benefitted by previous undertakings while his team had taken a more sensible measure by criticizing the crisis.

In the succeeding paragraph, McCain made an attempt to describe his future measures using FR strategy again along with another rhetorical move, here "repetition" (Table 16).

Table 16
Excerpt Quotes 7 by McCain from Speech Events, Scene Three

Document:	**q no.3**
Weight: 0	
Position:	**9 - 9**
Code:	**future representation/repetition**

McCain: "...and <u>we're going to</u> have **to buy up these bad loans** and we're going to **have to stabilize home values,** and that way..."

In response to McCain's claims, Obama continued:

Table 17
Excerpt Quotes 8 by Obama from Speech Events, Scene Three

Document:	q no. 3
Weight: 0	
Position:	9 – 10
Code:	populism/metaphor

Obama:" *Well, Oliver, first, let me tell you what's in the rescue package for you. Right now, the credit markets are* <u>frozen up</u> *and what that means, as a practical matter, is that small businesses and some large businesses just can't get loans.* <u>If</u> *they can't get a loan, that means* <u>that they can't make payroll.</u> *If* <u>they can't make payroll</u>*, then they may end up having to shut their doors and* **lay people off***. And* <u>if</u> *you imagine just one company trying to deal with that, now imagine a million companies all across the country. So it could end up having an adverse effect* **on everybody***, and that's why we had to take action. But we shouldn't have been there in the first place..."*

Here, as evident in Table 17, Obama mentioned three successive 'If clauses'. In fact, in this declaration, in the opening section of his talk, he used two rhetorical devices: one amplification by repeating 'if conditional' three times consecutively, which could also be an indication of rhetorical "hypophora" where the political figures raise empathies within audience by typical 'what would happen if' terms; however, it was used in its positive way by directing the conditions without asking the questions 'what if' from the audience, only providing the effects themselves. Interestingly, here rhetorical 'hypophora' had been used in tandem with another rhetorical device, i.e., repetition, for reinforcing an argument.

Further on in the document, when Obama severely attacked McCain's claims, he referred the audience to how history had been misrepresented by McCain, using 'comparison' strategy and metaphor as a rhetorical device (Table 18).

Table 18
Excerpt Quotes 9 by Obama from Speech Events, Scene Three

Document:	q no.3
Weight: 0	
Position:	12 – 12/15
Code:	comparison / metaphor

Obama: *"Now, I've got to correct* **a little bit of Senator McCain's history***, not surprisingly. Let's, first of all, understand that the biggest problem in this whole process was the deregulation of the financial system. Senator McCain, as recently as March, bragged about the fact that he is a deregulator. On the other hand, two years ago, I said that we've got a sub-prime lending crisis that has to be dealt with.* <u>I wrote to</u> *Secretary Paulson,* <u>I wrote to</u> *Federal Reserve Chairman Bernanke, and told them this is something we have to deal with, and nobody did anything about it...*<u>he jumped on it a year later</u>*.... So look, you're not interested in hearing politicians* <u>pointing finger</u>*s... What you're interested in is trying to figure out, how is this going to impact you?* <u>This is not the end of the process;</u> <u>this is the beginning of the process.</u> *And that's why it's going to be so important for us to work with homeowners to make sure that they can stay in their homes."*

Here at this point, two other rhetoric's along with a 'repetition' were also observed: 1) two metaphors, when Obama was accusing McCain at how he had ignored a warning by Obama before: *'but McCain jumped on it a year later'*,

and *'pointing fingers'* when he wanted to mention how McCain had managed to accuse his rival, 2) repetition, when Obama was talking on how his mannerism may affect his country: *'This is not the end of the process; this is the beginning of the process'.* As it is clear, 'process' and 'this is' were repeated twice each as specified in the talk above.

For further evidence, still lots of other propositions could be examined in the following scenes; however, for brevity reasons, at this point, possible inferences are brought to discuss the points in greater depth.

In line with the third research question, all in all, it could be argued that the nature of each political move with specific rhetorical devices was amorphous in the analyzed sample in that not specific political strategies had been mapped over specific rhetoric's but what was clear was that, in the majority of cases, both discoursal moves had been used together to reinforce the effect of arguments. This could indicate, as Van Dijk had asserted, surveying both text and context together; this could reveal the nature of discourse better than the time when we examine each individually.

Discussion

The implications from the content analyses on the first three scenes of US presidential events in 2008 are brought to summarize the inferences. In this article, based on the evidence given in the results section, the following interpretations could be enumerated:

1) In both talks given by the two political parties, the political candidates had made use of rhetorical and political moves in tandem within the same propositional unit to reinforce the influence of their speech in line with Van Dik's model for PDA (1997). This could indicate how they had realized both macro level (political) and micro level (rhetorical) elements of language realization to strengthen their talk. It could also prove that they had not just devoted their linguistic resources to either rhetorical devices or political strategies exclusively.

2) There were cases where some political moves had not been paralleled with any rhetorical devices. 'Number Game' was a case in point in the retrieved document for question no. 1{Position: 17 – 17}.

3) There were very rare cases where rhetorical devices had been used but no political moves had been paralleled with them. This signified that rhetorical devices had been used for a political purpose in mind but when the candidates had used any of political strategies, this did not necessarily coincided with using a rhetoric like the Number Game referred to above.

4) Within some political and rhetorical moves, some of the discoursal forces employed were paralleled with the majority of political strategies like repetition and metaphor. As evidence, a case is brought here from all three speech events analyzed and across the two candidates not to bring any bias to the dataset: 1) The document retrieved for question no. 3, position 6-6: here repetition had been paralleled with disclaimer by McCain, 2) The retrieved document for question no. 2, position: 6-6: here repetition had been mapped over populism by McCain, 3) The document retrieved for question no. 2,

position 12-12, where Obama used repetition with populism, 4) The document retrieved for question no. 3, position 16-16, by Obama mixing repetition with populism.

5) Some rhetorical devices and political strategies had been used to excess compared with other rhetorical devices like 'repetition' (twenty nine cases), ' reference to events and people' with twenty eight entries, and within political strategies 'comparison', 'populism', and 'future representation' with sixteen, sixteen, and fifteen entries respectively.

Conclusion

The innovation in this study was two-fold: 1) It was tried to find two discoursal moves in association with one another in a specific context to find any hidden factors that reveal the speakers' ideology and power in using the language to win the political debates. In previous studies, such a measure had been mainly followed through a uni-dimensional CDA, 2) In similar studies, researchers had mostly explored the CDA through quantitative research methodologies by enumerating the number of intended linguistic elements only. This, by intuition, could not reveal all the hidden ideological intentions of the speakers under study to a maximum way. In Wang (2010), for instance, Barack Obama's speech was analyzed in terms of Systematic Functional Linguistics of Halliday and through CDA; he analyzed the speech in terms of modality and transitivity and the functions by enumerating all the instances of tense, voice, and modal verbs to reveal the hidden ideological power of Obama's speech on linguistic grounds. Although this study could indicate some discoursal elements pertaining to ideology through analyzing as such, this still needed to be evaluated in terms of specific political moves at macro level as well, which had explicitly been recognized by politicians to be influential. As Van Dijk (1985) asserts, in CDA, as a type of discourse analytical research that primarily studies the way social power abuse, dominance, and inequality are enacted, reproduced, and resisted by text and talk in the social and political context, critical discourse analysts prefer to take explicit positions in order to understand, expose, and ultimately struggle with social equality. Such measures in PDA research methodologies, as was done in the present study, could bring about more straightforward results as desired by Van Dijk. In this regard, it is intended that further research look at other aspects of the socio-political discourses through such means that can hopefully explicitly touch the relationship between ideology, power and language.

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Move Recycling in Soft Science Research Articles: English Native Speakers vs. Iranian Speakers

Research Article
pp. 115-137

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Abstract
Inspired by intercultural rhetoric theories and their distinctions between big and small cultures, the current study strived to investigate whether Move Recycling (MR) in English soft science research articles (RAs) was sensitive to cultural and disciplinary variations. To this end, 600 English RAs, half of which were written by Iranians and the other half by native English authors in six soft science disciplines, published from 2006 to 2018, were selected. Weissberg and Buker's (1990) Move model was used to determine the main Moves prevalent in the RAs; then, the frequencies of recycled Moves in various sections of the RAs were calculated. The quantitative data analysis results revealed that the use of MR was not associated with the authors' cultural background. However, some differences were found in the distribution of recycled Moves across RA sections and disciplines. That is, MR was most frequently found in the Discussion and least frequently in the Method sections. Moreover, it was most often observed in Economics RAs and least often in Psychology RAs, which was attributed to discipline-specific conventions. In the qualitative phase of the study, some RA authors' rationales for using MR elicited via emails underwent content analysis, and their three common reasons for using MR, including reader guidance, discipline conventions, and RA length, were identified. The findings of this study may serve as a guide for course designers to prepare discipline-specific materials for EAP writing classes in which MR is emphasized.

Keywords: big culture, intercultural rhetoric, move recycling, small culture, soft sciences

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Introduction

Over the last three decades, Applied Linguistics scholars have conducted a burgeoning number of Move-based studies to examine the generic structure of various sections of research articles (RAs) such as Abstract (Behnam & Golpour, 2014; Yakhontova, 2006), Introduction (Lim, 2012; Ozturk, 2007), Method (Lim, 2006; Peacock, 2011), Results (Atai & Falah, 2005, Yang & Allison, 2003), and Discussion (Joseph & Lim, 2018; Sheldon, 2019). A Move alludes to "a discoursal or rhetorical unit that performs a communicative function in a written or spoken discourse" (Swales, 2004, pp. 228-229). Move analysis is the identification of schematic units or Moves within the text (Nwogu, 1997). That is why several researchers (e.g., Bhatia, 1997; Hyland, 2002; Loi & Evans, 2010; Swales, 1990; Swales & Feak, 2009) have asserted that Move analysis plays a crucial role in improving researchers' and students' academic writing.

Move analysis has been employed in contrastive rhetoric (CR) to discover the possible effects of cultural factors on writing by comparing the generic structure of RAs written by writers for whom English is the first or dominant language and writers for whom it is not (e.g., El Malik & Nesi, 2008; Jalilifar & Dastjerdi, 2010; Keshavarz et al., 2007). There are two conflicting assumptions about the existence of differences in cross-cultural writing practices. The first is based on the premise that the authors' cultural background leads to variations in the rhetorical structure of the texts (Kaplan, 1966). The results of various cross-cultural studies confirm Kaplan's assumption (e.g., Behnam & Golpour, 2014; El Malik & Nesi, 2008; Hirano, 2009; Sheldon, 2011; 2019). The second hypothesis comes from Widdowson (1979), who believes in the homogeneity of scientific textual features across cultures and languages. A considerable amount of literature supports Widdowson's (1979) argument (e.g., Amnuai & Wannaruk, 2013; Chalak & Norouzi, 2013; Rezaee & Sayfouri, 2009; Yakhontova, 2006).

Parallel to cross-cultural studies, cross-disciplinary studies have received considerable attention from many researchers (e.g., Afshar et al., 2018; Ge & Yang, 2005; Stoller & Robinson, 2013). Based on the findings of their studies, the rhetorical structure used in RAs is affected by disciplinary variations. The significance of these studies is that mastery of genre knowledge would assist students in becoming participants in their target discourse communities (Hyland, 2002). Discourse communities, according to Swales (1990, p. 9), "are socio-rhetorical networks that form in order to work towards sets of common goals." These common goals serve as the foundation for shared communicative purposes. Established members of discourse communities are familiar with the [norms of] particular genres and use them to pursue their communicative goals (Swales, 1990).

A relatively new approach to contrastive studies, coined by Connor (2004), is intercultural rhetoric (IR). Researchers in IR simultaneously take into account the effect of authors' cultural background (big culture) and several small cultures (e.g., discipline and academic cultures) as multiple sources of second language writing deviations (Connor, 2004). Furthermore, they go beyond textual analysis and use ethnographic approaches to understand the quantitative results (Connor & Rozycki, 2013).

A close review of the literature shows that, while considerable attention has been paid to the RA analysis across cultures (Amnuai & Wannaruk, 2013; Jalilifar & Dastjerdi, 2010; Hirano, 2009; Sheldon, 2011; 2019) and disciplines (Ge & Yang, 2005; Peacock, 2011; Samraj, 2002; Stoller & Robinson, 2013), Move Recycling (MR) across RA sections has been overlooked in previous Move-based studies. In fact, MR deals with considering every appearance of a certain Move as a separate occurrence (Swales, 1990). As Swales (1990) points out, the length factor contributes to the MR in the social sciences RAs. However, linearity is preferred in the natural sciences and engineering; therefore, MR is less likely to occur in such RAs.

Moreover, MR acts as a link between the RA sections (Yang & Allison, 2003) and shows how these sections relate to each other to make the whole RA a unified, meaningful text. According to Tessuto (2015), cyclicity is necessary to demonstrate the expansiveness of the Moves. The use of MR in RAs may help readers correctly grasp the writers' intentions by refreshing readers' memories (Joseph & Lim, 2018), reminding them of important information, and motivating them to continue reading.

It remains uncertain whether researchers and scholars from different disciplines and cultures are familiar with the rationale for using MR across four conventional sections of RAs, including the Introduction, Method, Results, Discussion (IMRD) sections. This issue may be more critical for novice RA writers who may need more explicit instruction in this regard. It may raise this question for them that, while some Moves have already been used in one section of the RA, why should they be repeated in other sections of the RAs as well? They need, however, to become acquainted with the potential role that MR plays in making a cohesive text. Hence, this study aimed to help students and researchers become more explicitly aware of how MR spans across cultures and soft science disciplines.

Review of the Literature
Intercultural Rhetoric

Studies conducted within the framework of the CR have been seriously criticized for their static view of the notion of culture by researchers such as Spack (1997), Pennycook (2001), Matsuda and Atkinson (2008). Moreover, CR was based on the assumption that all speech communities had their own distinct cultures that could be compared. It was therefore criticized for ignoring different writing patterns within languages as well as variations in the writing of individual authors (Spack, 1997). Kubota (1999) adopted a postmodernist critical view and argued that CR stereotyped non-native writers by suggesting that, as they all write in the same way, their writings are deficient. These criticisms led to a new trend in contrastive studies and a new definition of the concept of culture.

Inspired by Atkinson's (1999) dynamic view of culture, Connor (2004) used the notion of intercultural rhetoric (IR) instead of CR to explore the relationship between writing practices and culture. In addition, some researchers, such as Holliday (1999) and Atkinson (2004), differentiated between big and small cultures in which nationality (or cultural background of authors) belongs to the big paradigm of culture, and disciplinary and academic

writing cultures subsume under the small culture's paradigm. IR-based studies simultaneously consider the effect of these two cultures on writing (Connor, 2004). Moreover, they extend beyond comparative textual analysis by using ethnographic approaches such as observations and interviews to validate quantitative findings (Connor & Rozycki, 2013).

Move Recycling

In addressing the difficulty of writing the Introduction section of the RA, especially for non-native students, Swales (1981) proposed a four-Move model to analyze this section: Move1: establishing the field; Move2: summarizing previous research; Move3: preparing for present research; Move 4: introducing present research. Several researchers, mainly Cooper (1985) and Crookes (1986), criticized Swales' model and demonstrated that his four-Move model could be adapted. One of the drawbacks of the Swales' (1981) model was that the Introductions of social science RAs were long and organized cyclically so that Moves 2 and 3 could occur more than once (Crookes,1986).

Since it was difficult to distinguish the first two Moves, Swales (1990) modified his previous model to a three-Move model and called it the CARS model. This model consisted of three main Moves, including M1: establishing territory; M2: establishing a niche; M3: occupying the niche with their related steps. In addition, in response to the aforementioned criticisms, Swales (1990) suggested that certain types of Moves may recur within the Introduction, a concept known as Move Recycling, which implies that Moves are not used in a linear manner but can be organized cyclically. For example, if the text starts with Move type 1, continues with Move type 2, and then returns to Move type 1, Move type 1 would be counted as having occurred twice.

MR in Introduction. MR has been documented in the Introduction section by some researchers, such as Samraj (2002), Ozturk (2007), Lim (2012), and Afshar et al. (2018). The study by Ozturk (2007), which examined Second Language Acquisition (SLA) and Second Language Writing (SLW) RAs, reflected that SLW researchers use Moves in a cyclical pattern. Likewise, Afshar et al. (2018) analyzed the Introduction sections of 52 Applied Linguistics and 52 Chemistry RAs and noticed the recycling of specific Moves in this section.

MR in Method. Very few studies have focused on the generic structure of the Method section (e.g., Lim, 2006; Peacock, 2011). One that may be more relevant to this study is Peacock's (2011) study. He investigated the Moves of the Method sections of 288 RAs in eight disciplines (36 RAs in each) and found that the presence of M4 (research objectives/questions/hypotheses) in the Method section was discipline-specific. That is, M4 appeared in 6% of Physics RAs, 3% of Biology RAs, 0% of Chemistry RAs, 11% of Environmental Science RAs, 67% of Public and Social Administration RAs, 36% of Business RAs, 22% of Language and Linguistics RAs, and 58% of Law RAs.

MR in Results. Earlier studies have also revealed that the recycling of the M4 occurs in the Results section (Atai & Falah, 2005; Kanoksilapatham, 2005; Posteguillo, 1999; Yang & Allison, 2003). Atai and Falah (2005) report on a research project they conducted on the Results and Discussion sections of the 80 RAs in Applied Linguistics written by English and Persian native speakers in which they found that M4 was present in almost all the Results sections of the

Applied Linguistics RAs for both English and Persian authors. In his study of varioius sections in 40 computer RAs, Posteguillo (1999) pointed out that hypotheses or objectives re-established in the Results section might be correlated with the length of the RAs. For example, in long RAs, the writer might feel obligated to create a link between the Introduction and the Results sections and, concurrently, to remind readers of the objective or hypothesis of the study in the Results section.

MR in Discussion. The recycling of the M4, previously found in the Introduction sections and variously called "background information" by Joseph and Lim (2018) and "focus of the study" by Sheldon (2019), was also reported in the Discussion sections. For example, Joseph and Lim (2018) analyzed 60 Forestry RA Discussion sections and found that the "background information" Move was present in 95% of these RA Discussions.

Findings and comments on findings Moves (M14 and M15), whose first manifestations, usually occur in the Results sections, are the two other Moves that are recycled in the Discussion section of the RAs. The presence of these two Moves in the Discussion section has been reported in various disciplines (e.g., Basturkmen, 2009 in Applied Linguistics; Basturkmen, 2012 in Dentistry; Kanoksilapatham, 2005 in Biochemistry; Yang & Allison, 2003 in Applied Linguistics).

Overall, the literature review reveals that a bulk of contrastive studies have been conducted through the lens of Move analysis. As mentioned above, some of them have focused on the individual section of the RAs (e.g., Sheldon, 2019). Nevertheless, Kanoksilapatham (2015) notes that, while focusing on individual sections of the RAs helps us understand how the specific section of the RAs is constructed, it provides us with rudimentary knowledge of how the entire sections of the RAs are organized. Moreover, the majority of these studies have examined a limited number of texts, which restricts the generalizability of the findings; accordingly, little is known about the textual organization of a large representative corpus. In addition, in the Iranian context, a number of cross-cultural and/or cross-disciplinary studies have been set out through the lens of Move analysis, including studies conducted by Ghasemi and Alavi (2014), Behnam and Golpour (2014), Farzannia and Farnia (2017), Afshar et al. (2018), and Tavakoli Gheinani and Tabatabaei (2018); however, they have dealt with other aspects of Move analysis and have not focused on MR.

Inspired by IR theories, this study was therefore carried out to fill the gaps mentioned above and to examine the IMRD sections of the RAs in a relatively large corpus, relying on both quantitative and qualitative data analysis to identify possible disciplinary (small culture) and cultural (big culture) variations in the use of MR. It also sought to integrate the perspectives of native speakers of English and the Iranian RA authors on MR to provide more information and validate quantitative findings. It is hoped that the results of this study could be beneficial in EAP and ESP classes, as well as in raising awareness among researchers, course designers, teachers, and students of MR.

In line with the purposes of the study, the following research questions were addressed:

1. What are the differences between native speakers of English and

non-native speakers of English (Iranian) in applying MR to the IMRD sections of the soft science RAs?

2. What are the differences across the six disciplines of soft science RAs in recycling individual Moves?

3. Why do native English and Iranian authors of the soft science RAs of the current study recycle the Moves?

Method
Design

The present study was based on a mixed-method design. The quantitative analysis of the study involved the overall frequency of MR as well as the possible differences across cultures and disciplines in applying MR. The qualitative analysis dealt with the analysis of the reasons for the use of MR by RA authors.

Materials

Emails. In the qualitative phase of the study, email dialogs were set up between the researchers and RA writers to elicit their reasons for MR.

The Corpus. The current study comprised a corpus of 600 empirical English RAs in six soft science disciplines, including Sociology, Applied Linguistics, Management, Economics, Psychology, and Linguistics. The two main rationales for selecting these disciplines were (a) empirical RAs with IMRD structures could be found in these disciplines, and (b) they were not newly developed disciplines in Iranian contexts, and we could find the necessary RAs written in English by Iranian authors. In order to control the time variable and ensure consistency of results, the researchers chose thirteen empirical RAs from each volume of the selected journals in the period from 2006 to 2018. A total of 100 RAs from each discipline — 50 RAs written by native speakers of English and 50 RAs written by Iranian authors as non-native speakers of English — were selected.

The RA Selection Process

The RAs that followed IMRD structures were downloaded from the Internet. The identification of the boundary between IMRD sections was based on the discourse function in the RAs. For instance, the Method section was labeled differently in different journals, such as Data and Measurement, Method, Data and Method, Methodology, Research Setting, and so forth. In order to distinguish native English authors from non-native authors, Wood's (2001) criterion was used. According to this criterion, to be considered a native English author, the author must be affiliated with an institution in a country where English is spoken as the first language and has a native name[1]. Although this may not be the perfect method to ascertain the authors' nativeness, it is an often-used method.

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[1] On the first page of each RA, information regarding the name of the author and the universities was available. To distinguish native English, first, we checked their names. The names that were prototypes of native English names, such as Christopher, Sarah, etc., were chosen in most cases. The university where the authors were affiliated was also checked to ensure that they were located in one of the following countries: Canada, New Zealand, Australia, the United States, and the United Kingdom.

In the RA selection process, they were rejected if they (a) were not empirical RAs with IMRD structure, (b) were written by authors whose nativeness was difficult to determine by their names and affiliations, and (c) were written with the collaboration of native English and Iranian authors. When an RA meeting the criteria mentioned above was not found in the particular issue of the journal, the subsequent issue was searched. In some disciplines, it was not easy to find RAs with all these characteristics, even in the native English group, when we had to search all issues to find an RA for a specific year. In addition, we could not find the necessary RA for the Iranian corpus in the selected journals, and we had to use more journals.

The Journal Selection Process

The criteria for selecting journals were their accessibility and reputation among the target discourse community members. Based on the established tradition of selection and sampling in some other studies, the nomination of informants (e.g., Harwood, 2005; Hyland, 2002), four experienced Iranian lecturers who had regularly published RAs in local and international journals in each of the disciplines in the current study, were separately requested to appoint four well-known journals in their fields of study. At first, four journals, which were common in their suggestions, were selected for both the native English and Iranian groups in each discipline. However, in some disciplines, Iranian authors did not have enough RAs published in selected journals to complete the corpus which was needed. In such cases, we had to use more journals based on their advice (see Table 1 for the list of selected journals). Although this method might seem to jeopardize our comparisons, we found that, according to Moreno (2008), the data were comparable in terms of their main communicative functions.

Table 1

List of Selected Journals for Iranian and Native English Authors

Disciplines	Journals
Applied Linguistics	English for Specific Purposes (ESP), System, Language Teaching Journal, International Journal of Applied Linguistics, The Language Learning Journal
Economics	Energy Economics, Energy Policy, Economic Modeling, Journal of Economic Policy Reform, Economics Letters
Sociology	International Journal of Applied Sociology, Mediterranean Journal of Social Sciences, American Sociological Association, Iranian Journal of Educational Sociology, Cultural Sociology, Social Problems, International Sociology, Canadian Studies in Population, Work, Employment and Society, Punishment and Society, Current Sociology
Management	Information and Management, Business Process Management Journal, The International Journal of Management Education, Management Science Letters, International Journal of Research in Marketing
Psychology	Europe's Journal of Psychology, Current Psychology, Journal of Happiness Studies, Child Psychiatry
Linguistics	Australian Journal of Linguistics, International Journal of Linguistics, Linguistics Journal, Lingua

Model of Analysis

In the present study, Weissberg and Buker's (1990) Move model was used to identify the Moves (see Appendix A). The rationales for selecting this model were that, in the first place, Weissberg and Buker (1990) focused on 12 disciplines and presented a list of Moves or, in their own terms, "Elements" that a scientific RA must include; therefore, the model could be considered a comprehensive model for move analysis. Second, it addressed the Moves that were prevalent in the four sections (i.e., IMRD sections) of the RAs, and we did not have to use four different models to identify the Moves for each section. Third, to narrow down the study's scope, we needed a broad model that did not concern sub-moves, and the model met this requirement.

It should be noted that Weissberg and Buker (1990) did not assign numbers to their identified Moves for IMRD sections of RAs. We did so to make moves easier for the readers to follow. More importantly, because this research was exploratory and pattern-seeking in nature, rather than pattern-imposing, their model was used as a road map to identify key Moves that the English RA might include.

The following example illustrates how *The Purpose of the Study (M4)* has been recycled in the Introduction, Results, and Discussion section of the Applied Linguistics RA by native English authors (Martin & Ellis, 2012):

Introduction: The current study, therefore, *investigated* the roles of ...
Introduction: The current study *intended to address* these issues...
Results: Even though *the primary purpose of* this study was to explore ...
Discussion: The goal of the present study was to explore...

Procedures

Procedure for Quantitative Data. Before the analysis, we classified articles in each discipline into two categories: those written by native English authors, and those written by Iranian authors. The articles of each group were then coded separately for quick identification and easy reference. For instance, PE1-PE50 stands for Psychology RAs written by native English authors. At the same time, PI1-PI50 refers to RAs written by Iranian authors in the same field. To better understand the RAs and to have a whole picture of the main Moves prevalent in them, we first read RA abstracts. Then, to identify the Moves, we read the entire RA. The moves were identified primarily based on their communicative values. However, textual signals were also used as complementary devices (see the above example provided for MR, in which the researchers have written in *italic* the textual signals that were extremely invaluable in the identification of M4).

The analysis was performed mainly by the researchers. However, to minimize subjectivity and ensure the reliability of the results, the second - rater with experience in Move analysis and a doctoral degree in Applied Linguistics- was employed to conduct Move analysis for half of the corpora independently. Before the analysis of the RAs, the two raters had a brief session to enhance the agreement. In this session, it was emphasized that only Moves that would be repeated in more than one section of the RAs should be considered recycled Moves. After identifying the Moves in the RA sections, their recycling was recorded, and the frequency of recycled Moves in the RA sections was

determined across the two cultures and the six disciplines. Inter-rater reliability was then calculated and found to be high (r = . 89). Besides, the researcher analyzed 30% of the corpora after a month interval to ensure intra-rater reliability. The calculated reliability yielded a high degree of reliability (r = . 95). Since the RAs were not equal in length, the obtained frequencies were normed as occurrences per 10,000 words and then entered into the SPSS (version 22) and analyzed using the Chi-square test.

Procedure for Qualitative Data. The second phase aimed to obtain RA authors' reasons for MR via email. To this end, the researchers randomly selected 60 native English and 60 Iranian RA authors (20 from each discipline) and invited them to participate in the study. To clarify the points for RA authors, we wrote their sentences manifesting their use of MR under the title of each of the recycled Moves in Word files. This way, we could clearly show them how they have recycled the Moves in different sections of their RAs. We then mailed the Word files along with their full articles and asked them, through an open-ended question, why they had repeatedly used these sentences in different parts of their RAs (see Appendix B for the content of our email). Thirty-eight (21 Iranian and 17 native English) authors responded to our emails. Eight of them were disregarded because their responses showed that either they were not eager to participate in the study or that they could not provide sufficient explanations. The content analysis was, therefore, only conducted on the reasons provided by 30 authors. That is, their responses were carefully read, coded, and compared by the researchers so that recurrent themes could be identified. Finally, the frequency of the recurring themes was calculated and tabulated for further interpretation.

Data Analysis

Chi-Square tests were used to answer the first and second research questions. In order to answer the third research question, the researchers compared the authors' reasons for MR based on the content analysis method. Then, the frequencies and percentages of recurrent themes were calculated.

Results
Research Question 1

The first research question addressed the differences between native speakers of English and Iranian authors in applying MR across the IMRD sections of the RAs. Table 2 illustrates the distribution of the recycled Moves, including M3 (gap), M4 (purpose of the study/ research questions), M5 (the statement of the value), M7 (sample), M9 (sampling techniques), M11 (materials), M12 (statistical treatment), M14 (most important findings), and M15 (comments on the results) in the IMRD sections of RAs by the two groups of authors.

Table 2

Frequency of Recycled Moves by Native English (E) and Iranian (I) Authors in IMRD Sections of RAs

Moves	M 3		M4		M5		M7		M9		M11		M12		M14		M15	
	E	I	E	I	E	I	E	I	E	I	E	I	E	I	E	I	E	I
I	45	34	76	53	21	17	1	0	5	2	0	0	0	0	0	0	0	0
M	6	3	17	15	7	8	20	12	21	11	4	4	1	1	0	0	0	0
R	4	0	52	45	6	0	3	3	5	4	0	0	11	7	10	7	0	0
D	5	6	62	50	9	6	3	1	4	3	1	0	6	8	67	65	67	65
Total	60	43	207	163	43	31	27	16	35	20	5	4	18	16	77	72	67	65

Note. As the frequency of recycling of other Moves across RA sections was equal to zero, they are not presented in the Table.

As Table 2 indicates, native English authors recycle M4 (f = 207), M14 (f = 77), and M15 (f = 67) more frequently than other Moves. M4 (f = 207) is the most often recycled Move by native English authors. Its recycling in the IMRD section of the RAs based on frequency can be organized as follows: Introduction (f = 76), Discussion (f = 62), Results (f = 52), Method (f = 17). However, M14 and M15, with equal frequencies (f = 67), appear to be recycled more frequently in the Discussion than in other sections of the RA. Table 2 also shows that the most frequent recycled Moves by Iranian authors are: M 4 (f = 163), M 14 (f = 72), and M15 (f = 65). M4, as was the case for native English authors, is the most-often recycled Move, and its recycling, based on frequency, can be organized as follows: Introduction (f = 53), Discussion (f = 50), Results (f = 45), Method (15). Meanwhile, M14 and M15 appear to be more often recycled in the Discussion section (f = 65) than in other sections.

Table 3

The Total Frequency of Recycled Moves in IMRD Sections of RAs by Native English and Iranian Authors

		English	Iranian
Sections	Introduction	148	106
	Method	76	54
	Results	91	66
	Discussion	224	204

Overall, the results displayed in Table 3 show that native English groups tend to utilize MR in the Discussion sections (f = 224) followed by the Introduction section (f = 148). Likewise, in Iranian authors' RAs, MR occurs most often in the Discussion sections (f = 204) followed by the Introduction sections (f = 106). However, a close analysis of these results reveals that the number of recycled Moves in the IMRD sections of the RAs by the native English authors exceeds the number of recycled Moves by Iranian authors. A Chi-square test was conducted to determine the significance of the difference between the two groups of the authors. This test results revealed no significant difference

between the two groups of authors in terms of MR, X^2 (3, 969) = . 294, p > .05, Cramer's V = . 62.

Research Question 2

The second research question in the present study sought to investigate the possible variation across six disciplines of the current study in recycling individual Moves. Table 4 presents the descriptive statistics of the individual Moves recycled across the soft science RAs included in this study.

Table 4
The Frequency of Individual Moves Recycled in Soft Science Disciplines

		Lin	AL	Eco	Man	Psy	Soc
	M3	14	16	24	17	13	20
	M4	47	63	83	63	42	73
	M5	4	10	28	13	1	18
	M7	3	3	18	9	1	10
Moves	M 9	3	4	24	9	1	13
	M11	0	1	3	3	0	3
	M12	1	8	12	8	1	6
	M14	24	22	31	27	20	26
	M15	22	22	23	24	20	21
	Total	118	149	246	173	99	190

Note. Lin = Linguistics; AL = Applied Linguistics; Eco = Economics; Man = Management; Psy = Psychology; Soc = Sociology

As shown in Table 4, soft science disciplines can be arranged according to the MR frequency (from the highest to the lowest) as follows: Economics (f = 246), Sociology (f = 190), Management (f = 173), Applied linguistics (f = 149), Linguistics (f = 118), and Psychology (f = 99). Economics RAs appear to be the main platforms for the landing of recycling Moves because most Moves have the highest recycling frequency in these RAs. High recycling rates of other Moves, including M3 (f = 24), M4 (f = 83), M5 (f = 28), M7 (f = 18), M9 (f = 24) in Economics RAs are more salient than in other disciplines. On the contrary, almost all Moves are recycled with the least frequency in the Psychology RAs.

Table 4 also shows that M4 is the most often recycled Move in the disciplines under study. The frequency of the M4 recycling across study disciplines could be organized as follows: Economics (f = 83), Sociology (f = 73), Management (f = 63), Applied Linguistics (f = 63), Linguistics (f = 47), and Psychology (f = 42). Furthermore, M14 and M15, with their relatively high frequency of recycling, show a similar recycling frequency across the six disciplines. A Chi-square test was used to investigate whether there was a significant difference between the six soft science disciplines in the recycling of individual Moves, the results of which indicated that this difference was significant, X^2 (40, 975) = .002, p < .05, Cramer's V = . 120.

Research Question 3

We have included some of the reasons provided by RA authors for MR to answer the third research question, considering why native English and Iranian authors of soft science RAs use MR.

1. Repetition and clarity help **readers** R_1 understand why they are reading what they are reading.

2. I tend to follow **the framework** $R2$ described in John Creswell's book.

3. I repeat the aims because it is important that **readers** R_1 understand the purpose of what they're reading. In a **long** $R3$ paper it's easy to lose track of the purpose of a particular part of the argument.

4. It is quite **conventional** R_2 to do this. When the aim is repeated in the Discussion, for example, we want to remind **the readers** R_1 of the purpose.

5. It is a **convention;** R_2 I was trained to be very clear with signposts that **guide the reader** R_1 through my analysis. Academic articles are **long** R_3 and full of details...

6. Repetition helps **readers** $R1$ to comprehend the main points in the paper.

7. It acts as a cue for **readers** R_1 to connect different sections of articles, especially in **long** $R3$ articles and tempts them to continue reading."

8. I have just followed the **convention** $R2$ of research article writing.

9. Because **readers** R_1 don't read the entire paper and authors want to ensure the readers don't miss anything important.

After careful reading and analysis of the RA authors' responses, we identified three primary reasons for the use of MR: the reader guidance, the discipline convention, and the length of the RA. Examples 1 to 5 illustrate the rationales of native English authors (to be specific, only their sentences, including their reasons, are given, and the recurring themes have been written in bold type by the researcher). Table 5 presents the frequency and percentage of the three reasons given by the RA authors.

Table 5
Frequency and Percentage of Native English and Iranian Authors' Reasons (R)

R1 (Guiding readers)		R2 (Convention)		R3 (Length)	
E	I	E	I	E	I
11	14	7	12	6	7
91.6%	77.7%	58.3%	66.6%	50%	38.8%

Note. The total number of native English group authors was 12, and the number of Iranian authors was 18.

As shown in Table 5, the reader guidance was most frequently cited by both groups of authors as a reason for MR (91.6 % of native English and 77.7 % of Iranian authors referred to this reason). It appears that both groups of RA authors' primary reason for the use of MR was to accelerate their readers' comprehension. Table 5 also reveals that 58.3% of native English authors and 66.6% of Iranian authors cited the discipline convention as the impetus for MR. This indicates that both groups of authors are trying to follow English academic writing standards in their respective disciplines. Finally, as given in Table 5, another reason for MR was the length of RAs, which was reported by 50% of native English authors and 38.8% of Iranian authors. These findings shed some light on a deeper understanding of why soft science RA authors, in the context of the present study, recycle the Moves.

Discussion

The present study was an endeavor to investigate whether MR in the IMRD sections of soft science RAs is sensitive to disciplinary (small culture) and cultural (big culture) variations. This section provides a brief discussion of the results obtained in light of the quantitative and qualitative data analysis.

Comments on Quantitative Findings

MR in IMRD Sections of RAs. The findings revealed that IMRD sections of RAs, based on the frequency of MR, can be organized as follows: Discussion, Introduction, Results, and Method. The reasons for MR in each section are discussed below.

MR was most frequent in the Discussion sections since these sections tended to involve all three of the most frequently recycled Moves (i.e., M4, M14, and M15). The high frequency of M4 recycling (research purposes/questions) in the Discussion section can be attributed to the distance between the Introduction and Discussion sections. It can be argued that, since the two other sections, including Method and Results, create spaces between the Introduction and Discussion sections, readers may forget about this Move. As a result, RA

writers strive to bridge the gaps between the two sections by recycling M4 in the Discussion sections and reminding readers of it. This repetition, in turn, paves the way for readers to have a straightforward and coherent reading without rechecking M4. Some scholars also have confirmed M4 recycling in the Discussion section (e.g., Ershadi & Farnia, 2015; Joseph & Lim, 2018; Peacock, 2002; Sheldon, 2019).

M14 (findings) and M15 (comments on the results) were the two other Moves with a high recycling frequency in the Discussion sections. Previous studies claimed that the Results sections do not only include the reports on the findings Move but also comments on the findings Move (Chen & Kuo 2012; Lim, 2010; Williams, 1999; Yang & Allison, 2003). It can be assumed that the Results section is the primary section for the provision of research findings and brief comments on them. In the Discussion section, the situation is reversed; that is, a summary of the findings (M14) is applied as a reminder in the Discussion section, and then further explanations and comments on them (M15) are implemented. Meanwhile, analyzing the generic structure of the Discussion sections by many researchers shows that these two Moves are the most commonly used Moves in these sections (e.g., Basturkmen, 2009, 2012; Kanoksilapatham, 2005; Yang & Allison, 2003). Given that M14 and M15 had previously occurred in the RA Results sections, their recycling in the Discussion sections is not surprising. In Weissberg and Buker's (1990) model, these two Moves have also been recycled in the Discussion sections, where we assigned them numbers 17 and 18.

The Introduction section was in the second position regarding the frequency of MR. Three main Moves with a high recycling frequency in this section were M3 (gap), M4 (research purposes/questions), and M5 (value statement). The considerable use of MR by authors in the Introduction section may be due to the importance of this section in the social science RAs. In other words, the authors of the RAs may use MR in the Introduction sections to help readers understand the main Moves in this section. Moreover, during data analysis, we found that MR most frequently occurs in longer Introductions (especially in Economics RAs). It seems that the complexity (Samraj, 2002) and the length factor contribute to MR in this section. This finding, in general, is consistent with the results of the studies reporting the cyclicity of the Moves in the Introduction sections, such as Swales (1990), Ozturk (2007), Lim (2012), and Afshar et al. (2018).

In addition, we found that among the recycled Moves in the Introduction sections, M4 had the highest frequency of recycling not only in the Introduction sections but also in the other three RA sections. The frequent recycling of M4 across RA sections highlights the importance of this Move for both groups of authors. It could be argued that M4 connects different sections of the RAs to show that they are not fragmented sections but are united to form the RA as a whole meaningful text.

M3 and M5 were also recycled in the Introduction section; however, their recycling in the other sections of RAs was too trivial to be discussed in more detail because the focus of this study was on Moves that were recycled across RA sections, not within the RA section.

The Results section was in the third position regarding the frequency

of MR. As was the case in the Discussion section, we believe that the recycling of M4 in the Results section, particularly in long RAs, links the Results section to the Introduction section (Posteguillo, 1999). This recycling could speed up RA reading by allowing readers to remember this Move without having to check it back. The recycling of the M4 in the Results sections is in line with previous studies such as Yang and Allison (2003), Atai and Falah (2005), and Kanoksilapatham (2005).

The findings showed that MR occurred less frequently in the Method sections of RAs compared to the other sections of RAs. Considering the fact that the Method section follows the Introduction section, where readers have adequately encountered M4, authors may assume that readers are not required to be reinformed about M4 in the Method section. However, in longer RAs, such as Economics, the situation was different. Since Introduction and Method sections in this discipline are long, readers may lose track of what M4 was. Consequently, they may need to be informed of this Move in the Method section once again. It seems that the length factor plays a fundamental role in MR. The recycling of the M4 in the Method section of longer RAs such as Economic RAs could be considered another manifestation of the discipline-specific characteristics. This finding is consistent with what was reported by Peacock (2011), who also recognized interdisciplinary variations in the frequency and percentage of the M4 in the Method sections.

The Influence of Big (National) Culture. A comparison of the RAs written by native English and Iranian researchers revealed that the difference between the two groups of authors was not statistically significant. One possible reason for this similarity is prescriptive writing instruction, which presents a very similar picture of what students and researchers around the world should follow. Current institutional trends are preparing certain style manuals and university textbooks for academic writing, which provide students with a wide range of rules to help them produce more effective texts (Hyland, 2002). These findings lend support to Widdowson's (1979) claim, who believes in the universality of the rhetorical structure of RAs. The findings are also inconsistent with Yakhontova (2006), who points out that the conventions of writing in different disciplines among somewhat closed national academic communities have preserved their stabilities, so that cultural factors do not influence authors' writing. Swales (2004) and Pennycook (2008) also consider the internationalization of English academic discourse as a critical factor in the universal application of certain writing practices. However, these results are not in line with the research findings which show that the cultural background of the authors influences their RA writings (El Malik & Nesi, 2008; Hirano, 2009; Keshavarz et al., 2007; Sheldon, 2011, 2019).

The Influence of Small (Disciplinary) Culture. Disciplinary cultures also play a crucial role in MR. If we were to draw a vertical line to display the soft science disciplines based on the frequency of MR, we would place Economics RAs at the top of the line and Psychology RAs at the bottom of it. These discrepancies can be partly attributed to the fact that Economics RAs (approximately 12000-14000 or more words) tended to be twice the length of Psychology RAs (about 5000-7000 words). The positions of the other disciplines were below Economics RAs and above Psychology RAs. Such

features are probably due to the different requirements and expectations defined and specified by the respective discourse communities of these disciplines. The results of previous studies revealing cross-disciplinary variations could confirm the observed variations across disciplines. For example, Samraj (2002) found that the conventions of one discipline are not generally applicable to writing in other fields. Ge and Yang (2005) noticed a disciplinary variation regarding the frequency of Moves. The findings are also in line with Joseph and Lim (2018), who asserted that what is appropriate in one discipline is not always appropriate in another. Additionally, Kanoksilapatham (2007) and Stoller and Robinson (2013) proposed that the textual organizations of disciplines are distinct.

Comments on Qualitative Findings

This section presents a discussion of selected email responses received from RA writers that point to guiding readers, discipline conventions, and length of RAs as the three principal reasons for MR.

Guiding Readers. Guiding readers were mentioned as one of the main reasons for MR by the majority of native English and Iranian RA authors. This reveals that they prioritize their readers and highlights authors' substantial attempts to organize their texts in a way that is most likely to be understood by the readers. This orientation to the reader can be approached from a social-interactive perspective, premised on the idea that writing is a form of social interaction through which writers communicate with their readers. That is, not only do they convey their messages, but they also strive to facilitate the readers' understanding of their messages. As Widdowson (1978) has pointed out, writing is a reciprocal phenomenon in that writers focus on written texts and assess their readers' reception. This means that writers also take on readers' roles and monitor their texts to see them through their readers' eyes and meet their expectations. According to one of the native English authors, "readers need to be immersed in a text full of potential meanings and affordances for understanding the text." As far as RAs are concerned, the objective could be achieved by providing a satisfactory amount of comprehension cues, such as MR.

Conventions of Disciplines. Both groups of authors also cited the convention of their disciplines as their reasons for MR. As authors endeavor to satisfy their audiences, they need to portray their messages in more attractive ways to the appropriate discourse community (Hyland, 2000). Besides, according to Spack (1988), writing in different disciplines may require different factors to be considered. It is, therefore, necessary for authors to examine which issues are essential in their discipline and which conventions they should follow.

RA Length. The two groups of authors also indicated the length of the article as a reason for MR. As discussed in the previous section, the high frequency of MR in Economics and its low frequency in Psychology could be mainly attributed to the length of RAs in these two disciplines. In the case of Economics, for example, the permitted article length gives writers more freedom to use Moves more recursively. On the other hand, the length of RAs in Psychology is relatively short, and this space limitation restricts the frequent

use of MR by authors. As Swales (1990) argued, the length factor could be closely related to the cyclicity of the Moves in the social science RAs.

One could claim that the three principal reasons raised by RA authors are interrelated. For instance, it could be argued that discipline-specific conventions require Economics RA authors to write long RAs. This, in turn, enables them to use MR more often to help readers understand longer RAs more easily.

Conclusion

Based on the theoretical framework of the IR, we went beyond the traditional static cultural perspective and discussed similarities and differences in terms of big (national) and small (disciplinary and academic) cultures. We did this because we believe that CR studies, focusing solely on authors' cultural background (big culture), could lead to the ignorance of the role of small cultures, such as disciplinary and academic writing cultures.

In light of the quantitative data analysis, a similar tendency was found between the two groups of authors in the MR application, which was attributed to the universality of the rhetorical structures (Widdowson, 1979). However, the differences in MR application across disciplines were traced back to certain conventions and principles that are typical characteristics of a particular discipline. Overall, these findings revealed that the effects of academic and disciplinary cultures (small cultures) transcended the impact of the author's cultural background (big culture) on the use of MR.

In the qualitative phase of the study, RA authors' low response rate has led us to conclude that all RA authors may not be aware of the critical role that MR plays in soft science RAs. Their logic for applying MR, however, deepened our insight into why they use MR. Their reasons also magnified the social-interactionist view that writing is a social process through which writers interact with their readers (Widdowson, 1978).

This study may have a number of implications for ESP and EAP instructors, syllabus designers, students, and researchers. The results of this study may serve as a guide for course designers to develop discipline-specific materials for EAP writing classes in which MR is emphasized. ESP and EAP writing instructors may know that one size does not fit all. That is, prescriptive writing instruction will not work for heterogeneous students with a distinct disciplinary background.

They can help students write to their readers with a greater sense of responsibility, for example, by using MR to the extent that the conventions of their disciplines allow. In addition, to alert students to the disciplinary culture and minimize their confusion regarding the application of MR in different disciplines, EAP and ESP instructors may encourage students to compare and contrast RA sections of different disciplines in terms of MR. Knowledge of the non-linear sequences of moves in soft science RAs can enable novice students and RA authors to use MR as a comprehension facilitator in their RAs. Such awareness can also make it possible for them to produce a coherent text and have a coherent reading.

In order to generalize the findings of this study, a larger corpus covering various disciplines and cultures is needed. The present study used

Weissberg and Buker's (1990) Move model to explore MR in the RA genre. A parallel contrastive study in terms of MR in other genres, such as theses and dissertations, can be conducted using other analytical models. Future experimental studies could examine the effects of explicit instruction of MR and its application by students. Finally, questionnaires and face to face interviews with both novice and experienced researchers could provide a more concise and comprehensive view of MR and contribute to Move analysis in future studies.

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Appendix A
Weissberg and Buker's (1990) Move Model

Introduction
Move 1: Establish a setting
Move 2: Literature review
Move 3: Gap
Move 4: The purpose of the study/ research questions
Move 5: The statement of the value
Method
Move 6: Design
Move7: Sample
Move 8: Limiting conditions
Move 9: Sampling technique
Move 10: Procedures
Move11: Materials
Move12: Statistical treatment
Results
Move 13: Location of results
Move 14: Most important findings
Move 15: Comments on the results
Discussion
Move 16: Original hypothesis
Move 17: Findings
Move 18: Explanation for findings
Move 19: Limitations
Move 20: Implications
Move 21: Recommendation and practical applications

Appendix B
The Content of the Email to the RA Authors

Subject: Request for guidance
Dear...,

       I am a Ph.D. student at the Islamic Azad University of Tabriz, Iran. Our research study deals with the analysis of research articles written in English in different fields. One of the questions of this research is why the authors of research articles repeat some functional structures in different sections of their articles? In order to answer this question, I need the authors' reasons for these repetitions in the research article. For example, in analyzing your article, I noticed that you repeated the purpose of your study, the gap, and the findings in the different sections of your paper. I have written these repetitions in the Word files to clarify the point. Would you please give me any reason for these repetitions? Your answer will definitely be of great help in completing this project. I assure you that any response from you will be used anonymously in the study.
I am looking forward to hearing from you.
Kind regards,
Kimia Soltani

Student and Teacher Attitude Toward Using Concordancing in Learning and Teaching Preposition Collocations: Issues and Options

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Narjes Mohit[2]

Abstract
The present study explored the effectiveness and efficacy of concordance-based instruction on learning and using proposition collocations (PCs) by Iranian EFL learners. Furthermore, we explored the instructional issues involved from both students and the teacher's perspectives. To this end, 60 homogeneous intermediate EFL learners participated in the study as the two thirty-subject groups of experimental and control. A researcher-made test on PCs was administered as the pretest to make sure that the learners' knowledge of PCs was approximately equal. Two parallel versions of the pretest were administered, in turn, as the immediate and delayed posttests with the aim of evaluating the possible effect(s) of eight sixty-minute treatment sessions. The results of a repeated-measures ANOVA revealed a significant difference between the performance of the experimental group and control group from the immediate to the delayed posttests. Also, the effect for the interaction of time and group was significant. At the end of the study, a 20-item questionnaire was administered to elicit participants' attitudes towards using concordancing to learn PCs. The results revealed that almost all respondents expressed positive attitudes towards learning PCs through concordancing, although some participants faced some practical or technical difficulties while using this technology. We also surveyed the teacher's attitude towards concordance-based PC instruction via an interview, proposing further issues and options for the classroom teaching practice. Lastly, the implications of the study for language teaching and applied linguistics are discussed.

Keywords: concordancing, grammatical collocations, lexical collocations, preposition, preposition collocations (PCs)

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Introduction

The notion that preposition errors are dominant among the most frequent error types on the part of English as a foreign language (EFL) learners takes hold among many researchers in the existing literature (e.g., Bitchener et al., 2005; Darus & Ching, 2009; Darus & Subramaniam, 2009; Owu-Ewie & Williams, 2017). Referring to the literature on prepositions, it is widely confirmed that preposition usage does not conform to easy-to-teach or easy-to-learn rules (Lindstromberg, 2010). In other words, there are no rules that cover all the occurrences and uses of prepositions (Lokeman Loke et al., 2013; Saravanan, 2014). The choice of prepositions depends on the nouns, adjectives, or verbs accompanying them. Put differently, we should pay attention to the preposition collocations (PCs) (Saravanan, 2014). As it was mentioned above, prepositions can carry immensely varying meanings in different contexts, thus there is no predictability to preposition usage. It is self-evident that they have to be learned context by context in order to serve as a remedy for English learners' erroneous preposition use. As advised by Chodorow et al. (2010), a continued exposure to a good number of correct preposition usage examples plays a decisive role in its successful learning. Vyatkina (2016) supports the idea that learners need repeated exposures of the patterns in rich and authentic context in order to stop poor performance related to the preposition usage. These facts highlight the need for an effective teaching to tap into this requirement and using concordancing technology seems to be efficient in this respect.

Concordancers can serve as advantageous and powerful tools for instructing PCs due to several reasons. For one thing, concordances show how vocabulary and grammar interrelate with each other (lexico-grammar) which serve as a prerequisite for learning prepositions (Vannestål & Lindquist, 2007). Also, concordances supply learners with "large quantities of real-life target language discourse. Exposure to these examples of genuine language use can (a) enrich learners' understanding of specific uses of target words in a wide variety of contexts and (b) expand their L2 linguistic repertoire" (Yoon & Hirvela, 2004, p. 259). In other words, concordances provide L2 learners with authentic language input, which is defined by Bahrani and Tam (2013) as language input that could be sourced from news, movies, songs, etc. Its main purpose is transferring real messages in the context of genuine communication not language instruction. Authentic materials are mostly accepted as beneficial in language learning. Another reason that proves the fruitfulness of adding concordances to the class syllabus is that inductive language learning could be enhanced through them (Stevens, 1995). Accordingly, discovery learning is there as an inner part of the inductive learning. So, students could discover the rules themselves by being exposed to and examining ample examples of a specific language item in use (Boulton, 2010).

Unfortunately, in Iran, the number of classroom contexts in which learners are provided with the opportunity to learn PCs via concordance-based instruction is inappreciable. In this study, teaching prepositions is coupled with concordancing, which gives EFL learners the bonus of up-to-date and authentic materials besides large quantity of input which is crucial in mastering PCs (Vyatkina, 2016). Also, learning enhancement is achievable when we make sure

of the learners' positive attitudes and perceptions of learning (Dörnyei, 2003). Thus, the learners' opinions on concordance-based PCs instruction were elicited. Putting concordance-based instruction on the map in the classroom context requires drawing teachers' attention to concordance-based instruction prior to initiating teaching (Mukherjee, 2002) although the ultimate goal of concordance-based instruction is to develop autonomous and independent language learners who productively use concordancing outside the classroom (Boulton, 2017; Huang, 2011; Lin & Lee, 2015). So, investigating the teacher's reflection on her experience was another focus of the current study with the aim of informing other teachers of possible advantages and disadvantages of concordance-based instruction.

Review of the Literature

According to Taiwo (2001), some particular prepositions accompany nouns, verbs, etc. in English and the knowledge of such nouns, verbs, etc. is deficient without knowing which prepositions usually accompany them. This kind of togetherness is called preposition collocations (PCs) (Lindstromberg, 2010).

Given that the proper use of prepositions in English is very challenging, using an effective instructional method is of high importance. Lorincz and Gordon (2012) proposed three approaches including traditional, collocational, and prototypical approach to preposition instruction. According to Lam (2009), the traditional method of teaching prepositions is through explicit instruction in which students focus upon learning prepositions separately within context, with no further expanding. As Mueller (2011) stated, collocation approach to preposition instruction means to learn prepositions within collocations. In other words, L2 learners should be provided with "chunks" (words that often occur together) to learn prepositions through them instead of learning them individually. For example, instead of teaching *for* as a single entity, L2 learners can be taught the PCs such as *pay for, famous for, for instance,* etc. Prototypical approach to preposition instruction was outlined by Lindstromberg (1996). He remarked that "a key contention about prepositions is that each one is likely to have a relatively small number of related literal meanings, among which the tendency is for one to be psychologically 'prototypical'" (p. 225). He maintained that, to learn prepositions, first the prototypical meaning (the prominent meaning among other associated meanings) should be identified and learned, and then the other associated meanings derived from the prototypical meaning should be learned.

A good number of researchers advocate using concordancing to teach collocations (Jafarpour & Koosha, 2006; Kulsitthiboon & Pongpairoj, 2018; zbay & Olgun, 2017; Saeedakhtar & Seyedasgari, 2018). One short and informative definition of concordances is developed by Yoon and Hirvela (2004) which is "Concordances emphasize the co-occurrence or most frequent combination of words, i.e., collocation" (p. 259). Concordancing serves as a handy tool that taps into two techniques of input enrichment and input enhancement which are facilitators of noticing the input (Schmidt, 2001). Input enrichment lies at the very heart of concordancing owing to the fact that this software provides a vast number of real-life instances of a word or phrase

usage in the target language. In terms of input enhancement, as Vyatkina (2016) points out, "Input enhancement is realized through the use of concordances in a way that concordances supply search results as stacked lines with the search words highlighted in the middle, and thus enhance the visibility of collocational patterns" (p. 160). Put another way, the search term appears in the center of the sentences. This technique is called "Keyword in Context" or KWIC concordance (Jafarpour & Koosha, 2006).

In addition to the positive aspects of the use of concordancing, there are some studies in the literature with the aim of finding probable difficulties or negative sides of using concordances. For example, Thurstun and Candlin's (1998) pilot study results showed that there were some negative reactions besides positive reactions on the part of the participants toward concordancing activities. They remarked that learners came across some cut-off sentences that made them confused and the arduousness of the authentic data made them discouraged. Yoon and Hirvela (2004) maintained that some students become disappointed with learning because some concordancers are not user-friendly due to their complex design.

In this study, it was resorted to concordance software to reduce the common preposition errors of Iranian EFL learners in the realm of four common patterns of PCs (i.e. adjective + preposition collocation, noun + preposition collocation, preposition + noun collocation, verb + preposition collocation). Although there are some studies in the literature that elicited the learners' attitudes toward concordancing in learning vocabulary and collocations in general (e.g., Aliponga, 2013; Saeedakhtar et al., 2020; Yoon & Hirvela, 2004), there are few studies, if any, on investigating EFL learners' attitudes toward the use of concordancing in learning PCs as well as exploring the teacher's stance toward using concordance-based instruction on PCs. This study was an attempt to determine how Iranian EFL learners perceived the use of concordancing to learn PCs. Also, the teacher who was instructed to carry out the instruction was interviewed by the researcher to reflect upon her experience of concordance-based PCs instruction. Thus, in accordance with these goals, the following questions were raised:

1. Is there any significant difference in learners' PCs learning via concordance-based instruction?

2. What are the attitudes of Iranian intermediate EFL learners towards using concordancing to learn PCs?

3. What is the attitude of the language teacher towards using concordancing in teaching PCs?

Method
Participants
In this study, 90 (53 females and 37 males) EFL learners from Bahare Zabanamoozan and Ghoghnoos English Language Institutes, Ardabil, Iran, served as the participants. They were in the age range of 14 to 30. All of them were bilingual in Turkish and Persian. Sixty of these students (38 females, 22 males) were selected as the homogeneous intermediate sample based on their scores on the Solutions Placement Test (SPT).

Instrumentation and Materials

SPT Language Proficiency Test. In this study, to ensure the homogeneity of the participants, or in other words, to make sure that all learners were at the intermediate level, Oxford SPT was administered as the proficiency test (Appendix A). The total score of the SPT was out of 70 (50 marks for the grammar and vocabulary section, 10 marks for the reading section, and 10 marks for the writing section). The test contained three parts including grammar and vocabulary, reading, and writing. For each error in the grammar and vocabulary section and the reading section, one point was subtracted. In the writing section, out of 10 points, four points were dedicated to content, two points to form, two points to range, and two points to accuracy. To analyze the scores and make sure of the homogeneity of the learners, we referred to the guidelines of the SPT, based on which those learners whose scores in grammar and vocabulary, reading, and writing were +31, +8, and +8, respectively, were taken as the intermediate learners and were consequently conceived as homogeneous. The 50 multiple choice questions and the reading task were designed to be done together in a 45-minute period and the writing task took approximately 20 minutes.

Preposition Collocation Test. The participants, before receiving treatment, were pretested through a 60-item researcher-made test comprised of three sections of A, B, and C. Forty multiple-choice items on the four categories of PCs were included in section A (each proposition collocation category was tested through 10 items). Section B included 10 completion items on the four groups of PCs. In section C, ten incomplete sentences were given to the participants and they were asked to finish the incomplete sentences using appropriate prepositions. In the last two sections (B and C), the distribution of items on each collocation of preposition category was equal (five items for each category). Before administrating the test, its content validity was checked by two TEFL professors of Mohaghegh Ardabili University. They commented that the test enjoys appropriate level of content validity. However, two items of the test were modified based on their feedback. The test was also validated through conducting a pilot study on 10 L2 learners to make sure that the difficulty level of questions is appropriate and to set an appropriate time limit. Based on the feedback received from learners, the items were neither difficult nor easy and the time limit of the test was set to be 60 minutes. The test given to the main group underwent computing reliability coefficient using the KR-21 formula which came to be 0.87.

A parallel version of the pretest was administered as the immediate posttest in order to assess the possible effect(s) of the eight-session treatment. To measure the possible long-lasting effect(s) of the treatment on the retention of PCs, another parallel test was administered as the delayed posttest two weeks after administrating the immediate posttest.

Preposition Collocations. During the eight-session treatment, the participants were exposed to 96 PCs including 24 adjective + preposition collocations (e.g., pessimistic about), 24 noun + preposition collocations (e.g., approach to), 24 preposition + noun collocations (e.g., by mistake), 24 verb + preposition collocations (e.g., pay for). The PCs were chosen according to the participants' errors on the pretest.

According to Sinclair (1991), any collocation is made up of a node and a collocate that go together. For example, in terms of PCs, the collocate *with* co-occurs frequently with the node *bored*. In this study, the PCs nodes selection was random. However, the criterion for the selection of PCs collocates was the degree of association between the node and the collocate. Measuring the mutual information (MI) score is one of the most common methods for measuring the strength of the association between the node and the collocate (Baker et al., 2006). In this study, the MI scores were checked from British National Corpus (BNC) available at https://www.english-corpora.org/bnc/ and the PCs collocates with highest MI were chosen. Moreover, the frequency of PCs was checked from BNC website (Appendix B).

Concordancer. The texts (selected from the Brown Corpus) were concordanced by AntConc 3.4.3 which is a handy, easy to use, and freeware concordance program available at http://www.laurenceanthony.net/software.html. This software includes seven tools (Concordance, Concordance Plot, File View, Clusters, Collocates, Word List, and Keyword List). In this study, the Concordance tool (the first tab across the top of the software) was used. It shows search results in a Keyword-In-Context (KWIC) format. On the left side of the software, there are corpus files and the result area is on the right side. To make a concordance, first, the participants clicked on Open Files in order to load the specific files dedicated to each treatment session into AntConc. Next, they typed the word they wanted to find in the Search Term box, and finally by clicking on the Start button below the box, the concordance lines appeared in the main window, with the search term highlighted in the center. An example of concordance output for the target word *provide* is presented in Figure 1.

Figure 1
An Example of Concordance Output for the Target Word "Provide"
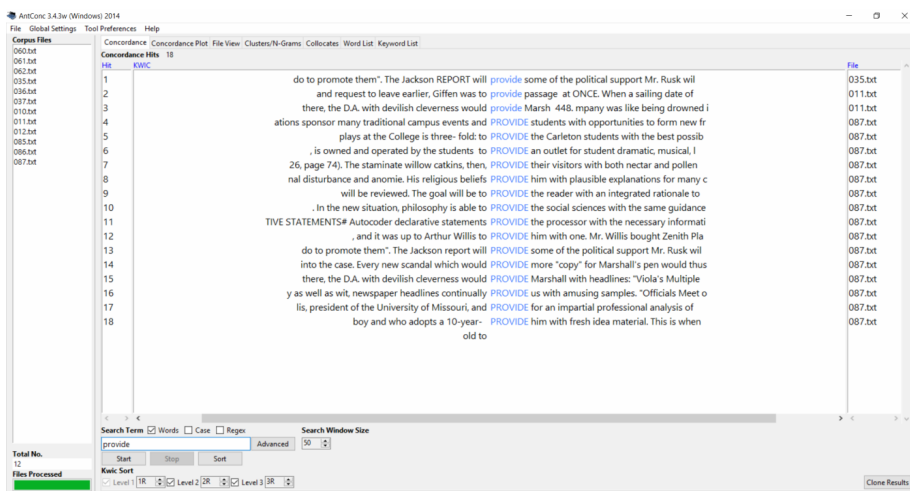
Questionnaire. At the end of the study, the participants in the experimental group were asked to complete a questionnaire consisting of 20 Likert-scale items aimed to assess the learner's attitude towards the use of

concordancing in learning PCs (Appendix C). The scale consisted of five points, "Strongly agree" = 1, "Agree" = 2, "Not sure" = 3, "Disagree" = 4, and "Strongly disagree" = 5. The items of the questionnaire were drafted consulting the literature and some of the previous questionnaires of the similar studies (e.g., Aliponga, 2013; Rezaee et al., 2014; Yoon & Hirvela, 2004). This questionnaire, like the previous ones, elicited learners' perceptions of the use of concordancing. However, unlike the previous ones, it elicited learners' attitudes towards the practical and linguistic difficulties that they experienced during the use of concordancing in more detail. The questionnaire contained three main domains. The first domain included eight items which elicited respondents' perceptions of concordance use for learning collocations of prepositions; the second domain was comprised of eight items which dealt with practical and linguistic difficulties experienced by the respondents; the third domain included four items that asked about participants' overall attitudes towards concordance use for PCs learning in the future.

Before conducting the study, first, the accuracy of each statement was checked by two TEFL professors of Mohaghegh Ardabili University. According to their comments, three items were modified. Then, the questionnaire was piloted on 15 L2 learners to eliminate any unclear and confusing items and set the time limit to ensure that the questionnaire could be completed in an appropriate time. Based on the results, the items were comprehensible enough and there was no need to simplify the statements. All the students in the pilot group completed the questionnaire in less than 30 minutes. So, the main groups were given 20 minutes to complete the questionnaire.

Interview. In this research, the teacher was a twenty-six-year-old female MA student of TEFL in Mohaghegh Ardabili University who was experienced in teaching English at pre-intermediate and intermediate levels for about 6 years. She was instructed by the researcher in using AntConc 3.4.3 concordance software and in operationalizing the study. To follow her reflection on the experience of concordance-based PCs instruction, she was interviewed by the researcher on the positive and negative aspects of the class, the effectiveness of the provided materials, her suggestions about possible future alterations that she would make if she taught PCs using the same software, her willingness to suggest concordance-based instruction to her colleagues, and her point of view toward possible ways of popularizing concordance-based instruction in classroom contexts.

The type of the interview used in this study was a structured researcher-made one consisting of six questions (Appendix D). The interview went under inter-rater validation evaluation by asking an expert in the field of research to review it.

Procedure

Having selected a homogenous sample through administrating SPT in the first session, the participants were assigned to two groups of experimental and control at random. In order to make sure that the participants had equal knowledge of PCs, they were pretested through a 60-item researcher-made test in the second session.

In the first treatment session (the third session), the participants were first introduced to the concordancing program. The teacher used the projector

of the classroom to instruct them on the use of AntConc (version 3.4.3) concordancer and how to read concordance lines. They were told when reading concordances, they should look for repeated regularities (Key-Words-In-Context) and look at the words to the right and left of the search word. The instruction on the use of the concordancing which lasted for 15 minutes was done in Persian in order to be more efficient. Then, they were supplied with the software and files of the Brown Corpus. Then, the participants went through searching for the 12 PCs and completed three tasks of (1) analyzing the searching results (concordance lines) and finding the prepositions going with the searching words, (2) preparing a short presentation on their findings, and (3) using the target collocations of prepositions to create their own sentences (the first two tasks were accomplished collaboratively, while the third one was accomplished individually). While they were practicing and completing the tasks, the teacher checked the groups one by one in order to ensure that there were no practical problems. After that, their findings were discussed with the teacher. During the other treatment sessions, 12 PCs were searched on AntConc per session by the participants (after the first treatment session, they did not receive any instruction on using concordancing and there was no teacher intervention). Also, they completed the same three designed tasks in each session.

The control group in all treatment sessions just did three traditional tasks of (1) matching words with the proper prepositions, (2) choosing the correct preposition in a multiple-choice exercise, and (3) using the instructed collocations of prepositions to make their own sentences. After completion of the tasks, the answers were checked and the choices the participants had made were discussed.

The first parallel version of the pretest was administered immediately after the last treatment session (session 11) as the immediate posttest to measure the efficiency of the treatment on the learners' PCs knowledge. They had 60 minutes to do the test. In the same session, after doing the immediate posttest, learners were asked to fill in the questionnaire intended to elicit their attitudes towards the use of concordancing in learning PCs. The delayed posttest (another parallel version of the pretest) was administered after two weeks to measure any possible long-term effect of the treatment on the participants' PCs knowledge.

Results
Quantitative Data Analysis
Before running a repeated-measures ANOVA, the normality distribution was assessed by checking Levene's test for homogeneity on the scores of the pretest and posttests. The results supported the equality of variance assumption across groups on the pretest, $p = .754$, immediate posttest, $p = .531$, and delayed posttest, $p = .167$.

Table 1
The Results of the Test of Homogeneity of Variance for Scores

	F	df1	df2	Sig.
Pretest	.099	1	58	.754
Immediate Posttest	.398	1	58	.531
Delayed Posttest	1.958	1	58	.167

The performance of the experimental group and the control group was compared by running a repeated-measures ANOVA over time (i.e., from the pretest to the posttests). Table 2 presents the descriptive statistics for the pretest, immediate posttest, and delayed posttest.

Table 2
Descriptive Statistics for the Pretest, Immediate posttest, and Delayed posttest

	Group	Mean	Std. Deviation	N
Pretest	Experimental	33.90	3.889	30
	Control	34.47	3.875	30
	Total	34.18	3.860	60
Immediate Posttest	Experimental	51.37	3.690	30
	Control	39.83	3.896	30
	Total	45.60	6.926	60
Delayed Posttest	Experimental	50.00	3.484	30
	Control	39.33	4.138	30
	Total	44.67	6.581	60

Based on the results of Wilks' Lambda = .006 (Table 3), there was a significant effect for time with a large effect size, $F(2, 57) = 4707.698$, $p = 0.000$, = 0.994. The performance of the experimental group and control group was significantly different from pretest to the posttests. Furthermore, based on the results of Wilks' Lambda = .021, there was a significant effect for the interaction of time and group with a large effect size, $F(2, 57) = 1330.130$, $p = 0.000$, = 0.979.

Table 3
Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Time Wilks' Lambda	.006	4707.698[b]	2.000	57.000	.000	.994
Time * Group Wilks' Lambda	.021	1330.130[b]	2.000	57.000	.000	.979

The results of between subjects variables, as illustrated in Table 4, showed that the main effect for group reached statistical significance $F(1, 58) = 54.355$, $p = 0.000$, = 0.484. Furthermore, the results revealed that the two groups performed differently with a medium effect size.

Table 4
Results of Between Subjects Variables

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	309756.050	1	309756.050	7195.134	.000	.992
Group	2340.006	1	2340.006	54.355	.000	.484
Error	2496.944	58	43.051			

Questionnaire Data Analysis

The questionnaire data analysis reflects on the results of the second research question aiming to investigate the attitudes of participants towards using concordancing to learn PCs. The questionnaire consisted of three sections. The first section included eight items which elicited respondents' perceptions of concordance use for PCs learning. Table 5 shows the participants' frequency of responses to the items of the first section. The results revealed that nearly all the respondents (93.4%) found concordancing as a helpful tool for learning PCs, with responses centering around Strongly agree and Agree. 93.3% of the respondents acknowledged that they had difficulty in learning PCs before becoming familiar with concordancing. With regard to the third item, being exposed to various examples is beneficial for learning PCs, the majority of the respondents (90%) acknowledged it. The fourth item compared concordancing to teacher's explicit explanation, most of the participants (90%) expressed that using concordancing to learn PCs is more beneficial than teacher's explicit explanation. With regard to attractiveness of concordancing due to its novelty effect, nearly all the respondents (96.6%) expressed agreement, while only a few students expressed disagreement (3.4%). In response to the sixth item, i.e., I like concordancing because it leads me to self-discovery learning, the positive response rate was 88.4%. The results indicated that 85% of respondents hold the view that concordancing is a handy and high speed searching tool for learning PCs. Also, when asked to compare concordancing and using a dictionary, 93.3% of participants considered concordancing more beneficial than dictionaries for learning PCs.

Table 5

Frequencies and Percentages of Participants' Perceptions of Concordancing Use for Preposition Collocations Learning

Item number	Items	SA N (%)	A N (%)	N N (%)	D N (%)	SD N (%)
1	I found it helpful to learn preposition collocations through concordancing.	43(71.7)	13(21.7)	0(0)	4(6.7)	0(0)
2	I had difficulty in learning preposition collocations before becoming familiar with concordancing.	48(80)	8(13.3)	0(0)	3(5)	1(1.7)
3	Being exposed to various examples is beneficial for learning preposition collocations.	45(75)	9(15)	1(1.7)	2(3.3)	0(0)
4	I think using concordancing to learn preposition collocations is more beneficial than my teacher's explicit explanation.	17(28.3)	37(61.7)	4(6.7)	2(3.3)	0(0)
5	Concordancing has attraction because it is something of a novelty.	37(61.6)	21(35)	0(0)	1(1.7)	1(1.7)

		SA	A	N	D	SD
6	I like concordancing because it leads me to self-discovery learning.	43(71.7)	10(16.7)	0(0)	4(6.7)	3(5)
7	Concordancing is a handy and high speed searching tool for learning preposition collocations.	25(41.7)	26(43.3)	2(3.3)	5(8.3)	2(3.3)
8	Concordancing is more helpful than dictionaries for learning preposition collocations.	39(65)	17(28.3)	1(1.7)	3(5)	0(0)

SA: Strongly agree   A: Agree   N: Not sure   D: Disagree   SD: Strongly disagree

The second section of the questionnaire containing eight items (Table 6) reflects on practical and linguistic difficulties experienced by participants. The results revealed that 87.1% of the respondents maintained that the searching technique was easy to learn. In relation to the 10th item, 14.8% of participants responded that understanding real texts in the corpus was too difficult for them, while 69.5% had a contrary view towards this item. With respect to item number 11 referring to the concordancing output analysis, 37.1% of the respondents had difficulty in analyzing concordancing output, whereas 59.7% expressed that they could easily cope with it. The participants' responses to the 12th item revealed that 28.6% considered concordancing lines very confusing due to the cut-off sentences in the concordance output, while over half of the respondents (63%) with responses centering around Disagree and Strongly disagree rejected it. The results indicated that although 29% of the participants had difficulty in analyzing the concordance output due to unfamiliar vocabulary items, 64.5% of the participants did not come across with problems on unfamiliar words. The results of participants' responses to another problematic aspect of concordancer use (distracted by various sentences in concordance output, whereupon making participants unable to focus on PCs), revealed that 35.5% of them faced difficulties in this respect and 58.1% held contrary views toward this item. The questionnaire also asked respondents whether they could easily find PCs in the concordance output without the instructor's help (item 15). Based on the results, 82.2% of the participants' responses to this item were positive. With respect to the last item of the second section, 80.6% of the respondents found focusing on selected concordance lines useful to learn PCs.

Table 6

Frequencies and Percentages of Practical and Linguistic Difficulties Experienced by Participants Through Using Concordancing

Item number	Items	SA N (%)	A N (%)	N N (%)	D N (%)	SD N (%)
9	The searching technique was easy to learn.	26(41.9)	28(45.2)	0(0)	3(4.8)	2(3.2)
10	The real texts in the corpus were too difficult to understand.	7(11.3)	8(12.9)	0(0)	35(56.5)	8(12.9)
11	I had some difficulty in analyzing concordance output.	8(12.9)	15(24.2)	0(0)	23(37.1)	14(22.6)
12	The cut-off sentences in the concordance output made me confused.	7(11.3)	11(17.7)	0(0)	35(56.5)	4(6.5)
13	I had some difficulty in analyzing the concordance output due to unfamiliar vocabularies.	8(12.9)	10(16.1)	2(3.2)	25(40.3)	15(24.2)
14	I think various sentences in concordance output would distract me and I cannot focus on preposition collocations.	9(14.5)	13(21)	1(1.6)	31(50)	5(8.1)
15	I could easily find preposition collocations in the concordance output without the instructor's help.	27(43.5)	24(38.7)	0(0)	8(12.9)	0(0)
16	Focusing on selected concordance lines was useful for me to learn preposition collocations well.	10(16.1)	40(64.5)	2(3.2)	3(4.8)	4(6.5)

SA: Strongly agree   A: Agree   N: Not sure   D: Disagree   SD: Strongly disagree

Section three of the questionnaire (Table 7) was comprised of four items eliciting participants' overall attitudes towards concordance use for PCs learning in the future. In relation to item 17, 73.4% of the participants stated that they would come to use concordancing on their own as they have learned more about it while 18.4% expressed disagreement. As it was expected, the majority of the respondents stated that they would use concordancing to increase their preposition knowledge in the future (90%), while a few respondents expressed disagreement (5%) and the other 5% were not sure about it. Also, 85% of the participants recommended using concordancing in English classes in future quarters, while the other 15% rejected this recommendation. Finally, with regard to the last item of this section, 11.7% of the respondents strongly agreed or agreed that using concordancing is time-consuming and needs lots of effort, so they would not consult it as a reference tool in future when they encountered problems in PCs, while 78.3% thought conversely.

Table 7

Frequencies and Percentages of Participants' Overall Attitudes towards Concordancing Use in Future

Item number	Items	SA	A	N	D	SD
17	As I have learned more about concordancing, I have come to use it by my own choice.	25(41.7)	19(31.7)	2(3.3)	10(16.7)	1(1.7)
18	I will use concordancing to increase my preposition collocations knowledge in future.	30(50)	24(40)	3(5)	1(1.7)	2(3.3)
19	I recommend using concordancing in English classes in future quarters.	40(66.7)	11(18.3)	6(10)	0(0)	3(5)
20	I won't use concordancing due to time and effort that should be spent on analyzing the data.	3(5)	4(6.7)	4(6.7)	29(48.3)	18(30)

SA: Strongly agree   A: Agree   N: Not sure   D: Disagree   SD: Strongly disagree

Structured Interview Data Analysis

The response that the teacher provided concerning the first question in the interview requiring her to reflect upon the positive side of the applied instruction was:

First, this class led me to not be the only active person in class. In fact, it lightened the burden on my shoulders by decreasing the flow of information and communication from me to the students. Second, the nature of this class required me to change the style of seating from rows to U-shaped style. So, by creating multiple U's' of four students, I had more control over the learners. As far as I am concerned, benefiting from this type of arrangement was mutual since I found the learners interested, energetic, more involved, and active in the classroom process. Third, through this instruction, increasing the students' engagement in learning was much easier.

On the positive side, the teacher in the current study said goodbye to her traditional role of an absolute lecturer and experienced a new role of a "coach" (McKenzie, 2000). To elaborate, in this class, the students were supplied with a concordancing tool and they were instructed on how to use it to solve their problems instead of the teacher herself showing them how to solve the problems and injecting her knowledge into them. Therefore, a uni-directional teacher-student interaction was replaced by multidirectional interactions of teacher-students, students-teacher, and student-student. Furthermore, substituting a traditional arrangement of the seating with a communication-oriented seating arrangement brought less disengagement of learners and more teacher's control over the students. Also, in this regard, the teacher received positive feedback from students by noticing their boredom

threshold enhancement and creation of inclusivity among students. Further, asking learners to take some responsibilities for learning and involving them in the process of learning requires grabbing their interest and stimulating learners' curiosity (Tomlinson, 2011) which was greatly performed in this study by resorting to concordance program.

With respect to the second question, the teacher expressed her view as:

One of the main negative points of this class was computer access limitation. While each threesome used one laptop, some students did not have their own laptops and they brought borrowed laptops to the classroom. Apart from this, some laptops ran out of charge and students ran into problems due to paucity of plugs. Although students were asked to bring fully charged laptops to the class, in some sessions some of them forgot to recharge their laptops at home. So, this problem was a source of distraction in my classroom. But, it was sorted out with the help of students. Some of them brought their own power banks to the classroom and also I provided the class with a power strip.

On the negative side, one of the reasons behind the question "why some teachers just operate in their comfort zones and do not stretch out of it to utilize technology in their classrooms?" could be attributed to teachers' concern about the facilities. In fact, most English classes are equipped with only one computer and many of the students may not have their own laptops. So, integration of computer-based concordancing into the classroom requires being sure of adequate related facilities. However, being faced with this limitation does not mean to forget about concordance-based instruction. Paper-based concordancing could be a good option (e.g., Boulton, 2010; Daskalovska, 2015). Moreover, in almost all classes, things never go one hundred percent right and there are some issues that are outside of the teachers' control. The teachers should not be worried about these unexpected moments that pop up during the class but be able to make the best possible decision on the spot.

The third question raised in the interview elicited the teacher's perspective of the effectiveness of the provided materials. She maintained that:

Regarding that the students had to search in concordancing to notice what prepositions most commonly occurred with their search term, there was an investigative mood in this class. Also, the provided materials offered my students the opportunity of being exposed to genuine use of language. However, sometimes students came across ambiguous and long sentences that confused them. To tackle the problem, I provided learners with simple sentences on prepositional collocations by breaking long sentences into smaller ones, rephrasing the concordanced words (key words) by my own examples that were simpler in terms of grammar and vocabulary.

In what follows, an example of ambiguous concordance output which was replaced by more simple and tangible example is supplied:

Concordance output example: ...we have a regular that all he's interested in is in fact doing Michael Heseltine's work for him or ...being ethical and professional people interested in community health and well-being...

Teacher's example: Mahsa is interested in playing tennis but she is not interested in studying math because it is difficult to her.

The notes that the teacher has made about the effectiveness of

provided materials in aiding students in learning could be compressed into two terms of involving learners in discovery learning and authentic materials. In the current study, discovery learning is brought to the classroom by incorporating tasks that require learners to go through searching, analyzing, and finding out the prepositions most commonly occurring with the target words. Also, "corpus-informed" materials led the researcher to bridge the classroom to the real-world (Reppen, 2011). However, sometimes the teacher needs to control and adapt the material through omission, addition, and replacement (Maley, 2011) since among concordance lines, some of them are too long or too short that may be ambiguous or distracting to learners. According to Reppen (2011), in corpus-based activities, teachers should "make sure that the vocabulary load is not too great and that the students are exposed to the target form in a way that is meaningful and relevant for the students" (p. 37).

Also, the teacher was asked, "Imagine yourself teaching the same content by using the same software. What would be different when you conduct the teaching?" She replied:

If I carry out the same instruction in future, I will start the initial sessions with the same three assigned tasks and in the subsequent sessions I will break the monotony and add or replace those tasks with more challenging tasks to maintain the learners' joy.

Reflecting upon the teacher's notes with reference to the last question, the challenging aspect of tasks would fade away after being repeated for a long time and this would lead into decreasing sense of accomplishment on the part of learners. As Tomlinson (2011) put forward, learners should be engaged in "tasks which are stimulating, which are problematic, but which are achievable too" (p. 10). He also maintains that tasks that are simple to accomplish might not make learners feel successful because they think that they are not really using their brains. As a variation, for instance, students could go through concordance-based tasks that are of information gap type besides the three same assigned tasks. For example, the same number of words could be divided amongst the groups and students could have been asked to collect the related concordance lines and become "experts" of their own words. Then, the groups could have exchanged their concordance lines with a gap and ask each other to guess the missing word (Willis, 2011).

The next interrelated questions in the interview held with the teacher were "Do you suggest your colleagues adopting concordance-based instruction of collocations? If yes, what is the purpose behind your suggestion?" She replied:

Yes, I like to share my experience of concordancing with my colleagues and suggest that they get familiar with and use it in the classroom context. For one thing, this helpful software may find favor with them too, and for another, they can develop their English teaching experience besides giving their students the opportunity to experience learning English through the up-to-date and user-friendly software.

The inference that could be made from the teacher's point of view is the reciprocal beneficiaries of the concordance-based instruction. Both teachers by extending their teaching repertoire and students by being offered a novel learning situation with its possible advantages can experience

concordancing.

The final question in the interview was on the teacher's suggestion(s) for popularizing integrating concordance-based instruction into classroom context of Iran. She replied, "*As far as I'm concerned, in order to develop concordance-based instruction, it could be practical if there were some specialized training sessions or workshops for students to be informed of concordance-based English learning activities and its advantages.*"

According to the teacher's notes, in order to develop integration of concordance-based instruction into classroom contexts, we should go directly to English students to draw their attention to concordance-based learning activities. However, according to Mukherjee (2002), failing to inform teachers of concordance-based instruction and its possible advantages results in failing to involve English learners in concordance-based activities, and consequently generating autonomous learners. It would be beneficial if webinars, workshops, and teacher training courses are held by the researchers and pioneers in this field to familiarize English language teachers with corpus-informed materials and concordancing and inform them of the significant contribution that corpus-informed materials can offer with respect to learning language patterns such as collocations, idioms, tenses, etc.

Discussion

The results of this study revealed a marked preference on the part of learners to work with and master PCs via concordance-based instruction. Therefore, owing to results of this study and others (e.g., Jafarpour & Koosha, 2006; Kheirzadeh & Marandi, 2014; Kulsitthiboon & Pongpairoj, 2018), concordance-based instruction of PCs plays a remarkable role in decreasing English learners' preposition errors.

According to Schmidt (2001), when L2 learners pay conscious attention to the input that they receive and compare what they have noticed with their own output, it brings about a cognitive process in them which will lead to "noticing the gap", whereupon the acquisition of the input occurs. In this study, as a route to noticing the gap, the participants were asked to identify all the preposition errors and compare how their usage differed from the concordance lines.

The effectiveness of concordancing can also be discussed in terms of exposure to the authentic data in concordance lines. Encouraging learners to make use of language form in a meaningful context, giving learners the chance of being exposed to genuine language, and offering them the chance of incorporating their background knowledge into the new situation are the beneficial effects of receiving authentic input among others (Gilmore, 2007).

According to zbay and Olgun (2017), exposure to massive repetitive patterns, which recur in the middle of the concordance lines (Key-Word-in-Contexts), provides a great opportunity for learners to deduce the meaning of collocational patterns. Non-native speakers of English, in comparison with native speakers, are less able to trust their intuitions concerning rules and examples in grammar and vocabulary use. So, "they need an objective linguistic informant to reinforce or refute their intuitions" (Flowerdew, 1996, p. 103); concordancing could fill the gap left by an objective linguistic informant

because it provides learners with reliable objective data on grammatical and lexical usage.

Rezaee et al. (2014) identified an added bonus of novelty effect in using concordancing to instruct collocations. In this study also, based on the results of the questionnaire, concordancing achieved positive impact and the majority of the learners stated that concordancing has attraction because it is something of a novelty helping them in mastering PCs.

In the current research, the questionnaire items concerned with the same underlying themes were grouped into three main domains. The first domain reflected on the participants' perceptions of learning PCs in the context of concordancing. The results of the questionnaire made clear that almost all the participants in the experimental group greatly welcomed the use of concordancing to learn PCs. Furthermore, they appreciated using concordancing as a reference tool for learning PCs much more than the teacher's explicit explanation and dictionaries. The findings of this study confirmed the findings of similar previous studies examining students' attitudes towards learning collocations in the context of concordancing (e.g., Chujo et al., 2016; Huang, 2014).

The second domain was to elicit participants' attitudes towards practical and technical difficulties they encountered during treatment sessions. In spite of the fact that a small number of respondents encountered difficulties during using concordancing, including being confused by cut-off sentences, being distracted by various sentences, being unable to analyze concordance output due to unfamiliar vocabulary items, difficulty of finding PCs in the concordance output, and difficulty of the real text in the corpus, the vast majority of them expressed their satisfaction towards concordancing. The findings related to this domain are inconsistent with the studies of Geluso and Yamaguchi (2014), Yoon and Hirvela (2004), and Kheirzadeh and Marandi (2014) who found that a high number of participants faced difficulties using concordancing.

The last domain was developed to check the students' opinion on using concordancing as a reference tool for learning PCs in the future. Based on the findings, not only did they approve of using concordancing in English classes in future quarters, but they also asserted that they would use concordancing by their own choice to increase their PCs knowledge in the future.

The data obtained from the interview revealed that the teacher was deeply satisfied with PCs instruction experience thanks to concordance software. Finding herself as a contributor to the process of exploring and discovering knowledge on the part of learners, not being a mere knowledge disseminator, creating as much interaction as possible in the instruction process, bringing investigative mood, stimulating learners' interest and curiosity, and bridging the classroom to the real world are the main reasons behind her satisfaction with the experimental sessions. These findings are in line with previous studies (e.g., Boulton, 2010; Yoon & Hirvela, 2004) in which they found concordancing beneficial to collocation learning owing to enhancing learners' discovery learning and supplying them with authentic materials. However, the teacher noted that, in order for concordancing to become an integral part of the classroom, it should be ensured that adequate related

facilities are guaranteed. Furthermore, the teacher's reasons behind her willingness towards suggesting her colleagues adopting concordance-based instruction of collocations lends support to the findings of Murray (2010), who states that one of the ways through which English language teachers can provide their students with more accessible and effective learning condition is drawing on their colleagues' experiences. Also, the teacher's point of view toward possible ways of popularizing concordance-based instruction in classroom contexts was elicited because it serves as a main factor in narrowing down the gap between research on concordance-based instruction and real practice of teaching English in classroom context (Boulton & Cobb, 2017; Mukherjee, 2004). Nevertheless, her point of view was in contrast with the study of Mukherjee (2004) who emphasizes focusing on attracting teachers' attention to corpus-informed materials before students. On top of everything else, the experience of one particular teacher in one particular context may not be translatable to other contexts. In order for findings to be confirmed and generalized with more certainty, a larger number of teachers should be interviewed on their concordance-based collocation instruction experience.

Conclusion

The current study has several pedagogical implications. Based on the experimental results of this study and other studies (e.g., Daskalovska, 2015; Jafarpour & Koosha, 2006; Vyatkina, 2016), concordancing can improve learners' PCs knowledge. Teachers should take into account that, in teaching PCs, instead of resorting just to their explicit explanation, they could combine concordancing and their explicit explanations in order to increase efficiency of instruction and make the class more student-centered rather than teacher-fronted. Teachers should note that, in spite of the fact that incorporating concordancing into their teaching may be time-consuming, it can help them to be up-to-date teachers by integrating authentic input with pedagogically simplified input especially in the case of PCs.

Concordancing can provide students with rich real-life examples embedded in a variety of rhetorical contexts. It can serve as a reference tool leading to discovery learning by helping learners discover the underlying rules from the given concordance data on their own and this discovery learning, in turn, leads to long-term retention of PCs. In addition, it can serve as a reference tool that learners can consult when they encounter problems instead of traditional reference resources such as dictionaries or grammar books. As stated by Tomlinson (2011), "novelty" and "variety" are two main factors that contribute to materials to achieve impact. On the one hand, concordancing and concordance-based activities possess both novelty and variety factors. On the other hand, almost all the participants of this study stated that their PCs knowledge improved by the use of concordancing. Hence, these notions give material developers hints and guidelines to develop materials of high quality by integrating concordancing and concordance-based tasks into the materials.

The use of concordancing is not without limitations. The major one is providing all the students with computers, which sometimes is not affordable. This sends an urgent message to app developers on designing and developing a concordancing app capable of being run on smart phones due to the abundance

of such phones these days. Also, using concordancing in classroom is time-consuming and its use requires effort and motivation on the part of both teachers and students. Last but not least, all the concordancers are not user-friendly and some of them may be very complex for students to use.

To confirm the findings of the current research with more certainty, the researchers suggest the following research endeavors:

1. A long-term study with a similar experimental design could be conducted.

2. Researchers could provide participants with various concordance-based tasks in learning PCs.

3. Further studies could apply other types of concordance software such as online concordancing tools of Cobb's Compleat Lexical Tutor

(http://www.lextutor.ca/), Web Concordancer

(https://www.edict.com.hk/concordance/), WordSmith

(https://www.lexically.net/wordsmith/), and MonoConc

(https://www.athelstan.com/mono.html).

4. Finally, conducting concordance-based studies with different proficiency levels (elementary, pre-intermediate, and advanced) would be helpful to gain more insights on the effectiveness of this technology.

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Appendix A
Placement Test

Elementary to Intermediate
Introduction
This placement test is intended to help teachers decide which level of *Solutions* (Elementary, Pre-Intermediate or Intermediate) is the most suitable for their students. It should be given at the beginning of the school year.
The *Solutions* placement test has been developed after consultation with teachers and is designed to assess students' knowledge of the key language as well as their receptive and productive skills. This will enable teachers to have a greater understanding of what level their students are at.
The test contains:
50 multiple choice questions which assess students' knowledge of key grammar and vocabulary from elementary to intermediate levels.
A reading text with 10 graded comprehension questions.
An optional writing task that assesses students' ability to produce the language.
The 50 multiple choice questions and the reading task are designed to be done together in a 45-minute lesson. The writing task can be done in the following lesson and should take approximately 20 minutes.

Interpreting scores

	Total	Elementary	Pre-Intermediate	Intermediate
Grammar & Vocabulary	50	0–20	21–30	31+
Reading	10	0–4	5–7	8+
Writing	10	0–4	5–7	8+

This table acts as a guideline for teachers when choosing which level of *Solutions* is suitable for their students. Reading and writing scores are included separately so that teachers who choose not to include these tasks in the placement test can still make an accurate assessment of their students' abilities.
Where there is a discrepancy in the level attained in the different parts of the test, a student's score for grammar and vocabulary should take precedence. Alternatively, a teacher may wish to conduct an additional oral interview to confirm the result.
Students whose scores fall on the borderlines should be placed according to the level of the rest of the class and monitored closely at the start of the course.

Placement Test
Grammar and Vocabulary
Circle the correct answers.

1   _ you interested in sport?
    A Be   B Am   C Is   D Are
2   My   is a writer and his books are very popular.
    A aunt   B uncle   C sister   D mother
3   We live in the city centre and our house   have a big garden.
    A doesn't   B isn't   C aren't   D don't
4   There   a lot of people outside the school. What's the problem?
    A are   B is   C be   D am
5   Cathy   a game on her computer at the moment.
    A plays   B is playing   C to play   D play
6   Paul is very   . He doesn't go out a lot.
    A bored   B confident   C angry   D shy
7   _ you like to come out with us tonight?
    A Do   B Would   C Are   D Will
8   Dad's   work right now. He's a teacher.
    A on   B at   C for   D by
9   Did you   shopping after school yesterday?
    A went B goed C going D go
10 There wasn't milk for breakfast this morning so I had toast and
    orange juice.
    A a B some C the D any
11 I   five emails before school today.
    A sent   B sended   C did send   D was send
12 Turn   and you'll see the museum on the left.
    A on the right   B rightly   C by the right D right
13 The beach was very crowded   Monday.
    A in   B on   C at   D to
14 I   the new Batman film yet. Is it any good?
    A haven't seen   B didn't see   C don't see D am not seen
15 Tom got the   marks in the class for his homework.
    A worse B worst C baddest D most bad
16 You _ _ eat all that cake! It isn't good for you.
    A don't B may not C should not D will not
17 How   time have we got to do this exercise?
    A long   B many   C much   D quick
18 Don't forget to get   the bus at Station Road.
    A out   B off   C over   D down
19 Our teacher speaks English to us   so that we can understand her.
    A slow   B slower   C more slow   D slowly
20 My sister   speak French when she was only six years old.
    A was   B should   C could   D had
21 I really enjoy   new languages and I'd like to learn Italian soon.
    A to learn   B learning   C learn   D learned
22 My father has been a pilot   twenty years and he still loves his
    job.
    A since   B for   C until   D by
23 Quick – get the food inside! It   any moment.
    A rains   B is raining   C is going to rain D can rain
24 Sam asked me if I   a lift home after the concert.
    A had wanted   B wanted   C would want D want
25 Which train _ for when I saw you on the platform on Sunday?
    A did you wait   B were you waiting
    C have you waited   D are you waiting
26 I   not be home this evening. Phone me on my mobile.
    A can   B could   C may   D should
27 I hope you   a good time at the moment in Greece! Phone soon.
    A are having   B have   C have had   D had
28 If we in the countryside, we'd have much better views than we do now.
    A lived   B were live   C would live   D live

Appendix B
The List of the Preposition Collocations in association with the Frequency of the Node (F) and Mutual Information (MI)

Adjective + Preposition	F	MI
Afraid of	3	2.75
Ashamed of	3	3.82
Aware of	3	4.26
Bored with	3	4.62
Capable of	3	4.83
Crowded with	4	4.22
Different from	3	3.98
Distracted by	4	5.75
Excited about	3	5.63
Experienced within	5	2.24
Famous for	4	3.21
Fed up with	5	5.38
Harmful to	3	2.68
Inspired by	3	6.16
Interested in	3	5.94
Keen on	3	4.49
Optimistic/pessimistic about	3/3	6.20/6.44
Pleased with	3	4.46
Qualified for	4	3.03
Rude to	4	2.46
Similar to	3	3.54
Thankful for	3	4.82
Tired of	4	2.34
Weak in	5	1.09

Preposition + Noun	F	MI
At last	3	3.43
At once	3	4.24
At risk	4	4.55
By chance	4	2.63
By mistake	3	3.12
By permit	3	5.99
For instance	3	6.48
In advance	3	4.33
In common	3	2.29
In danger	3	3.16
In detail	3	3.60
In fashion	5	2.31
In someone's opinion	5	5.16
On diet	4	4.32
On duty	4	3.32
On foot	4	3.15
On purpose	5	2.74
On time	5	1.24
Out of reach	4	5.46
To someone's surprise	3	3.25
Under arrest	4	2.54
Under condition	4	3.21
Under discussion	5	1.84
Under stress	4	7.63

Noun + Preposition	F	MI
Advice on	4	4.03
Approach to	3	3.14
Attack on	5	4.73
Chance for	4	1.74
Choice between	3	5.05
Control over	4	5.69
Cure for	5	3.94
Damage to	5	2.96
Decision on/about	4	3.99
Decrease in	3	4.53
Delay in	3	2.97
Disadvantage of	3	2.69
Expert on	5	2.87
Habit of	3	3.90
Interaction between	3	7.77
Objection to	4	3.74
Problem with	4	2.92
Process of	3	2.85
Report on	5	3.47
Solution to	3	2.67
Success in	3	2.39
Talent for	4	3.44
Threat to	3	3.44
Trouble with	3	3.88

Verb + Preposition	F	MI
Accuse of	3	4.50
Agree with	3	5.27
Apologize to	3	5.08
Arrive in/at	3	5.79
Believe in	4	3.03
Borrow from	5	3.64
Collide with	4	5.86
Compare with	4	3.80
Compensate for	5	5.92
Concentrate on	5	6.44
Cope with	3	6.73
Depend on	3	6.41
Explain to	3	1.19
Insist upon	3	5.71
Pay for	5	4.01
Plan for	5	3.09
Prevent from	5	4.40
Prohibit from	3	2.76
Provide with	3	5.20
Resist at	3	4.73
Taste of	5	2.03
Trust in	4	4.23
Vary from	3	2.34
Worry about	3	4.51

Appendix C
Learner's Attitude Questionnaire

The following statements are about your opinions on using concordancing. Please use the scale below to tell us how much you agree or disagree with the following statements (circle a number from 1 to 5). Thank you very much for your help!

Strongly agree	Agree	Not sure	Disagree	Strongly disagree
1	2	3	4	5

Age:
Level:

1. I found it helpful to learn prepositional collocations through concordancing.	1	2	3	4	5
2. I had difficulty in learning prepositional collocations before becoming familiar with concordancing.	1	2	3	4	5
3. Being exposed to various examples is beneficial for learning prepositional collocations.	1	2	3	4	5
4. I think using concordancing to learn collocation of prepositions is more beneficial than my teacher's explicit explanation.	1	2	3	4	5
5. Concordancing has attraction because it is something of a novelty.	1	2	3	4	5
6. I like concordancing because it leads me to self-discovery learning.	1	2	3	4	5
7. Concordancing is a handy and high speed searching tool for learning prepositional collocations.	1	2	3	4	5
8. Concordancing is more helpful than dictionary for learning prepositional collocations.	1	2	3	4	5
9. The searching technique was easy to learn.	1	2	3	4	5
10. The real texts in the corpus were too difficult to understand.	1	2	3	4	5
11. I had some difficulty in analyzing concordance output.	1	2	3	4	5
12. The cut-off sentences in the concordance output made me confused.	1	2	3	4	5
13. I had some difficulty in analyzing the concordance output due to unfamiliar vocabularies.	1	2	3	4	5
14. I think various sentences in concordance output would distract me and I cannot focus on prepositional collocations.	1	2	3	4	5
15. I could easily find prepositional collocations in the concordance output without the instructor's help.	1	2	3	4	5
16. Focusing on selected concordance lines was useful for me to learn prepositional collocations well.	1	2	3	4	5
17. As I have learned more about concordancing, I have come to use it by my own choice.	1	2	3	4	5
18. I will use concordancing to increase my prepositional collocations knowledge in future.	1	2	3	4	5
19. I recommend using concordancing in English classes in future quarters.	1	2	3	4	5
20. I won't use concordancing due to time and effort that should be spent on analyzing the data.	1	2	3	4	5

Appendix D
Interview

This interview brings into focus the attitudes of the teacher who was instructed by the researcher to operationalize the research plans toward preposition collocation instruction through concordancing.

1. What were the positive aspects of the class to you?

2. What were the negative aspects of the class to you?

3. How effective did the materials seem to be?

4. Imagine yourself teaching the same matter by using the same software. What would be different when you conduct the teaching?

5. Do you suggest your colleagues adopting concordance-based instruction of collocations? If yes, what is the purpose behind your suggestion?

6. What is your suggestion(s) for popularizing integrating concordance-based instruction into classroom context of Iran?

Teacher Individual Self-Efficacy and Collective Efficacy as Predictors of Teacher Work Engagement: The Case of Iranian English Teachers

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Abstract
As a result of the role of teachers' psychological factors in affecting their performance, there has been an ever-increasing interest in the significance of teachers' constructs in influencing their effectiveness and work engagement. As an attempt to shed more light on the relationships between teacher psychological factors in English as a Foreign Language (EFL) context, the objective of this research was to probe the role of teachers' self-efficacy and their collective efficacy as the predictors of work engagement for Iranian EFL instructors. To this end, a sample of 168 English teachers completed the self-report scales of the constructs under investigation. Structural Equation Modeling was adopted to evaluate the causal relationships among the variables. The findings revealed that teachers' sense of efficacy explained 23.7% of the work engagement variance whereas teacher collective efficacy accounted for 10.5% of the variance in work engagement. It was revealed that, although each variable had a unique contribution to work engagement, teachers' individual self-efficacy was a more powerful predictor of work engagement than their collective efficacy. Based on the findings, important implications can be provided for EFL teacher education programs.

Keywords: collective efficacy, EFL teachers, structural equation modeling, teacher self-efficacy, work engagement

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Introduction

  Teaching is considered as a complicated activity associated with improvisation, unpredictability, and parallel processing (Clandinin & Connelly, 1986; Goldman & Kearns, 1995). It is worth noting that teachers have their own specific personality characteristics, thinking patterns, ideologies, and cognition that significantly affect their choices and the actions in the classroom (Kim et al., 2018; Kim et al., 2019). The increasing evidence has verified the high associations of teachers' perceptions, cognition, and emotions with their learners' achievements (Cross & Hong, 2012; Klassen & Tze, 2014; Schutz & Zembylas, 2009; Zembylas & Schutz, 2009). As a result, much research attention has been directed to examining constructs such as teacher efficacy (e.g., Friedman & Kass, 2002; Tschannen-Moran & Hoy, 2001), work engagement, and collective teacher efficacy, burnout, and teacher attrition is increasing (e.g., Friedman, 1991; Grayson & Alvarez, 2008; Parker et al., 2012; Skaalvik & Skaalvik, 2010).

  An increasing number of studies on teacher education have called for the necessity of investigating teacher engagement as one of the key teacher-related factors (e.g., Klassen et al., 2013; Skaalvik, & Skaalvik, 2014). This necessity is precipitated when it has been found that low teacher engagement and work satisfaction can be a main causal variable for teachers' turnover and their decisions to give up the teaching enterprise (Kelchtermans, 2017; Klassen & Chiu, 2011). Considered as a motivational construct, teacher engagement indicates teachers' willingness in devoting their mental, physical, and affective capacities to their instructional practices (Klassen et al., 2012). This conceptualization is rooted in a multi-faceted view of work engagement introduced by Klassen et al. (2013). According to Klassen et al. (2013), teacher engagement is considered as a motivational variable constituting four underlying elements pertaining to emotional, social, and cognitive engagement. From their perspective, emotional engagement is concerned with teachers' positive emotional feelings and reactions to their activities. Engagement with pupils and coworkers refers to instructors' degree of attention, commitment, and interactions with pupils and co-workers.

  Teacher engagement is conceptualized as a dimension of teacher effectiveness which can shed more light on teachers' success or attrition (Bakker & Schaufeli, 2008; Hakanen et al., 2006; Louis & Smith, 1991; Perera et al., 2018). Moreover, work engagement may be concerned with the employee's positive, work-oriented structure of mind recognized by vigor, dedication, and absorption as its components (Schaufeli et al., 2002). Vigor refers to high degrees of energy and mental efforts during engagement with the work. Dedication is characterized as getting strongly engaged in doing the work and experiencing a feeling of importance, interest, as well as challenge, and absorption refers to one's full concentration and immersion in the work (Bakker & Demerouti, 2007). Notwithstanding the accumulated evidence confirming the significance of teachers' work engagement in positively affecting teacher as well as learner performance, the exploration of teacher engagement is essentially lacking on L2 teacher education research agenda.

  Self-efficacy is regarded by Bandura (2006) as "the foundation of human motivation, well-being, and accomplishments" (p. 3). From his

perspective, self-efficacy acts as a motivational construct in a sense that "unless people believe they can produce desired effects by their actions they have little incentive to act or to persevere in the face of difficulties" (p. 3). As a result, efficacy perceptions can affect individuals' objectives and desires and their capability to inspire themselves. From a socio-cognitive perspective, self-efficacy perceptions may influence individuals' emotions in a sense that more self-efficacious individuals usually experience further positive emotions and feelings (Linnenbrink & Pintrich, 2003). Individual self-efficacy of teachers is expected to be inter-connected with teachers' motivational constructs such as work engagement, which is defined by Schaufeli et al. (2002) as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (p. 74). The positive association between work engagement and teacher self-efficacy has been reported in the literature (Burić & Macuka, 2018; Granziera & Perera, 2019).

A significant body of research has reported that teachers' perceptions of efficacy are associated with greater degrees of teacher engagement and satisfaction as well as lower degrees of burnout or teaching stress (Ghasemzadeh et al., 2019; Granziera & Perera, 2019; Sarıçam & Sakız, 2014; Schwarzer & Hallum, 2008; Skaalvik & Skaalvik, 2014, 2019). It is also argued that teacher self-efficacy is significantly correlated with job satisfaction (e.g., Demirdag, 2015; Klassen & Chiu, 2010; Moè et al., 2010). In other words, teachers' beliefs about their capabilities affect their beliefs about how well they have accomplished their teaching activities and how satisfied they are with these accomplishments (Tschannen-Moran & Hoy, 2001). Job satisfaction is also related to teachers' motivation, behavior, and work engagement (van den Berg, 2002; Weiqi, 2007). Therefore, teachers' sense of accomplishment and their confidence that they can help learners learn more effectively will contribute to increasing their engagement in their teaching activities (Bakker & Bal, 2010; Fiorilli et al., 2020). Against this backdrop, it is hypothesized that that teachers' individual self-efficacy can significantly predict their work engagement in Iranian EFL context.

Having received less research attention than teacher individual self-efficacy, collective efficacy is conceptualized as instructors' attitudes "about the ability both of the team and of the faculty of teachers at the school to execute courses of action required to produce given attainments" (Skaalvik & Skaalvik, 2007, p. 613). It is worth noting that the present knowledge on collective teacher efficacy indicates that this construct is positively correlated with teaching enthusiasm as well as job satisfaction and is inversely associated with teacher burnout and attrition (Lim & Eo, 2014; Ross & Gray, 2006; Skaalvik & Skaalvik, 2007). As another facet of teacher efficacy, collective efficacy has been characterized as a crucial construct affecting effectiveness of teachers. Employing this construct for groups of teachers, Goddard et al. (2000) designed the measuring instrument of collective teacher efficacy. From their perspective, teacher collective efficacy is conceptualized as "the perceptions of teachers in a school that the effort of the faculty as a whole will have a positive effect on students" (Goddard et al., 2000, p. 480). It should be stated that "Collective efficacy is not simply the sum of the efficacy beliefs of individuals. Rather, it is an emergent group-level attribute that is the product of coordinative and

interactive dynamics" (Bandura, 1997, p. 7). Also, it is worth noting that collective teacher efficacy is not a unitary group trait, but it can be used at the member level and its degrees can change between members of the same group. As far as the related literature is concerned, few studies have ever investigated the interplay between collective efficacy of teachers and their work engagement (Stephanou & Oikonomou, 2018). Inspired by the findings of a number of previous studies (Lee et al., 2011; Skaalvik & Skaalvik, 2019), the present study hypothesizes that collective teacher efficacy can act as a correlate of instructor work engagement. From this perspective, it is hypothesized that teachers who are endowed with greater degree of collective efficacy perceptions are hypothesized to be more active, energetic, devoted, committed, and resilient.

Although an alluring line of inquiry into teachers' individual constructs prevails in L2 literature, a thorough investigation of the variables influencing teachers' professions and their work engagement requires greater empirical support. Despite the significance of teacher psychological constructs in influencing teachers' effectiveness, less body of research has explored the impact of collective efficacy of teachers on their work engagement in EFL contexts. In addition, to the best of the authors' knowledge, no previous research has ever uncovered the concurrent effects of teacher individual self-efficacy and collective efficacy on teacher work engagement among EFL practitioners. Consequently, the present research sought to examine the significance of teachers' individual sense of efficacy and their collective efficacy in predicting work engagement for EFL instructors. As a result, three research questions were formulated for the purpose of the current research:

1. Does teacher individual self-efficacy significantly predict work engagement among Iranian English teachers?

2. Does teacher collective efficacy significantly predict work engagement among Iranian English teachers?

3. Which of the two types of efficacy is a stronger predictor of work engagement among Iranian English teachers?

Literature Review

The present research is theoretically grounded in the socio-cognitive career theory of job satisfaction (Lent & Brown, 2006), providing a social cognitive theory as the framework to explore the inter-connections among individual self-efficacy, collective efficacy, and work engagement of EFL practitioners. From this model's viewpoint, self-efficacy is concerned with instructors' perspectives regarding their competence to accomplish specific activities needed to achieve desired objectives. As far as teaching is concerned, self-efficacy is conceptualized as instructors' perceptions of their capability to attain teaching activities required to accomplish instructional objectives. The predominant framework of instructor self-efficacy widely referred to in the literature considers instructor self-efficacy as a composite of three components (Tschannen-Moran & Hoy, 2001): 1) efficacy in classroom management, indicating teachers' perception of their competence in establishing discipline and managing the classroom; 2) efficacy in instructional strategies, referring to the perceived ability in employing effective techniques and strategies in

teaching and testing; and 3) efficacy in student engagement, denoting the perceived skills to establish interactions with pupils and enhance their interest and involvement in tasks.

Additionally, from the social cognitive career theory perspective, work engagement of teachers can be characterized as being involved in objective-oriented tasks (Perera et al., 2018). According to the main framework of engagement, engagement is concerned with the voluntary devotion of cognitive, physical, and emotional competencies to teaching-related activities (Schaufeli et al., 2002). Teachers that are more involved in their work pay further attention and exert more efforts to their teaching activities and those that are emotionally engaged are more likely to experience pleasant emotional states while doing their teaching-related tasks.

Regarding social cognitive career theory, it can be argued that teachers' self-efficacy perceptions are likely to affect their engagement in carrying out goal-directed activities (Perera et al., 2018). Self-efficacy perceptions influence individuals' perception of opportunities and obstacles in the context and affect their decisions about selecting, exerting efforts in, and pursuing objective-directed tasks and thus are expected to be correlated with engagement (Bandura, 1997). In other words, teachers that are more confident about their abilities in carrying out particular work-related activities show higher degrees of work engagement.

Compared with teachers' individual sense of efficacy, collective efficacy has received less research attention (Pajares, 1997). Like self-efficacy, which refers to the degree of effort and perseverance devoted to an activity and the perceived success of that activity (Bandura, 1997), collective teacher efficacy addresses collective perceptions of a group towards their capability in doing activities and their efforts and persistence in accomplishing the desired objectives (Bandura, 1997). The underlying assumption is that if instructors consider themselves as members of a successful staff in a school, they may make further personal attempts to contribute to the effective functioning of the group (Goddard, 2001). It is argued that the sources fueling teachers' individual self-efficacy (Bandura, 1997) may affect the collective efficacy perceptions of teachers (Klassen et al., 2010). Therefore, it is stated that collective teacher efficacy is affected by the group's previous mastery experience, vicarious experience through observing other groups' mastery, and being encouraged by valued others (Goddard & Goddard, 2001). Collective efficacy is raised in case students, teachers, principals, and administrators are usually more supportive. This sense of collective capability fosters motivations of the teachers to overcome the challenges they face.

As far as Iranian EFL setting is concerned, psychological teacher variables have received adequate research attention recently (e.g., Fathi & Derakhshan, 2019; Fathi & Saeedian, 2020; Moradkhani et al., 2017; Shirazizadeh & Karimpour, 2019; Shirazizadeh et al., 2019). With regard to the previous empirical studies investigating these three variables, the more illustrating studies are reviewed here. For example, employing SEM analyses, Xanthopoulou, Bakker et al. (2007) explored the significance of personal resources including self-efficacy, optimism, and organization- oriented self-esteem as predictors of work engagement. The findings demonstrated that self-

efficacy and other personal resources could partially mediate the association among resources and engagement. In another study, Federici and Skaalvik (2011) probed the correlation between principal self-efficacy and work engagement. Three hundred principals selected randomly from Norway served as the participants of this study. Using SEM approach for the data analysis, the researchers reported that principal self-efficacy and work engagement were significantly interconnected. The researchers finally maintained that "creating and sustaining a work environment that promotes work engagement may have a positive impact for the exercising of not only the principal and teacher professions, but also for student outcomes" (p. 595).

Also, Lim and Eo (2014) investigated the associations among organizational atmosphere, collective efficacy, and burnout. The participants of the study were school instructors in Korea. SEM was employed for the data analysis. Their findings revealed that school organizational climate was positively inter-connected with collective efficacy perceptions and it was inversely related with burnout of the instructors. Moreover, it was found that climate of the school and burnout were correlated through the mediation of collective efficacy. The positive correlation between instructor individual self-efficacy and work engagement was verified by Simbula et al., (2011) who employed a quantitative longitudinal design to divulge the inter-connection among engagement, efficacy beliefs, and job resources. The results of SEM analyses for a dataset obtained from Italian teachers indicated that job resources and self-efficacy had significant effects on work engagement which in turn could also influence resources and self-efficacy.

Concerning collective efficacy studies, Goddard and Goddard (2001) carried out a project to divulge the association between individual teacher self-efficacy and collective efficacy perceptions of instructors. Hence, a sample of teachers from forty-seven schools in an urban district served as the subjects of this research. The teachers responded to the items of the valid measures of the two constructs under investigation of this project. The findings revealed that collective efficacy beliefs could significantly account for individual teacher self-efficacy. In another study, Caprara et al. (2003) probed the role of both individual and collective efficacy perceptions as the independent variables of teachers' job satisfaction. The participants were Italian teachers who completed the measuring instruments of the constructs. Multilevel structural equation modeling analyses verified a structural model in which individual and collective efficacy perceptions acted as correlates of teachers' job satisfaction. However, it was divulged that collective efficacy was a stronger correlate of satisfaction and individual self-efficacy of teachers was a mediator affecting collective efficacy beliefs.

Methodology
Participants
The participants of this study were 168 English teachers teaching at various schools and language institutes in various Iranian provinces. The teachers were selected based on convenience sampling, and their participation was entirely voluntary. The sample included both male (N = 73) and female (N = 95) teachers whose age ranged from 19 to 41(M = 25.36, SD = 7.12) with

teaching experience between 1 and 21 years (M = 7.84, SD = 3.01). All the teachers were graduate or college students of English majors at B.A., M.A., or PhD levels. They were teaching at different proficiency levels varying from elementary to the advanced levels.

Instruments

Teacher Self-Efficacy Scale. To gauge individual self-efficacy of teachers, the Teachers' Self-Efficacy Scale (TSES) validated by Tschannen-Moran and Hoy (2001) was employed in this study. This scale is used for examining the teachers' self-efficacy. This scale contains 24 items measuring three underlying components, including efficacy in engaging students, using instructional strategies, and managing the classroom. Each item was responded on a 5-point Likert scale varying from (1) "not at all" to (5) "a great deal". TSES is argued to have high reliability and validity. In the current research, the internal consistency index for the total questionnaire was high (0.87), suggesting that the reliability of the items was relatively high.

Collective Efficacy Scale. As far as collective efficacy of teachers was concerned, this construct was gauged by a short self-report questionnaire designed by Skaalvik and Skaalvik (2007). The questionnaire is a one-dimensional scale. The items assess the respondents' perception of teaching, enthusiasm, directing learner behavior, dealing with their needs, and creating a comfortable atmosphere. All items are concerned with what "we" or "teachers at this school" could do or accomplish. A sample item of this scale is as follows: "At this school, we have a common set of rules and regulations that enables us to handle disciplinary problems successfully.". The answers were given on a 5-point Likert scale from 1 (never) to 5 (always).

Engagement Scale. To measure work engagement of teachers, the questionnaire constructed by Schaufeli et al. (2002) was administered to the participant teachers. This questionnaire constitutes three underlying dimensions: Vigor (VI), Dedication (DE), and Absorption (AB). Each item is evaluated on a 7-point Likert scale which ranges from 0 ("never") to 6 ("always").

Data Collection Procedure

The goal of the existing research was to explore the associations among Iranian EFL teachers' self-efficacy, collective teacher efficacy, and their teaching engagement. The present research is a non-experimental, correlational study whose data were collected through administering three valid questionnaires measuring the constructs under investigation. The data collection began in September 2019 and lasted for three weeks. The teachers were requested to answer the items of questionnaires in the presence of the researchers. It took the respondents about an hour to answer all the items. Before answering the items, the participants were provided with the necessary explanation on how to complete the questionnaires. The participants were also ensured that their completed questionnaires and answers would be confidential.

Data Analysis

The collected data were analyzed using the SPSS AMOS 22. As a kind of data screening, the missing data and outliers were determined and checked.

During the initial analyses, no wrongly coded data were found. Moreover, the expectation– maximization (EM) algorithm was employed for random assignment of the missing items. Then, Structural Equation Modelling (SEM) was used to test the causal relationships. A set of fit indices were taken into account for the model evaluation phase. The indices used were: χ^2/df (chi-square to degrees of freedom ratio), Tucker-Lewis index (TLI), comparative fit index (CFI), goodness-of-fit index (GFI), and root mean square error of approximation (RMSEA) (Hu & Bentler, 1999).

Results

In order to make sure about the internal consistency and validity of the measures used in this research, a Confirmatory Factor Analysis (CFA) was performed in the dataset. The aim of running CFA was to verify the psychometric features of the measuring instruments of the three constructs. The obtained values of fit indices showed an overall good fit of the dataset (X^2/df = 2.242, p = 0.00, GFI = 0.973, TLI = 0.987, CFI = 0.985, RMSEA = 0.041). As far as the reliability coefficients of scales are concerned, Table 1 shows that the internal consistency of all questionnaires was more than 0.70, confirming their acceptable reliability indices. As presented in Table 1, Alpha coefficients varied from 0.77 (collective teacher efficacy) to 0.87 (self-efficacy). Also, the factor loadings for the items of the three questionnaires were significant (p < 0.001).

Table 1
Variables and Factor Loading of Items

Variable	Items	Cronbach's α	Factor loadings	*t*- value
Self-efficacy	How much can you do to get through to the most difficult students?	0.87/0.87	0.76	11.892***
	How much can you do to help your students think critically?		0.81	11.741***
	How much can you do to control disruptive behavior in the classroom?		0.78	10.928***
	How much can you do to motivate students who show low interest in school work?		0.82	12.338***
	To what extent can you make your expectations clear about student behavior?		0.88	12.385***
	How much can you do to get your students to believe they can do well in school work?		0.79	11.201***
	How well can you respond to difficult questions from your students?		0.87	10.215***
	How well can you establish routines to keep activities running smoothly?		0.79	12.691***

	How much can you do to help your students value learning?		0.82	12.550***
	How much can you gauge student comprehension of what you have taught?		0.66	12.411***
	To what extent can you craft good questions for your students?		0.86	12.336***
	How much can you do to foster student creativity?		0.84	10.284***
	How much can you do to get children to follow classroom rules?		0.71	12.123***
	How much can you do to improve the understanding of a student who is failing?		0.69	11.591***
	How much can you do to calm a student who is disruptive or noisy?		0.78	11.543***
	How well can you establish a classroom management system with each group of students?		0.82	11.892***
	How much can you do to adjust your lessons to the proper level for individual students?		0.82	11.741***
	How much can you use a variety of assessment strategies?		0.68	10.920***
	How well can you keep a few problem students from ruining an entire class?		0.80	12.338***
	To what extent can you provide an alternative explanation for example when students are confused?		0.88	12.257***
	How well can you respond to defiant students?		0.71	11.201***
	How much can you assist families in helping their children do well in school?		0.69	10.011***
	How well can you implement alternative strategies in your classroom?		0.73	8.652***
	How well can you provide appropriate challenges for very capable students?		0.78	9.867***
Collective teacher efficacy	As teachers of this school, we can get even the most difficult pupils engaged in schoolwork.	0.77/0.77	0.68	9.652***

	Teachers in this school prevent mobbing effectively.		0.71	11.458***
	As teachers of this school, we handle conflicts constructively because we work as a team.		0.66	10.523***
	At this school, we have a common set of rules and regulations that enables us to handle disciplinary problems successfully.		0.68	10.387***
	Teachers in this school successfully address individual pupils' needs.		0.71	12.408***
	At this school we are able to create a safe and inclusive atmosphere even in the most difficult classes.		0.71	11.562***
	Teachers at this school succeed in teaching language skills even to low ability pupils.		0.80	11.725***
Work engagement	When I get up in the morning, I feel like going to work.	0.83/0.83	0.79	10.212***
	At my work, I feel bursting with energy.		0.85	11.618***
	At my work I always persevere, even when things do not go well.		0.81	11.458***
	I can continue working for very long periods at a time.		0.82	10.523***
	At my job, I am very resilient, mentally.		0.89	10.387***
	At my job I feel strong and vigorous.		0.88	12.408***
	To me, my job is challenging.		0.68	10.219***
	My job inspires me.		0.71	11.618***
	I am enthusiastic about my job.		0.71	11.458***
	I am proud on the work that I do.		0.80	10.523***
	I find the work that I do full of meaning and purpose.		0.68	10.387***
	When I am working, I forget everything else around me.		0.67	12.408***
	Time flies when I am working.		0.68	10.562***
	I get carried away when I am working.		0.71	12.725***
	It is difficult to detach myself from my job.		0.71	11.842***

I am immersed in my work.	0.80	11.278***
I feel happy when I am working intensely.	0.88	10.813***

Note : *** significant at the 0.001 significance level

Then, the descriptive statistics (i.e., mean & standard deviations) and correlations (see Table 2) between the variables and their components were calculated. As shown in Table 2, the total teacher self-efficacy and work engagement are significantly correlated ($r = .51$, $p < .01$) and their correlation coefficient is higher than that between collective teacher efficacy and work engagement ($r = .41$, $p < .01$).

Table 2
Descriptive Statistics and Correlations Between Variables

	M (SD)	1	2	3	4	5	6
1. CTE	20.68 (8.13)	1.00					
2. SE	42.63 (11.71)	.24*	1.00				
3. IP	38.40 (11.47)	.27*	.28*	1.00			
4. CM	43.79 (13.08)	.25*	.24*	.27*	1.00		
5. Total SE	129.37(31.22)	.31**	.28*	.30**	.31**	1.00	
6. Work engagement	45.83 (15.87)	.41*	25*	.32**	.33**	.51**	1.00

TE= collective teacher efficacy; SE= Student engagement; IP= Instructional practices; CM=classroom management; Total SE= Total teacher self-efficacy.
* $p <.05$.
** $p < .01$.

In the follow-up analysis, SEM was adopted to investigate the structural model accounting for the relationship among the three teacher-related constructs. For the SEM analyses, two hypothetical models (see Fig. 1) were tested. As the structures of the associations for the two proposed models are identical, they can be statistically interpreted in the same way. However, the two models were examined to substantiate the results. Also, the unique contributions of the two predictor variables (i.e., the collective efficacy & individual self-efficacy) were taken into considerations by examining fit indices of the hypothesized models. The model evaluation indicated a satisfactory fit for the data (Table 3). As model A indicates, the correlation coefficients between the three constructs turned out to be significant. More specifically, individual self-efficacy and collective efficacy had 8 % of shared variance ($R^2 = .286$). Teacher individual self-efficacy and work engagement demonstrated 23.7% common variance ($R^2 = .487$). Likewise, collective teacher efficacy and work engagement shared 10.5 % of variance ($R^2 = .325$). Therefore, it can be argued that teacher individual self-efficacy acted as a more powerful correlate of work engagement than collective teacher efficacy.

Consequently, to identify the unique contribution of teacher individual self-efficacy and collective efficacy separately, incremental R^2 in correlational analyses were considered by juxtaposing the amount of variation in work engagement demonstrated in the two models. As shown by model B, collective

teacher efficacy and teacher self-efficacy jointly accounted for 31% of the variance in work engagement. Consequently, it could be stated that collective teacher efficacy accounted for the additional percentage of 8% of the variation of teacher work engagement, beyond individual teacher self-efficacy as the single correlate (ΔR^T = .31–.23 = .08). Furthermore, the unique impact of teacher individual self-efficacy as the predictor of work engagement above the collective teacher efficacy factor was 21% (ΔR^T = .31–.10 = .21). Given these results, it can be argued that the unique impact of individual self-efficacy was greater than the impact of collective teacher efficacy in predicting work engagement.

Table 3
Result of Fit Indices

	χ2	χ2/df	GFI	TLI	CFI	RMSEA	Δχ2
Models A and B	6.13	2.24	.97	.98	.98	.04	
Model A1 (β CTE = 0)	11.39	3.45	.96	.97	.97	.05	5.26*
Model A2 (β TSE = 0)	12.01	3.76	.97	.96	.97	.03	5.88*

Note. CTE= collective teacher efficacy; TSE= teacher self-efficacy.
* *p* <.05.

Afterwards, the unique effect of collective efficacy and individual self-efficacy of teachers on work engagement was tested by making every of the pertinent beta weights constrained to zero and then their relevant χ2 differences were investigated in model B. In case constraining beta weights to zero should lead to substantial decrease in χ2, the unique effect of each construct in predicting work engagement was considered to be significant. The values for fit indices of the hypothesized models are shown in Table 3. Constraining beta weights to zero in model A1 (*β* collective teacher efficacy = 0) as well as model A2 (*β* teacher self-efficacy = 0) resulted in remarkable chi-square changes [model A1 (*β* collective teacher efficacy = 0): Δχ2 (1, N = 168) = 5.26, *p* <.05; model A2 (*β* individual self-efficacy = 0): Δχ2 (1, N = 168) = 5.88, *p* < .05]. As illustrated by these result, it can be concluded that collective efficacy and individual self-efficacy can significantly predict work engagement for Iranian EFL practitioners.

Figure 1
Collective Efficacy and Individual Self-Efficacy as Predictors of Work Engagement

Model A

Model B
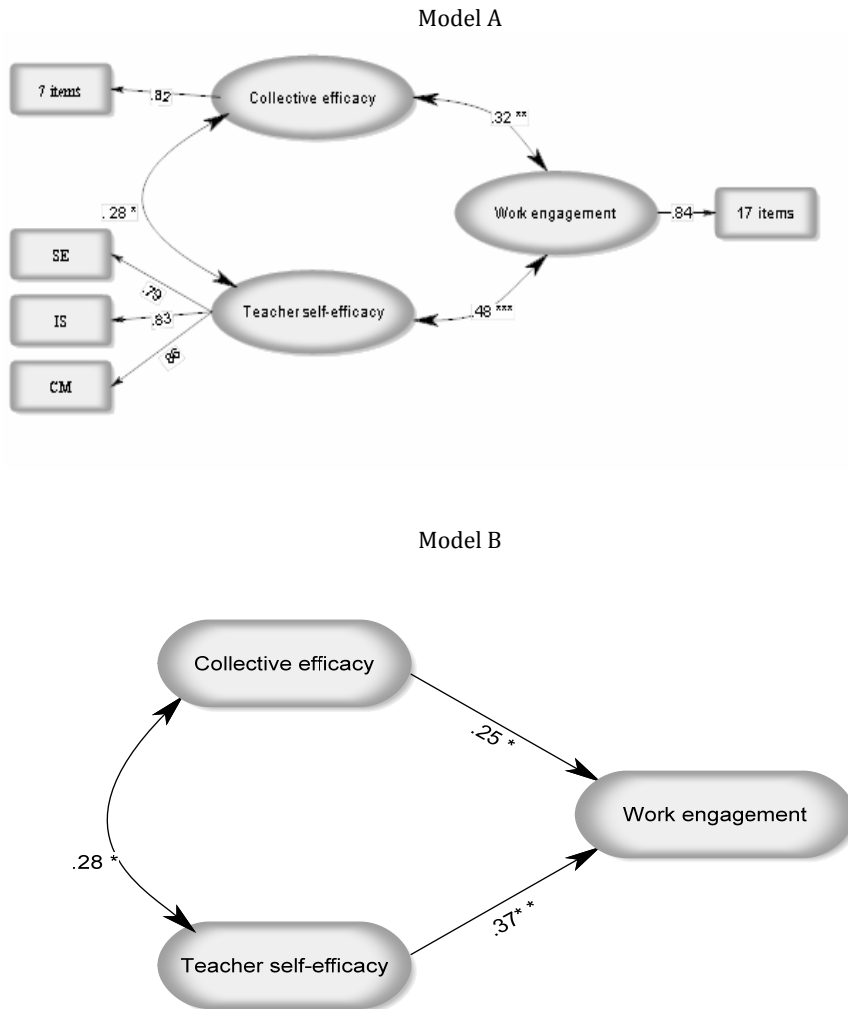
*p < .05. ** p < .01. ***p < .001

Discussion and Conclusions

The current research sought to investigate the contribution of teachers' individual self-efficacy and their collective efficacy as the predictive constructs for work engagement among Iranian EFL practitioners. The analyses of SEM results provided significant findings. First, it was found that collective efficacy of teachers served as a substantial predictive variable for teacher work engagement. This finding is partially supporting the Skaalvik and Skaalvik's (2019) study, which reported that collective efficacy was indirectly correlated with engagement via the mediation of teacher self-efficacy. Since teacher engagement can be regarded as the direct opposite of burnout (Maslach & Leiter, 2008), the present findings partially support those of Skaalvik and

Skaalvik (2007), who found that perceived collective efficacy and teacher burnout were negatively correlated. Similarly, Lim and Eo (2014) reported that school atmosphere and teacher burnout were negatively correlated via the mediation of collective teacher efficacy.

It might be argued that teachers with greater collective efficacy beliefs are more engaged in their work by persisting in their attempts, setting higher goals, and doing their best in solving their problems. Collective efficacy perception of the EFL teachers might have enhanced their vigor, dedication and absorption in their teaching career. In other words, it may be stated that teachers with higher levels of collective efficacy beliefs become more energetic and mentally resilient during their work, devote efforts in their work, and persist while encountering difficulties. Such teachers are also more likely to feel a sense of effectiveness, interest, motivation, as well as pride and experience a sense of psychological identification with their work (Kanungo, 1982). These teachers may be totally focused and thoroughly immersed in their teaching activities in a sense that they have difficulty getting detached from their work and time passes quickly for them.

Moreover, the results of SEM analyses divulged that instructor individual self-efficacy was a stronger correlate of teacher work engagement than collective teacher efficacy. In other words, it was revealed that teachers' individual sense of efficacy could play a more significant role in affecting work engagement of EFL teachers. EFL teachers are likely to have good collaboration as well as team work and support each other; however, they are more reliant on their own competencies and skills when they are engaged in the actual practice of teaching. This finding is particularly in line with those of Skaalvik and Skaalvik (2019), who found that "in the actual teaching situation, the teachers are primarily alone and must trust their own skills and abilities" (p. 1406). Therefore, further teacher engagement is more affected by teachers' perceptions of their individual teaching abilities than by a sense of group competencies or being in a supportive environment. However, the significance of collective teacher efficacy should not be ignored as it is argued that individual self-efficacy beliefs are significantly influenced by collective efficacy perceptions (Goddard, & Goddard, 2001; Kurt et al., 2011; Skaalvik & Skaalvik, 2007).

Taken together, the results of this research showed that, if EFL practitioners have positive perceptions of their abilities in using effective teaching strategies, engaging students, and managing their classrooms and also if they possess positive perceptions of their own group's competencies, efforts, and cohesiveness, they are more likely to be engaged in their teaching activities (Nir & Bogler, 2008). More self-efficacious teachers can overcome challenges they face, exert more effort in their teaching, and are more perseverant in encountering difficult situations (Bandura, 1989). Such teachers are claimed to be more motivated and engaged in their teaching activities (Llorens et al., 2007). This finding is in line with that of Klassen & Chiu (2010), who found that practitioners with stronger self-efficacy beliefs are may be more engaged and satisfied with their teaching activities. Also, this finding is also in line with those of Granziera and Perera (2019) who investigated a structural model connecting teachers' individual efficacy perceptions, engagement, and satisfaction. Their

findings indicated that these teacher-related constructs were significantly inter-connected. Furthermore, it can be argued that increasing instructors' individual self-efficacy would contribute to enhancing their commitment and professional responsibility (Canrinus et al., 2012), thereby enhancing their work engagement.

As far as the world of practice is concerned, identifying the antecedents of teachers' work engagement can have significant implications. Exploring the underlying causes of work engagement may contribute to improving positive functioning of teachers, their teaching attitudes, and individual health (Schaufeli & Salanova, 2008). Teacher education programs should pay further attention to teacher work engagement and its causes. In so doing, teacher educators and policy makers are recommended to train supervisors and language school principals to raise their awareness of the emotional aspects of their teachers and to help them give helpful support to their teachers. Additionally, language centers, schools, and institutes can improve teachers' individual sense of efficacy and their collective efficacy by giving organizational support via establishing a friendly atmosphere and sense of community between teachers and administrators. Such organizational support is likely to enhance job satisfaction and work engagement among EFL teachers.

One notable limitation of the present research is the fact that collective efficacy was considered as the individual-level construct which was characterized as every practitioner's perceptions of the collective competencies of the faculty at the institution or school. However, instructors of the same institution are likely to have different perceptions of their conjoint competencies. This is of high significance as it is claimed that a teacher's individual perceptions about the competencies of the faculty can influence his or her teaching performance and functioning. As a result, future researchers are recommended to investigate this construct at the school level (Skaalvik & Skaalvik, 2019). In addition, future researchers are suggested to utilize qualitative research methods so as to obtain more in-depth knowledge of the associations among teacher constructs in EFL contexts.

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The Aesthetics of Trauma in Fadia Faqir's *The Cry of the Dove*

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Abstract
Since the last decades of the 20th century, trauma theory has gained academic status for analyzing literary representations of various forms of violence, oppression, and social upheavals. Drawing upon the Freudian model of trauma and more recent categorizations of post-traumatic stress disorder, this paper aims to study Fadia Faqir's third novel, *The Cry of the Dove.* The author, who writes about and from diaspora, leads her young Muslim female character to fight for her identity in a Western country. The paper analyzes the literary strategies and narrative techniques in this feminist trauma narrative to indicate how the author has tried to represent what is originally marked by voicelessness. In order to imitate the forms and symptoms of the impact of trauma, the novel's narrative style features fragmentation, non-linearity, repetition, poetic prose, and stream of consciousness. This paper proves that the interplay of these techniques helps the reader understand the evasive nature of traumatic experience and engage her or him emotionally with the narrator's story. Cathy Caruth, Anne Whitehead, and Laurie Vickroy are among the main theoreticians of the research.

Keywords: trauma, diaspora, Fadia Faqir, *The Cry of the Dove,* narrative techniques

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Introduction

Nancy Miller (2002) proposes "the age of trauma" (p. 11) for the current age. The world has seen a large variety of violence and conflict during the last two decades and trauma theory has gained academic status for analyzing literary representations of various forms of violence, oppression, and social upheavals. Literature, according to Cathy Caruth (1996) "opens a window on traumatic experiences because it teaches readers to listen to what can be told only in indirect and surprising ways" (p. 6). Moreover, it is through literary works that authors are able to scrutinize more deeply the psychological effects of events and to reveal the human dimension of traumatic experiences.

The empirical basis of trauma theory has been mostly in Holocaust, the two World Wars, and more recently September 11, and has disregarded the miseries of less fortunate nations who have been silenced. Radstone (2007) observes that "it is the sufferings of those categorized in the West as other that tend not to be addressed via trauma theory" (p. 25). Craps (2013) verifies this notion; "the funding texts of the field (including Caruth's own work) largely fail to live up to the promise of cross-cultural ethical engagement; they marginalize or ignore traumatic experiences of non-western or minority cultures" (p. 46). To lead trauma theory away from its Eurocentrism and in order to decolonize trauma studies, emphasis should be placed on narratives that provide insight into phenomena such as slavery, forced immigration, Islamophobia, and racism.

This paper tends to shift attention by bringing contemporary psychological and cultural trauma theory together to study a novel by a female Muslim novelist who writes about and from Diaspora. Faqir in this novel, *The Cry of the Dove,* tells the story of a Muslim female immigrant who has been the victim of tribal and patriarchal value system in her own country and the target of racist and Islamophobic hatred in the host country. Faqir develops stylistic strategies to reproduce the especial function of traumatic memory with its "fragmented components of frozen imagery and sensation" (van der Kolk & van der Hart, 1999, as cited in Moran, 2007, p. 4). Her stylistic feature reflects the sensorial details and broken pieces of images related to her trauma of loss and separation.

This study tries to explore how Fadia Faqir utilizes modernist narrative forms to "reproduce and aestheticize the characteristics of traumatic memory" (Moran, 2007, p. 3). As Whitehead (2004) establishes, "the rise of trauma theory has provided novelists with new ways of conceptualizing trauma and has shifted attention away from the question of what is remembered of the past to how and why it is remembered" (p. 3). As some scholars have pointed out, "modernist narrative form, with its emphasis on interiority, memory, psychological verisimilitude, and its development of fragmented, nonlinear plots, provides an ideal medium for the transcription of traumatic experience" (Herman, 1992, as cited in Moran, 2007, p. 3). By utilizing these literary devices and narrative techniques, the author aims to illustrate how deeply the traumatic event has impacted her main character's life.

Fadia Faqir is an acclaimed writer who was born in Jordan in 1956, and is an Honorary Fellow of St. Mary's College at Durham University now. She has written a number of academic papers on Islam, gender, and democracy, and is a serious challenger of 'honor killing' on which she has written broadly. This

theme is reflected in her third novel, *The Cry of the Dove,* which was published in 2007. Faqir sets the story of *The Cry of the Dove,* also known as *My Name Is Salma,* between the Middle East and Britian. "As an Arab woman who writes in English, Faqir displays the intricacies of postcolonial discourse. (Her novels) stand between East and West, and combine Arabic traditional storytelling with postmodern narrative mode" (Al Maleh, 2009, p. 282).

This novel investigates the immigration of its central character, Salma, who is the victim of what is called honor killing. Salma gets pregnant before getting married and runs away from her brother who plans to kill her to repair the family's lost honor. To protect Salma from family 'honor killing', her teacher introduces her to the police and they take her into "protective custody". Salma spends several years in prison where her baby girl, Layla, is born. The child is taken away from her immediately. Salma is then rescued and adopted by Ms. Asher, under the name of Sally Asher. She takes Salma into England. As an unskilled Bedouin woman, Salma has to confront the conflicts of forced immigration, assimilation, racism, and separation. This settlement in Britain exposes Salma to a different culture and religion, which she finds it very difficult to adapt to.

It is in Exeter, a new homeland, that Salma undergoes a painful process of forming a new identity, with a new name, Sally Asher, and a new language with which she fuses Arabic. She is still obsessed with traumatic past experiences echoing from Hiama, her home village, while the terror of being shot by her own family members never leaves her sedate. She gets a job as a seamstress and plans to save money to go back to her homeland and her daughter, whom she calls Leila. Even after seventeen years of separation, she still thinks of her mother, daughter, and village; she plans to go back home in spite of all the dangers awaiting her.

Review of Literature

The present paper analyzes the linguistic and stylistic mechanisms in *The Cry of the Dove*, as a feminist trauma narrative to indicate how the author has tried to represent what is originally marked by voicelessness. Most of the studies which have been conducted on the novel focus on the question of gender and religious identity. For instance, El-Miniawi in "The Crisis of Identity in *My Name Is Salma"* (2016), traces the character's search for and assertion of identity. She tries to prove that Salma undergoes a physical and psychological change from a state of pure innocence to one of organized experience.

Hasan Majed in his PhD dissertation at the university of Sunderland entitled as "Islam and Muslim Identities in Four Contemporary British novels" (2012) examines Islam and Muslim identities in Fadia Faqir's *The Cry of the Dove* in third chapter. He argues that this novel incorporates both colonial and post colonial discourse.

Within the same framework, Esra Mirze Santesso in *Disorientation: Muslim Identity in Contemporary Anglophone Literature* (2013) focuses on the Muslim immigrants' experiences in the novels published in Britain after 9/11. The chapter entitled as Mimicry in Fadia Faqir's *The Cry of the Dove,* examines the promise as well as the limits of 'British Muslim' identity and the challenges of coordinating a non-Western religious identity with the secular policies of Western states.

Seda Canpolat, in "Scopic Dilemmas: Gazing the Muslim Woman in Fadia Faqir's *The Cry of the Dove* and Leila Aboulela's *Minaret*" (2015), describes the representation of racist and sexist gazing in two British Muslim women's novels. She argues that both female Muslim protagonists veer between racialized and sexualized ways of being seen. We can claim that *The Cry of the Dove* has not been investigated through trauma theory, and the stylistic features of the novel as a trauma narrative has not been identified in any forms of academic research.

An Overview of Trauma Theory

To read *The Cry of the Dove* within the framework of trauma studies necessitates a quick look at the origin of the theory and its definition. Drawing upon the Freudian model of trauma and the more recent categorization of post-traumatic stress disorder (PTSD), most cultural and literary theorists position trauma as a tardy reaction to an agonizing incident that one cannot fathom. Bond and Craps define it as a "belated response to an overwhelming event too shattering to be processed as it occurs" (2019, p. 4). In this definition, obviously, the words *belated* and *overwhelming* are considered as significant features of traumatic experience; thus, it can be inferred that, because the traumatic event is very devastating, it cannot be unraveled on the spot and is consequently delayed. Not surprisingly, the delay in dealing with trauma occurs in memory and the excessive pain or agony in the traumatic situation disrupts the memory's function, so that the traumatic incident "could not be assimilated at the time of its occurrence and only belatedly in its insistent and intrusive return" (Wolfreys, 2002, p. 132). Accordingly, the response to traumatic events occurs sometime after the event.

The difficulty of integrating traumatic experience into memory due to its 'overwhelming' nature affects its retrieval. The traumatized subject is unable to process the event as it occurred; the interrelationship and sequence of events are disrupted and only fragmented images or excited senses are preserved. Luckhurst (2008) emphasizes the inaccessibility of traumatic memories and the metamorphosis they undergo in the process of revival. He verbalizes this process as follows: "traumatic memories are repressed as they are formed, leaving them unavailable to conscious recall; subsequently, they recur in various displaced ways, as hallucinations, flashbacks, or nightmares" (p. 3). Put differently, due to the enormity of the traumatic experience, the unconscious tends to repress it; hence it has to get transformed in order to find some outlet in the conscious mind.

Bond and Craps (2019) accentuate the indefinability of trauma by using the term "slippery". They go on to define it as "blurring the boundaries between mind and body, memory and forgetting, speech and silence. It traverses the internal and external, the private and the collective" (p. 5). The fluctuation they refer to can explain the difficulty a traumatized subject experiences in diagnosing and healing the source of her/his distress. As Bohleber maintains, trauma can be a permanent experience with unforeseen durability: "Trauma, and being overwhelmed by its remembrance, was not only a concern for the surviving victims, but also had specific consequence for their children and children's children" (2010, p. 102). In addition to the

psychoanalytic aspect of trauma, its effect on literary studies is also noteworthy.

Since the 1990s, a group of scholars including Caruth (1996), Felman and Laub (1992), and Herman (1992) have examined the concept of trauma and its role in literature. In her pioneering study of literary trauma, entitled *Unclaimed Experience: Trauma, Narrative, History,* Cathy Caruth (1996) suggests "trauma is an unsolvable problem of the unconscious that illuminates the inherent contradictions of experience and language" (p. 3). She goes on to elaborate on this "insolvability" by stating: "trauma is an injury to the psyche that language often fails to adequately represent or express. Trauma is both highly resistant to articulation and wildly generative of narratives that seek to explicate the 'unclaimed' originary experience" (p. 76). The paradox of resisting articulation on the one hand and generating narrative on the other is exactly the focal point that literary studies, including the present article, try to elucidate.

Other critics have pointed to the same difficulty in representing the traumatic experiences; Ronell (1994) declares that, "trauma can be experienced in at least two ways….as a memory that one cannot integrate into one's own experience; and as a catastrophic knowledge that one cannot communicate to the others" (p. 313). The unrepresentability of trauma experience poses a paradox or contradiction; the paradox of having to remember and being unable to communicate what you remember. Whitehead (2004) acknowledges such a paradox and asks, "if trauma comprises an event or experience which overwhelms the individual and resists language or representation, how then can it be narrativised in fiction" (p. 3)? Whitehead (2004) provides an answer for this contradiction in her *Trauma Fiction,* pointing out that "trauma fiction overlaps with and borrows from both postmodern and postcolonial fiction in its self-conscious deployment of stylistic devices as modes of reflection or critique" (p. 14). In this fashion, the solution to fill the gap between memory and its expression could be traced mostly to the level of form rather than content; i.e. stylistic measures of narrative techniques.

Vickroy (2002) attests the above mentioned claim and defines trauma narratives as narratives that "go beyond presenting trauma as subject matter or in characterization; they also incorporate the rhythms, processes, and uncertainties of trauma within the consciousness and structures of these works" (p. 24). Vickroy's emphasis on the "structure" is further explained by Caruth. She (1996) suggests that "if trauma is at all susceptible to narrative formulation, then it requires a literary form which departs from conventional linear sequence" (p. 13). These critics advocate departure from the conventional and realistic mode of narration and experimentation with innovative narrative techniques for the communication of the traumatic experience.

The representation of the traumatic experience, a psychological event which is originally marked by unrepresentability and voicelessness, requires structures and techniques that may communicate the unspeakable. Whitehead (2004) identifies the characteristics of literary imitation of trauma experiences, which can be found within fictional trauma representation; she maintains that, "novelists have frequently found that the impact of trauma can only be

adequately represented by mimicking its forms and symptoms, so that temporality and chronology collapse, and narratives are characterized by repetition and indirection" (p. 4).Therefore, shattering the chronological order can be regarded as the primary narrative technique in trauma literature. Wolfreys (2002) also refers to the same mechanisms in writing or reading trauma narratives: "to read trauma is to register the sign of a second experience and recognition of the return of something spectral in the form of a trace or sign signifying, but not representing directly, that something having occurred, has left its mark, an inscription of sorts on the subject's unconscious, …and does return repeatedly" (p. 133). In other words, lack of directness is an indispensable feature of trauma narratives. Perhaps dissimulation and disguise are two terms which can define the ghostly nature of trauma literature very well.

These critics have all stressed the inexpressible experience of trauma and the movement of structural repetition. Repetition is also a key term which is inseparable from trauma experience. As Žižek (2001) avers, "there is an inherent link between the notions of trauma and repetition, signaled in Freud's well-known motto that what one is not able to remember, one is condemned to repeat…as such, it repeats itself indefinitely, returning to haunt the subject" (p. 37). Moran (2007) draws attention to the somatic, as opposed to linguistic, aspect of memory and maintains that, "traumatic events persist as preverbal 'body memories' that resist narration; they recur as incomprehensible and intrusive memory fragments that are almost hallucinatory in their intensity" (p. 8). This lack of verbal competence is acknowledged by Herman as well: "The excessive arousal of emotions in trauma victims leaves them almost mute. These memories remain "wordless and static" (1992, p. 175). Indeed, as Herman carries on, the trauma story is "pre-narrative, it does not develop or progress in time, and it does not reveal the story teller's feelings or interpretation of events" (p. 176). Defying the conventional narrative time lines leads to another stylistic feature in the genre. Trauma stories instead feature "fragmented components of frozen imagery and sensation" (Moran, 2007, p. 47). As mentioned before, trauma involves an enigma; a relentless desire to repeat the traumatic memory and the impossibility of communicating it to others. Due to the so called unspeakable, unrepresentable nature of traumatic experience, "trauma theory is forced to engage with the paradox of the incommensurability and impossibility of language and representation in relation to trauma on the one hand, and the desperate need for means of expression on the other" (Wiel, 2014, p. 14). Modernist and postmodernist narrative techniques are suitable choices for representing the unrepresentable traumatic experience.

It seems that "trauma aesthetics correspond with the modernist and postmodernist turn in critical theory towards fragmentation, a decentered self, non-linearity, and stream of consciousness" (van der Kolk & van der Hart, 1999, as cited in Moran, p. 16). Corresponding to the ruptured and disorganized memory of the traumatized subject, trauma literature reflects the same tendency: "Following trauma theory, trauma fiction thus largely privileges narrative rupture as the only proper work of a trauma aesthetic" (Luckhurst, 2008, p. 89). Following the nature of traumatic memory which is fragmented,

"the trauma aesthetic is uncompromisingly avant-garde: experimental, fragmented, refusing the consolations of beautiful form, and suspicious of familiar representational and narrative conventions" (p. 81). As a consequence, instead of representing trauma in literature, the unrepresentability of the experience is depicted through stylistic methods. "Trauma victims have often been observed to recount their experiences in incoherent and fragmented narratives; it is due to the excessive arousal in a traumatic situation [that] significantly alters processes of encoding, storing, and later consolidating a memory and its recall" (Bohleber, 2010, p. 129). That means, the scar that is imprinted on the psyche by the unexpectedness and severity of the traumatic experience fragments memory and hence linguistic representation.

The chronological temporality of the linear narrative dominant in realistic novels allows the reader to create an organized sense of time, while trauma survivors often "report feeling that time is standing still" (Bohleber, 2010, p. 97). In trauma narratives, such a disturbance in the sense of time is shown in the flashbacks and repetitions in which the past and present are hardly distinguishable. These techniques aim to mirror the distorted perception of time. The affliction the traumatized subjects undergo cannot be traced to what they recount; rather, their distress must be diagnosed in how they narrate the suffering.

Discussion

The present study aims to explore literary techniques by which Fadia Faqir has sought to represent trauma, or narrate the unnarratable, in *The Cry of the Dove.* It attempts to identify the implications of Caruth's conceptualization of trauma for narrative fiction generally, and for Faqir's *The Cry of the Dove* in particular. The perceived inadequacy of the traditional narrative style has created the need to develop a new narrative that can effectively represent trauma. The tendency of realist narratives to produce a fixed meaning contradicts the inconceivable nature of trauma experience. The structure of the narrative in *The Cry of the Dove* incorporates the chaos in Salma's traumatized mind and follows the structure of traumatic memory.

Fadia Faqir's style in *The Cry of the Dove* is far from being realistic; the reader is fascinated by her non-linearity, polyphony, and references to Arab sources of storytelling. Nash (2007) observes that "there is an exceptionally close connection to Arabic narrative forms in her oeuvre" (p. 22). Her prose gives way "to snatches of verse and song, both folk forms and high art by Arab writers, such as Nizar Qabbani and Mahmoud Darvish" (Chambers, 2011, p. 61). In an interview, Faqir refers to some important points regarding the narrative techniques she employs in her novels in general, and in *The Cry of the Dove* in paricular; she asserts: "I don't believe in linear narrative, it doesn't appeal to me …. My narrative is always fractured, the glass is held in the hand and then dropped to the floor. A fractured narrative could perhaps become more tragic and more beautiful than the whole" (Faqir, 2007, as cited in Chambers, 2011, p. 64).

It seems that the broken glass could also be considered as a proper image for a person who has experienced the overwhelming effects of a trauma and is now suffering what Bolheber (2010) calls "the dissociated state of self"

(p. 101). He defines the concept of dissociation as "the splitting of consciousness" (p. 102), and explains it in these terms, "in the patients who have undergone trauma, parts of their psyche are like split-off states of the self and when activated give rise to a severely altered state of consciousness" (p. 130). The traumatic experience involves fragmentation and disconnection; the traumatized subject's sense of self and her environment might differ from what is supposed to be normal and real. So much like a broken glass scattered on the floor, the traumatized subject's speech is dispersed and fragmented, which can reflect the fractured structure of memory.

Non-Linearity

"The so-called nonlinear narratives are considered in literary theory, those that lack a straightforward storyline" (Larocca, 2015, p. 82). Faqir reminds that her novel keeps shifting between the past and present. "The character...takes one step forward then two steps back, and is torn between her past and the present. The juxtaposition of the past with present serves to reinforce the idea that the past is alive in the present" (Faqir, 2007, as cited in Chambers, 2011, p. 64). Fragmentation in *The Cry of the Dove* is thematic as well as formal, which, in the disjointed and nonlinear narrative style, reinforces the theme of 'dissociated state of self'. Non-linearity, silence, and gaps in *The Cry of the Dove* are expressions of the rupture or trauma that is experienced by Salma.

Felman and Laub (1992) describe testimony as "fragmented and broken in form, composed of bits and pieces of memory that has been overwhelmed by occurrences that have not been settled into understanding or remembrance" (p. 5). In Salma's narration of the events, the reader has to bring the pieces of her thoughts together to be able to make sense of it. One can notice these disjointed fragments all over the novel, but as a striking example, it could be referred to a story told by her mother when she was still in Hima. Later on, she remembers the pieces of the story and inserts them within her thoughts:

> I took my pipe and walked to my favorite spot at the very top
> of the mountain where I play happy tunes watching the sun
> sink into the water and listening to the jingling of cow bells
> and the bleating of sheep. The kerosene lamps were lit one by
> one in the valley. It reminded me of my village Hima, my
> mother, and my teacher Miss Nailah. She no doubt would swim
> out of the castle to safety and then her patient camel would
> carry her home (Faqir, 2007, p. 43).

The last line refers to the story of 'Jubayyana and the camel' told by her mother when Salma was a little girl. In these lines, "the past emerges in bits and pieces and the plot strays in time, resisting chronology and closure" (Whitehead, 2004, p. 35). As in doing a puzzle, the reader who bears witness to Salma's traumatic memory and life experiences, has to put the bits and pieces from different places to make a tentative picture of what has happened to her. Larocca (2015) considers such narratives as a 'labyrinth' and maintains that, "the narrative develops in circles and parallel levels, in a web of different times and places all intertwining and at the same time excluding each other" (p. 82). The reader's active role in passing through the 'labyrinth' of such a narrative,

joining the creative process, and thus making sense of it becomes evident.

The inversion of the traditional linear concepts of time as represented through an orderly, sequentially progressing plot, is an important narrative strategy that works to engage the reader with the issues of trauma experience. For example, the sequentially progressing plot is disrupted in the section in which the dialogues are interrupted with cartoon scenes; "'Did you have a good time yesterday?' Tom was chasing the Jerry around the house. 'Yes, thank you.' 'Who was it?' Jerry was trying to tie Tom's tail to an electric iron. 'A guy who has a health shop'" (Faqir, 2007, p. 54). The intrusion of cartoon scenes disrupts and fragments the narrative. This style of writing evokes a mood of detachment, it hints at the impossibility of any kind of effective and genuine communication between Salma and other characters. This sense of aloofness and distraction suggests the difficulty of talking about herself and her traumatic experiences.

The fragmentation of the narrative that mirrors the effects of the trauma is also represented by the inversion of time concept. The time stretches backward and forward between the past, present, and future. This provides a sense of timelessness, a concept that is very relevant to experiencing and recollecting the trauma. Some paragraphs in *The Cry of the Dove* go back in time to narrate Salma's early experiences in her home village, some describe her prison days, some refer to her temporary stay in Lebanon, some of them tell the story of her voyage to Britain, some describe her early settlement in Exeter and friendship with Parvin, and some refer to present time and her settlement in Liz's house. "The present and past events are tightly braided as Salma finds herself falling on past memories as they left permanent scars on the present and her future life" (El Miniawi, 2015, p. 61). The juxtaposition of the past and present serves to reinforce the idea that Salma's traumatic past is still alive in the present, and intrudes to haunt her memory and the narrative alike.

Stream of Consciousness

Stream of consciousness approach employed by modernist and postmodernist fiction writers is an attempt to express how the mind works. According to Abrams (1993), "stream of consciousness is the name for special mode of narration that undertakes to reproduce, without a narrator's intervention, the full spectrum and the continuous flow of a character's mental process" (p. 202). "Stream of consciousness point of view creates a sense of dissociation and aloofness" (Versluys, 2009, p. 24), which are among the key symptoms of traumatic memory. In *The Cry of the Dove,* the flow of thoughts draws Salma back and forth from past to the present and vice versa. She jumps from one idea to another in a way that the readers feel the agonies of her traumatized psyche; "she yanked, bit, belted, until I turned black and blue and sank blissfully into darkness, walking alone under electric poles, whose shadows were getting longer and longer, I hugged my shopping bag. No, it was not easy living here in England as an 'alien' which was how the immigration officer had described me" (Faqir, 2007, p. 34). In the above extract, Salma first remembers how her mother got infuriated when she heard about her pregnancy and hit her, then notices the shadow of electric poles while she is walking in the street, and once again her mind sways in the past, remembering the time she immigrated to England.

In some parts of the novel, the rapid shifts in the way Salma thinks makes it rather impossible to trace and puzzle out which part of the story it is from and what she is talking about. For instance, in her flight to Greece the flow of her thoughts revolve in a way that is difficult to discern:

> A long well, cold water, seeds popping open, a body breaking free, yielding, 'I wish I had never set my eyes on you', 'Cest la vie ma fille!', 'Jesus died to save you all', 'you are on you own, Salma', a gun slung on a shoulder, grime-filled toe nails. 'Enough, shoot me!', throwing up in the bin, ...'too much past', doves crying, sniffing falafel, 'Min il-bab lil shibak' .... get married to Sadiq, eating dry bread, Noura's blood and snot running down her chin, a heart-wrenching howl (Faqir, 2007, p. 241).

This excerption, which includes short sentences and phrases, reflects the chaotic state of Salma's thoughts and feelings. These intrusive memories from different people and places which suddenly rush to her mind demonstrate her suffering from the trauma and inability to cope with it even after seventeen years. The author employs these narrative techniques to reverberate the inner voice of Salma's dissociated self. Balaev (2014) believes that "the use of stream of consciousness to describe the traumatic experience is to create a dissociating effect" (p. 135). Replicating the experience of thinking through stream of consciousness allows the reader to enter the mind of the traumatized character of the novel and get access to her gloomy world since the words fail to express what is marked by voicelessness.

Poetic Prose

In some parts of the novel, poetic overtones can be heard. A melodic style, harmonized by integration of emotions and affects, "releases language from the governing body of ideas into the life of the soul expressed through the incessant eruption of musical motifs, ... the states of thought, in no logical order, in the form of bursts of thought rising from the depths of the self" (Dujardin, 1991, p. 135). Challenging genre boundaries and establishing a poetic language seem to be at the heart of trauma aesthetics. Onega and Ganteau (2011) identify the importance given to formal experimentation as a way to "shock readers into affective participation and reflexive thought as well as understanding of trauma" (p. 270). The incoherent words that the author repeated again and again with very slight modification in reference to different characters are finally phrased as a final tribute to her daughter; "Layla was emerald, Indian silk cascading down from rolls, fresh coffee beans ground in an ornate sandalwood pestle and mortar, honey and spicy ghee wrapped in freshly baked bread, a pearl in her bed, ... pure perfume sealed in blue jars, ... a full moon hidden behind translucent clouds... the clear whiteness of my eye.... the blood pumping out of my broken heart" (Faqir, 2007, p. 258). Figurative language as a structuring device is employed in some parts of the novel notably when Salma is meditating on her daughter. Her use of metaphorical language gives the reader a vivid impression of a mind full of scattered ideas that will not integrate into a pattern.

This refrain which is repeated on several pages with its oriental Arab elements and richly sensual imagery "[is] used to trap the reader in a mesmerizing image or spectacle, to render any form of distance impossible" (Onega & Ganteau, 2005, p. 210). Faqir employs rhythmical narrative, symbolic, and metaphorical devices as a way to address feelings, senses, and emotions. Through breaking the boundary of genres (fiction and poetry), the author explores a way to communicate the overwhelming, unspeakable experience of trauma. "Trauma is both highly resistant to articulation and wildly generative of narratives that seek to explicate the 'unclaimed' originary experience" (Caruth, 1996, p. 76). Onega and Gateau (2005) in their joint introduction to the edited collection of *Ethics and Trauma in Contemporary British Fiction,* contend that, "through the process of intensification (through hyperbolical soliciting of affects), the text becomes rhetorically, thus pragmatically, iconic of PTSD (posttraumatic stress disorder), by relying not only on the representational but also on the performance of its affects" (p. 17-18). "Trauma's affects can indeed said to be excessive, overwhelming, which is why a cognitive aesthetics of trauma emphasizes containment of these affects through symbolization" (Wiel, 2014, p. 172), and also metaphors and images.

Repeated Imagery

Trauma literature can utilize imagery to emphasize the "frozen and wordless quality of traumatic memories" (Herman, 1992, p. 37). Imagery "is used to signify all the objects and qualities of sense perception referred to in a poem or other works of literature, whether by literal description, by allusion, or in the vehicles of its similes and metaphors" (Abrams, 1993, p. 86). Emotional impact, repetition, compulsion, states of hopelessness, and other symptoms of trauma can all be traced through visual clues and repetitive imagery in *The Cry of the Dove.* As Whitehead (2004) points out, "trauma narratives are characterized by repetition and indirection…Traumatic memories lack verbal narrative and context; rather they are encoded in the form of vivid sensations and images" (p. 38).

In this novel, Salma is haunted by the picture of a man (supposedly his brother), or a group of men, (men of his tribe) with daggers and guns to kill her and to restore the family's spoilt honor with her spilt blood. In several paragraphs, this frightening image disturbs and haunts Salma, both in sleep in the form of nightmares and in wakefulness as flashbacks and intrusive memories:

> Listen for the galloping of horses, for the clank of daggers being pulled out of scabbards, for flat-faced owls hooting in the dark, …for the swishing sound of his sharp dagger. Sniff the air for the sweat of assassins. Listen to his arm grabbing Leyla's neck and pulling it right back, to his dagger slashing through flesh and breaking bones to reach the heart. Listen to your daughter's warm red blood bubbling out and drip dripping on the dry sand. …. 'Kill me instead,' I screamed at Mahmoud's shadow by the steal railway (Faqir, 2007, p. 262).

Two or more kinds of "sensations are experienced" in this passage. "Synesthesia is applied to descriptions of one kind of sensation in terms of

another" (Abrams, 1993, p. 210). The synesthetic imagery of sight, color, motion, sound, and heat has been made by "Listen to your daughter's warm red blood bubbling out and drip dripping on the dry sand" (Faqir, 2007, p. 210). Through a combination of word and image, this novel succeeds in illustrating the intrusive symptoms of trauma. Employing these stylistic features successfully overwhelms the reader through strong sensations. Intrusive repetitive imagery appears throughout *The Cry of the Dove* to illustrate the trauma caused by this escalating sense of fear and helplessness.

Since trauma survivors often experience repetitive intrusions of imagery related to the trauma, authors of trauma narrative, as explained by Whitehead (2004), often utilize a form of repetition to illustrate this characteristic; "one of the key literary strategies in trauma fiction is the device of repetition, which can act at the levels of language, imagery, or plot" (p. 86). Repetition also "has a constant impact on the audience's capacity of narrative reformulation when functioning on the thematic, structural, and linguistic levels" (Miller, 1982, p. 2). The itinerary image of the wind functions mysteriously in relation to Salma's traumatic experience of losing her daughter. After giving birth to her daughter in prison, the infant is immediately snatched away from Salma, and the bitterness of failing to hug and to breastfeed the child haunts her till the end of her life. "Suddenly the fine hairs on the back of my neck stood up. I knew that breeze. She was out there crying for a foothold ... A sudden chill ran through me so I bent forward as if winded and hugged my erect nipples" (Faqir, 2007, p. 192). The chilling wind unexplainably reminds her of Leyla.

The intense excitation in trauma victims "splits the memory into various isolated, somato-sensory elements: into images, affective states, and somatic sensations, as well as smells and sound" (Bohleber, 2010, p. 117). The repetition of these images suggests that Salma is reliving these events even after seventeen years and cannot escape or recover from her trauma since "to be traumatized is precisely to be possessed by an image or event" (Caruth, 1995, p. 4). Traumatic memory is stored as a state of affect and its "reappearance depends on the occurrence of certain stimuli that are associated with the original traumatic scene" (Bohleber, 2010, p. 83). The certain stimulus which triggers Salma's sense of loss and the subsequent bitter memory of guilt is the chilling wind. "The sudden intrusion [of the stimuli] into consciousness is overwhelming and often shocking, reducing the ego to a state of passive helplessness; it can neither gain control of the situation through self-reflection, nor dissolve it" (p. 130). The narrator stresses the familiar nature of the chilling wind which is also mentioned in other pages of the novel. This recognition is related to the trauma experience; "a sudden and passively endured trauma is relived repeatedly, until a parson learns to remember simultaneously the affect and cognition associated with trauma through access to language" (van der Kolk & Ducey, 1989, p. 271).

The white dress which Salma had made for her daughter in prison also acts as an important repeated image which associates her with the past traumatic events. "This dress which stands for all the beauty and purity of the unseen daughter, will be a life savior for Salma" (El Miniawi, 2015, p. 62). She cannot resist the temptation of watching and feeling the dress in spite of the

fact that the doctor has prohibited the reminders of the past. The dress "will be used as an evidence of her skill as a seamstress, and also secure her the much needed job as a means of livelihood in England" (p. 63). The imagery of flowers abounds in the novel; Salma calls herself 'black iris', but her daughter is lily. Flower imagery may suggest beauty, purity, and the motherly feelings toward a fragile little child; "I spent hours making that baby-girl dress. I spent hours trying to imagine what a white water lily would like floating in clear water on a luminous jolly night: Lelyla. I tried to make the shape of the dress similar to that of a lily" (Faqir, 2007, p. 39). Elsewhere in the novel, Salma nostalgically associates the dress with her home, "it was a promise of a reunion, a return. That white dress was home" (p. 7).

Exeter Cathedral has a particular affective resonance in Salma's narration. It seems that she negotiates her state of being alien with this visual image. "Whenever I went, I saw churches in the distance: old, decaying and dark houses of God. Whenever I entered, the cathedral or a church I would feel cold" (p. 25). The image of the church as a dominant symbol of Christianity reminds her of her difference as a Muslim immigrant. "I could hear it sung everywhere in the cathedral; where do you come from, …Go home" (Faqir, 2007, p. 167).

Salma is suffering from her shameful past and thinks that she has spoilt "her family's honor with her dark deeds" (p. 177). Her compulsive tendencies, especially with regard to cleaning, could be explained by her obsession with guilt and shame. It seems that she struggles to wash and purify her soul in doing so much cleaning and scrubbing; "I sat down watching the clothes being tossed around in the soapy water, spun, then tossed around again… I wished I could put me among the washing so I could come out at the other end 'squeaky clean', without dry stains or dark deeds" (p. 44). Closely related to her obsession with cleaning, the image of darkness and dirt are also emphasized in the novel. "My face was black as if covered with soot, my hands were black and I had smeared the foreheads of my family with tar" (p. 101).

The repetition of imagery operates in negotiating the initial traumatic memory, as well as representing the language-deficient quality of trauma, in which the images voice the unspeakable. Repetition of images "replays the past as if it was fully present and remains caught within trauma's paralyzing influence" (Whitehead, 2004, p. 86). *The Cry of the Dove* is structured around the notion of repetition in stylistic terms. Images and motifs echo the initial trauma of loss and displacement and the novel "mimics the effects of trauma in its persistent repetitions and returns" (p. 120). The disturbing and dark atmosphere of the novel is stressed by repetition of words and images related to the trauma experience.

Polyphony

The Cry of the Dove exhibits the polyvocal quality of trauma fiction in relation to many voices contained within the memory of the trauma. Polyphony, as a Bakhtinian concept, literally means multiple voices. "To make a reference to Bakhtin is basically to focus on how he read Dostoevsky's work as texts containing many different voices, unmerged into a single perspective, and not subordinated to the voice of the author" (Sarnou, 2016, p. 209). "Instead of a single objective world, held together by the author's voice, there is a plurality of

consciousnesses, each with its own world. The reader does not see a single reality presented by the author, but rather, how reality appears to each character" (p. 210).

According to Vickroy (2002), one authorial approach in stylistic representation of trauma "involves the creation of dialogical interaction between testimonial elements and multiple subject positioning" (p. 27). She believes that, "multiple voices of characters and narrators bearing witness to traumatic pasts situate the reader within the struggle for accounts of and responses to oppression, the responsible remembrance, and defensive amnesia, thereby giving them a sense of being within the traumatic condition" (p. 28). It should be noted that many critics use the terms *polyphony* and *dialogism* interchangeably; as Clark and Holquist point out, "the phenomenon that Bakhtin calls 'polyphony' is simply another name for dialogism" (p. 242). "In polyphonic novels different centers of consciousness are allowed to interact on the plane of novel. For Bakhtin a polyphonic novel captures a plurality of independent and unmerged voices and consciousness" (p. 6).

"The patients who have undergone trauma especially in childhood, parts of their psyche are like split-off states of the self and when activated give rise to a severely altered states of consciousness" (Bohleber, 2010, p. 130). "Trauma effects an incision in the self, so that one effectively becomes two" (Felman & Laub, 1992, p. 178). These altered states of consciousness reflected in Salma's interior monologues confuse the reader who is caught between different voices which are echoed through the narrator's "internal psychic splitting" (Abraham & Torok, 1994, p. 100). Sometimes, the reader hears Salma, the Bedouin oppressed woman who has recently immigrated to England, while at other times, the voice of Sally, now an assimilated Arab-British woman, is heard as manifested in the following excerpt:

> I wanted to cover my head with the quilt and just lie still in the darkness…. A policeman visited Khairiyya recently and asked her about the whereabouts of all the girls she managed to smuggle out. You must go with Miss Asher to England. 'Hinglaand? Fayn Hinglaad?' …the grey concrete building of Exeter Public Library looked like army barracks, but its glass windows gleamed in the warm light of the sun. When I opened the door I was met by a hushed polite silence so I cleared my voice and said to the middle-aged librarian, 'I would like to join the library'" (Faqir, 2007, p. 48).

In the extract above, the first voice the reader hears is that of Salma, the Bedouin illiterate woman who is unable to pronounce the word England; however, then there is a sudden shift in the narrative voice and the reader hears another voice, that of Sally, the British educated woman who speaks English fluently.

Lindbladh (2017) attempts to demonstrate the interrelatedness of polyphony and trauma theory and the psychological hardships experienced by the witnesses in the act of representing a traumatic experience. He maintains that, "a testimony of traumatic events is characterized by the existentially ambivalent feelings experienced by the witness towards the very act of narrating a traumatic past. In his point of view, the representation of internally

focused monologues accords with polyphonic composition of trauma narratives" (p. 296). The necessity and also the impossibility of talking about her overwhelming experiences of loss and separation make Salma write imaginary letters to friends and relatives in Hima. These letters which are never sent express the agony of her mind and the scars of her soul.

In some of these letters, which are full of lies about her present condition in Exeter, heterogeneous voices are heard, in which her hopes and ambitions lie. These heterogeneous voices in the same letter belong to the two halves of the character's split or dissociated self, Salma and Sally. Salma in a letter discloses her suffering to an old intimate friend in Hima, about being hit by her drunken landlady who mistook her for one of her ponies; "the wound was coiled around my arm like a snake. With no one to make me soup...I feel sorry for myself. I wish you were here to run your hand on my head" (Faqir, 2007, p. 168). Suddenly and all unexpectedly, the narrative voice of Sally is heard fabricating and bragging about her unseen daughter's accomplishments; "Layla has passed her A-levels and will go to university soon. She will come home weekends and we will drive to Dartmouth and spend the day swimming in the sea" (p. 260). These "interweaving of voices represent the various inner parts of the same person" (Riccioni & Zuczkowski, 2012, p. 271), which could be considered as an "image of a heterogeneous self which is in the process of self-understanding and the creation of an identity, most important to consider in the processing of traumatic experiences" (Lindbladh, 2017. p. 297).

Conclusion

Trauma studies have been mostly Eurocentric in orientation, disregarding the pains of less fortunate people in other nations who have been condemned to silence. Fadia Faqir gives voice to a Muslim female immigrant who is the victim of a patriarchal value system in his own country where wrong traditions such as 'honor killing' are supported and the target of racial discrimination and hatred in the host country. This paper has investigated the effect of trauma on a displaced Muslim woman in the narrative of an immigrant Muslim novelist in the context of post 9/11 Islamophobia. The research shows that, although trauma is marked by unrepresentability and silence stated by the major theoreticians of the field, it can be tracked through literary strategies and narrative techniques like non-linearity, poetic prose, repetition, stream of consciousness, and polyphony. Through the fragmented, reiterated, and polyvocal discourse of the novel's first person narration, which is full of gaps and silence, the reader is invited to participate in the formation of the text, as a means to bear witness to the suppressed and marginalized character's suffering. The interplay of these techniques in *The Cry of the Dove* helps the reader appreciate the evasive nature of traumatic experience and emotionally engages her or him with the story.

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The Impact of Teaching Through ENGAGE Model on L2 Speaking of Iranian EFL Learners

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Abstract
ENGAGE model, as a unique brilliance learning system, has been proposed to help language teachers to revolutionize language learners' experiences by transcending the limitations of conventional methodologies and addressing the whole being of the learners. The present study sought to investigate the impact of using ENGAGE model on the speaking skills of Iranian EFL learners. For this purpose, from the target population of students learning English in one of the language institutes in Iran, 100 female intermediate students with an age range of 18 to 25 were randomly selected out of 150 participants and assigned to three groups, receiving their instruction based on the principles of Audio Lingual Method (ALM), (n = 32), Task-based Language Teaching (TBLT) (n = 33), and ENGAGE model (n = 35). Applying a tripartite cycle comprising pretesting, intervention, and post-testing, the obtained data were analyzed via SPSS. The outcome of the posttest data analysis revealed that the participants taught by ENGAGE model significantly outperformed those in other samples on target L2 speaking tasks. Subsequently, the participants in the three groups were interviewed to see how they perceived the inherent merits of the ENGAGE model in real practice. The qualitative data drawn from the interviews with the students were analyzed through content analysis relying on open and axial coding forms and the results reflected that the ENGAGE model was the most pedagogically efficient method compared to TBLT and ALM. Notably, the findings could have interesting implications for ELT practitioners, program developers, and EFL teachers.

Keywords: ALM, brilliance leaning system, EFL learners, ENGAGE model, speaking skill, TBLT

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Introduction

Second language speaking is a priority for many L2 or foreign-language learners. The reason lies in the fact that speaking, as a significant component of the target language, is the prime means of communication (Hughes, 2013). That is why speaking is emphasized among the L2 language learners (Kim & Craig, 2012). In teaching L2 speaking, EFL teachers and course books rely on various approaches, ranging from traditional to modern ones (Eslami et al., 2015; Kim, 2014). Likewise, some other studies (Baker, 2015; Kim & Craig, 2012; Kozulin, 2002) have rarely looked beyond reading and writing skills. Moreover, EFL learners are typically perceived as reticent in class (Sadeghi & Maleki, 2015). A lot of researches (Borich, 2016; Darling-Hammond, 2016; Muijs & Reynolds, 2017; Nilson, 2016; Rivers, 2018) have been done by educational stakeholders to help students gain the required skills. However, teachers cannot completely rely on some methodologies, or more specifically talking, as Kumaravadivelu (2003) acknowledges, "there is no best method there ready and waiting to be discovered" (p. 12). He goes further to believe that it is futile to look for one best method. Accordingly, in the pursuit of the research, the researcher is determined to keep as far away from the old established and prescribed methodologies as he resorts to more interactionist theories such as the one proposed by Long (1985).

A plethora of L2 research (Ghanizadeh et al., 2018; Sundqvist & Sylvén, 2016; Yang et al., 2013) support the importance of listening-speaking and how comprehensible input facilitates L2 development in the classroom context. Yang et al. (2013) argue that developing proficiency in listening is the key to achieve proficiency in speaking.

Two of the highlighted methods in ELT which claimed the development of L2 speaking and meaning negotiation under their guidelines were Audio-lingual Method (ALM) and Task-Based Language Teaching (TBLT).

In the present study, ALM was operationally defined as the teacher-centered method in which all four skills were sequentially focused on in the classroom and fluency as well as accuracy of the learners' production was of paramount significance. TBLT was also operationalized through the method employed to teach EFL speaking and writing with tasks at its center, the way theoretical perspectives of this approach have been presented in the literature as well as the way Ellis (2003, 2009) proposed it.

Irrespective of the success of both of the aforementioned methods in the Iranian EFL context in the past, lack of a well-sequenced, centralized, and strong educational method in teaching L2 in general, and in the Iranian context, in particular, has created a lot of problems for the L2 teaching (Akbari, 2015; Nair et al., 2017).

To fill this educational gap, Halsey (2011) presented her naturalistic-oriented educational proposal, namely the Energizing, Navigating, Generating, Applying, Gauging, and Extending (ENGAGE) Model, in her book titled *Brilliance by Design* which paved the way for the emergence of educational program changes in America, especially in California where Halsey and Halsey (2017) and Halsey et al. (2018) used the model to develop an educational program stressing the environmental issues in California. Though old traditional and modern methods of language teaching have found their ways to the Iranian

educational system (Safari & Rashidi, 2015), to the knowledge of the present researchers, ENGAGE model has not been practiced as a framework in the English Language Teaching (ELT) domain in the Iranian context yet. Considering the ever-growing demand of Iranian EFL learners for fluent and effective speaking, this study was an attempt to investigate the comparative effects of ALM, TBLT, and ENGAGE model in improving the speaking skill of Iranian EFL Learners.

Literature Review

The present section deals with the notions of TBLT, ALM, and ENGAGE model in terms of their teaching L2 speaking methodology.

TBLT

Task-Based Language Teaching was in fact initiated by Prabhu (1987) beginning in 1979 (Ellis, 2009). TBLT is an extension of the principles of Communicative Language Teaching (CLT) in which the syllabus is specified in terms of functions and notions. As Ellis (2019) discusses, through pre-task planning and within-task planning, the advocates of CLT and TBLT focus on real language use in various language skills, especially speaking. Natural learning within the classroom context is one the gifts of TBLT to the learners. There may be cultural barriers to the uptake of TBLT in some parts of the world where people are highly self-culture oriented. Another problem within the scope of TBLT backs to the misunderstanding of the concept of focus on form: Some individuals might think it only pertains to grammar, while it is largely relying on vocabulary as well as pronunciation.

ALM

Combining behavioristic psychology principles and American structural linguistics accompanied with Contrastive Analysis (CA) developments, during and after the World War II, paved the way for the emergence of Oral Approach, the Aural-Oral Approach, and the Structural Approach which later on resulted in the development of ALM (Howatt & Widdowson, 2004). This method emphasized grammatical accuracy in speaking (Richards, 2008). Though ALM is considered the first scientific approach in the ELT (Juffs, 2020), it had its own shortcomings such as the weak learning theory (Chomsky, 1966) and high amount of meaningless repetition the ALM used in its instructions (Rivers, 2018).

The ENGAGE Model

Halsey (2011) proposed the concept of *Brilliance by Design* which was manifested in the ENGAGE model of education. Likewise, Halsey (2016) proposed the idea that individuals' brain can be energized and their mindfulness, which emphasizes paying deliberate attention to the present moment through observation of thoughts and emotions without judging, can be increased. She asserted that traditional approaches to teaching cannot engage the learner's mind. To engage the mind, Halsey and Halsey (2017) recommend active learning strategies. One such strategy is the ENGAGE Model by Halsey (2011) which "takes a six step approach to teaching content by using active

learning techniques combined with utilizing meaningful interpretation" (Halsey & Halsey, 2017, p. 8). Kim et al. (2017) used the ENGAGE Model in the domain of nursing practices. In this regard, they found "improvement in EBP beliefs had direct effects on improvements in job satisfaction of the participants" (p. 90). Likewise, Glance et al. (2018) have developed a model, known as learn, expand, and engage (LEE), which has been inspired by Halsey's (2011) ENGAGE Model. They indicate that "the LEE model provides a framework for higher education instruction that directly responds to a recently identified need for competency-based student learning pedagogy in the helping professions" (p. 104).

Highlighting the environmental issues connected with Chaparral ecosystems and specific and iconic vegetation of California, Rundel (2018) developed an educational program for the operationalization of ecosystem knowledge of the students for turning the tide on urbanization, land-use change and protection of endangered species (p. 1). Underwood et al. (2018) also propose that the ENGAGE Model can be used for curriculum development in the educational settings aiming at paving the ground for more awareness toward the environment, wild life, global issues, and consequently, more responsible life-long learning.

A plethora of research has been conducted on EFL speaking classrooms at the international level (Albino, 2017; Aljumah, 2011; Guchte et al., 2015; Housen & Kuiken, 2009; Jassem, 1997; Kunnu & Sukwises, 2014; Lee, 2009; Nakatani, 2010). Almost all these studies have concluded that EFL students need to be able to overcome the speaking breakdowns resulting from the lack of speaking activities in EFL classes (Ghaemi & Hassannejad, 2015). A key aspect of dealing with such a difficulty is knowing communication strategies. Therefore, there should be a crucial concern in our English classes for communication strategy instruction with a systematic method. The ENGAGE Model (Halsey, 2011), which takes a relatively new approach to teaching content, could be employed in teaching speaking.

Due to the fact that, today in Iranian education system especially in English language institutes, ALM and TBLT are totally common, in this research, these two methods were compared with ENGAGE model. Considering the problems stated above and the purpose of the present study, the following research questions were formulated.

1. Do ALM, TBLT, and ENGAGE model have statistically significant different effects on the English language speaking development of Iranian EFL learners?
2. What are students' attitudes toward incorporating ENGAGE model, TBLT, and ALM in the speaking classroom?

Method
Participants
The participants of the study were 100 female intermediate level learners (N = 100) with the age range of 18 to 25 in one of the language institutes in Damghan (Mofid Language School). These participants were randomly selected out of 150 intermediate students (N = 150) attending English conversation classes. Also, their performance in a standard QPT was taken into consideration for the purpose of homogeneity. The selected students

were divided into three groups; (ENGAGE model, n = 35), (ALM group, n = 32), (TBLT group, n = 33).

Instrumentation

Quick Placement Tests. In order to check the homogeneity of the participants, a standard Oxford Quick Placement Tests (QPT) was used. The test was reported to have had a high reliability (α = .91) based on Cronbach's alpha (Berthold, 2011, p. 674). In the present study, the results indicated that QPT had a reliability index of KR-21 = .72.

IELTS Pretest of Speaking. The second instrument used in this study was a standard pretest of speaking selected out of the standard IELTS series. This was done to tap the learners' L2 speaking knowledge more appropriately based on a standard measure. An "inter-rater reliability index reported for the speaking test of IELTS was [r (3000) = .87, P < .0]" (O'Sullivan, 2018, p. 1). This index, as O'Sullivan mentions, belongs to March, 2018 from over 140 countries worldwide.

IELTS Posttest of Speaking. The speaking posttest was a new speaking IELTS test selected out of the standard IELTS series. "The inter-rater reliability index reported for this speaking test of IELTS was [r (2000) = .82, P < .05]" (Fernandez, 2018, p. 8). To score the participants' performance, both in the pretest and posttest phases, the IELTS Speaking band descriptors (public version), which covered the speaking sub skills, were used.

Semi-Structured Interview. The selected students (1/3 of the study participants in each group) took part in a semi-structured interview which took 15-30 minutes after the intervention process. The interview guide was used to collect the qualitative data. In this regard, ten learners from each group were interviewed prior to the intervention process to find their views concerning the previous instructional types they had experienced. Then, following the intervention, the same students were asked to take part in an interview for their attitudes towards the method which was employed in each of the conversation classes. The data were analyzed and categorized through *open coding* (general related views) and *axial coding* (specific issues).

The interviewees were singled out from the participants in the quantitative phase through convenience sampling provided they gave their consent for further cooperation. The interview guide's content and construct validity were confirmed through expert judgment validity criteria (Creswell & Clark, 2017). To ensure the reliability of the interview, the researchers relied on the intra-rater reliability in which one of the researchers (the interviewer) gave similar ratings when observing the same performance (Dörnyei, 2007). For the present study, the researchers' consistency in the process of eliciting the information was then accounted as the representative of reliability of the interview. As the interviews were done by one of the researchers, she tried to be consistent in rating and weighting the learners' views concerning the interview items in the post-phase.

In semi-structured interviews, "the researcher uses a written list of questions as a guide, while still having the freedom to digress and probe for more information" (Mackey & Gass, 2016, p. 173). The framework for carrying out the interview was based on Dörnyei ′ s (2007) guideline. ***Procedure***

First, the standard QPT was administered to 150 intermediate students. Based on the scale presented for scoring QPT, 100 learners whose scores fell between 24 and 47 were selected as the main participants of the study. The selected participants were randomly assigned to three groups (the ENGAGE group as the experimental group, and TBLT as well as ALM as the other groups) with 33 to 34 students in each. Hence, one group received instruction through ALM, another one through TBLT, and the third group received ENGAGE model instruction.

In the second phase, the participants took part in a pretest of speaking to assure their homogeneity. It is worth mentioning that an inter-rater reliability index was employed to tap the learners' performance in the speaking test. Likewise, 10 learners from each group were interviewed prior to the intervention process to find their views concerning the previous instructional types they had experienced.

Following the processes of subject selection and getting ensured of the participants' speaking homogeneity, the researchers launched the intervention phase which lasted 10 sessions. The whole semester included 8 weeks and the learners attended the class three days a week each session lasting for 90 minutes in all groups. It is worth mentioning that the classes of three groups (ALM, ENGAGE, and TBLT) received the same hours of instruction and practiced with the same teacher in all groups.

In the Audio-Lingual Method Group (ALMG), the researcher provided the instruction advocating the principles of ALM which emphasized the use of grammatical sentence patterns. The procedure was as follows: (1) the language teacher gave a brief summary of the content of the dialogue, (2) the language learners listened attentively while the teacher read or recited the dialogue at normal speed several times, and (3) the language learners recited the dialogue line by line or together depending on their length. If the teacher detected an error, it was corrected and the student was asked to repeat the sentence, (4) repetition was continued with groups decreasing in size, (5) pairs of individual acted out of the dialogue. By this time, they had been supposed to memorize a text.

The TBLT group in the present study was exposed to real-world language. An example goes as follows: The teacher used pictures to elicit learners' speech and such pictures might have also focused on learners' real-world language and real life issues. Therefore, for the present study, the use of pictures to elicit learners' speeches was one of the appropriate methods. The students looked at the pictures and spoke about them. They were asked to connect them to their real life situations or bring their own family pictures to the classroom and talk about them. They used photos published in a recent newspaper about a specific novel event, like an accident or a festival, and talked about that. The teacher did not interrupt them while they were speaking. Nor did she fine-tune their production. This resulted in a less stressful situation for the learners.

In the experimental group (the ENGAGE Model group), the teacher used the principles of the ENGAGE model (Halsey, 2011). This model employs active learning strategies through naturalist education programs to engage the mind (Halsey, 2016). Hence, the six-step general perspectives proposed by

Halsey (2011, 2016) were taken into consideration in a language classroom at the intermediate level, as described below:

Step 1: Energizing students at the beginning of any classroom session through making them involved in the warm-ups, ice-breaking discussions, talking about daily life issues, and motivating them through using gestures and postures.

Step 2: Asking the students to navigate what they had gained in the energizing session and develop the new content. This way the content of what was being taught was developed by the learners and the teacher monitored them to talk about their own interests and concerns.

Step 3: Helping students generate personal meaning and connect what they had gained to their own life and what they felt given the new concepts they had learned and the topic(s) discussed in the classroom. This was done through asking the students to present oral reports to the classroom about the current events, their life and their feelings about recent events in the immediate social context and the like.

Step 4: Helping students apply their learning to the real world. This was done via asking the students study about the topic selected in the classroom, use the internet, get involved in the social media, collect information about a specific issue, and then present their own perspectives in the classroom. In the next step, students focused on what they could do to bring about a positive change in the social context and their own life.

Step 5: Making leaners gauge and celebrate their progress. This was possible though employing self-assessment (SA) in the classroom context.

Step 6: Helping students extend their learning to action. This became possible through asking the students to use what they had learned in speaking about different issues, lecturing about various topics, taking part in debates and discussions in English, and if possible using what they had learned in the social media to find international friends, watching films, and solving the daily life issues and enjoying living through the English language world.

After the intervention, the three experimental groups received a speaking posttest. This was a new version of IELTS speaking test with the hope of measuring the participants' probable development in speaking skill. An inter-rater scoring system was used to score the learners' performance in the speaking test, and then the inter-rater reliability of the scores was taken into consideration. In the qualitative phase, which followed the quantitative one, the learner's attitudes towards the method employed in each of the conversation classes were elicited. The results of the quantitative study gave additional insights into the issue (Creswell & Clark, 2017). The collected quantitative data were fed into SPSS version 25 and the results were reported. Also, the qualitative data which came from the results of the posteriori interviews with the learners were analyzed through content analysis (Creswell & Clark, 2017) and relying on open coding, axial coding, and selective coding system. Then, the results of the posteriori interviews were compared to the priori interviews in each group. In addition, the posteriori interview results of the three groups were compared together and reported and the final findings were discussed against the similar previous findings in the literature and the results were presented.

Results

The first research question aimed to probe the efficacy of three models (i.e., ALM, TBLT, and ENGAGE) on the English language speaking development of Iranian EFL learners. To answer this research question, one-way analysis of variances (i.e., one-way ANOVA) was run. Table 1 displays the results of the Levene's test of homogeneity of variances. The non-significant results of the test (F (2, 97) = .178, p = .837) indicated that the three groups enjoyed homogenous variances on pretest of speaking.

Table 1
Test of Homogeneity of Variances; Pretest of Speaking by Groups

		Levene Statistic	df1	df2	df2
	Mean	.371	2	97	.691
	Median	.178	2	97	.837
Pretest	Median with adjusted df	.178	2	96.549	.837
	trimmed mean	.365	2	97	.965

Table 2 displays the descriptive statistics for the TBLT, ENGAGE, and ALM groups on pretest of speaking. The results indicated that TBLT (M = 25.03, SD = 4.30), ENGAGE (M = 25.43, SD = 4.64) and ALM (M = 23.88, SD = 4.51) groups had close means on pretest of speaking.

Table 2
Descriptive Statistics; Pretest of Speaking by Groups

	N	Mean	SD	Std. Error	Lower Bound	Upper Bound	Min	Max
TBLT	33	25.03	4.326	.753	23.50	26.56	16	32
ENGAGE	35	25.43	4.648	.786	23.83	27.03	16	32
ALM	32	23.88	4.513	.798	22.25	25.50	16	32
Total	100	24.80	4.504	.450	23.91	25.69	16	32

A one-way ANOVA was run to compare the three groups' means on the posttest of speaking in order to probe the first research question. Table 3 displays the results of the Levene's test of homogeneity of variances. The non-significant results of the test (F (2, 97) = .820, p = .433) indicated that the three groups enjoyed homogenous variances on the posttest of speaking.

Table 3
Test of Homogeneity of Variances; Posttest of Speaking by Groups

		Levene Statistic	df1	df2	Sig.
	Mean	1.024	2	97	.363
	Median	.820	2	97	.443
Posttest	Median with adjusted df	.820	2	96.431	.443
	trimmed mean	.954	2	97	.389

Table 4 displays the descriptive statistics for the TBLT, ENGAGE, and ALM groups on the speaking posttest. The results indicate that ENGAGE group (M = 45.57, SD = 4.77) has the highest mean on the posttest of speaking. This is followed by the TBLT (M = 30.27, SD = 4.17) and ALM (M = 25.06, SD = 4.54) groups.

Table 4
Descriptive Statistics; Posttest of Speaking by Groups

	N	Mean	SD	Std. Error	Lower Bound	Upper Bound	Min	Max
TBLT	33	30.27	4.178	.727	28.79	31.75	22	38
ENGAGE	35	45.57	4.779	.808	43.93	47.21	36	52
ALM	32	25.06	4.543	.803	23.42	26.70	18	34
Total	100	33.96	9.886	.989	32.00	35.92	18	52

Table 5 displays the results of the one-way ANOVA. Based on these results (F (2, 97) = 189.11 p = .000, Partial eta squared = .796 representing a large effect size), it can be said that there are significant differences between the three groups' means on the speaking posttest. Thus, it can be concluded that the first null-hypothesis is rejected.

Table 5
One-Way ANOVA; Posttest of Speaking by Groups

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	7700.848	2	3850.424	189.110	.000
Within Groups	1974.992	97	20.361		
Total	9675.840	99			

The significant results of the one-way ANOVA are followed by the post-hoc Scheffe's tests in order to compare the groups two by two (see Table 6).

Table 6
Post-Hoc Scheffe's Tests; Posttest of Speaking by Groups

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
TBLT	ALM	5.210*	1.119	.000	2.43	7.99
ENGAGE	TBLT	15.299*	1.095	.000	12.58	18.02
	ALM	20.509*	1.104	.000	17.77	23.25

Based on the results displayed in Table 6 above, it can be concluded that;

1. The ENGAGE group (M = 45.57) has significantly outperformed the TBLT group (M = 30.27) on the posttest of speaking (Mean Difference = 15.29, p = .000).

2. The ENGAGE group (M = 45.57) significantly outperformed the ALM group (M = 25.06) on the posttest of speaking (Mean Difference = 20.50, p = .000).

3. The TBLT group (M = 30.27) significantly outperformed the ALM group (M = 25.06) on the posttest of speaking (Mean Difference = 5.21, p = .000).

The second research question examined the students' attitudes toward incorporating ENGAGE model, TBLT, and ALM in the speaking classroom. To answer this question, a semi-structured interview was conducted. More precisely, ten learners from each group were randomly interviewed to present their attitudes towards the method which had been employed in each of the conversation classes. All the data were categorized through open coding (i.e., general related views) and axial coding (i.e., specific issues). The interview comprised 10 items asking about a number of issues such as students' perception towards the method employed in the class, the feedback provided by the teacher, classroom learning in daily life, evaluating speaking in terms of fluency, coherence, lexical resource, accuracy, and pronunciation in speaking English. What follows illustrates the detail description of the items (n = 6) for the interview questions. All the qualitative data have been reported in terms of frequency and percentage with the hope of accounting for the learners' perceptions toward incorporating ENGAGE model, TBLT, and ALM in the speaking classroom.

The first item deals with the way learners feel about the method their teacher used in the classroom this term. Ten EFL learners from each group presented their ideas concerning the method they had received in their respective classrooms as categorized in Table 7 below. As the table shows, all the interviewees (100%) have asserted that they had enjoyed a friendly atmosphere in the class, while 80 percent of the TBLT group have had the same idea, while for the ALM group, the rate is just 40 percent. In terms of motivation, all the ENGAGE group participants (100%) have mentioned that the level of motivation was high in the classroom, while it was lower for the TBLT (70 %) and ALM (50%) groups. Similar results were obtained concerning the students' talking about their life experiences in the classroom, being involved in the classroom activities, and taking part in the classroom discussions. Likewise, it was found that think-aloud protocols and brainstorming techniques were mainly used in the ENGAGE model class. Finally, students could improve their English as well as their understanding of the world around in the ENGAGE model classroom more than the other methods.

Table 7
Participants' Viewpoints About ENGAGE Model, TBLT, and ALM in the EFL Classroom

No.	Viewpoint	Frequency			Percentage		
		ENG.	TBLT	ALM	ENG.	TBLT	ALM
1	The class enjoyed a friendly atmosphere.	10	8	4	100%	80%	40%
2	The amount of motivation was high in the classroom.	10	7	5	100%	70%	50%
3	Students talked about their life experiences.	10	8	5	100%	80%	50%
4	Almost all the students were involved in the classroom activities.	10	8	5	100%	80%	50%

5	Students had to read a lot outside the classroom to play a significant role in the classroom discussions.	10	10	6	100%	100%	60%
6	The think aloud protocols and brainstorming techniques we used in the class.	10	4	2	100%	40%	20%
7	Students could improve their English as well as their understanding of the world around.	10	7	3	100%	70%	30%
8	The class was boring.	0	3	8	0.00%	30%	80%

The second item asked the extent to which students learned to improve their speaking from the feedback provided by the teacher. The most frequently mentioned viewpoints by the students in the three groups concerning their L2 speaking development under the effect of the feedback provided by their teachers in the intervention period are categorized in Table 8 below. Based on the results categorized, in almost all the four factors signified by the students, ENGAGE model gains priority over TBLT and ALM. Also, TBLT is superior to ALM. This means that the feedback provided by teacher has helped L2 learners to improve their speaking ability in the ENGAGE model in the first place, while its effectiveness in TBLT has been good enough but falls in the second place, and ALM comes third.

Table 8
Students' Viewpoints About Their Teacher's Feedback on L2 Speaking

	Very Confident	Confident	Not Confident
1.Feeling about speaking in English	ENGAGE (70 %)	ENGAGE (30 %)	ENGAGE (0.00 %)
	TBLT (60%)	TBLT (30%)	TBLT (10%)
	ALM (20 %)	ALM (30 %)	ALM (50 %)
	Significant Effort	Appropriate Effort	Inadequate Effort
2.The amount of effort one makes on speaking assignment	ENGAGE (80 %)	ENGAGE (10 %)	ENGAGE (10 %)
	TBLT (70%)	TBLT (10%)	TBLT (20%)
	ALM (0.30 %)	ALM (20 %)	ALM (50 %)
	Mostly Understand	Somewhat Understand	Inadequately Understand
3.Understanding the feedback on assignments	ENGAGE (80 %)	ENGAGE (20 %)	ENGAGE (0.00 %)
	TBLT (80%)	TBLT (20%)	TBLT (0.00%)
	ALM (0.20 %)	ALM (20 %)	ALM (60 %)

	Mostly Understand	Somewhat Understand	Inadequately Understand
4. Understanding the teacher's comments	ENGAGE (90 %)	ENGAGE (10 %)	ENGAGE (0.00 %)
	TBLT (80%)	TBLT (10%)	TBLT (10%)
	ALM (60 %)	ALM (20 %)	ALM (20 %)
	Yes	Maybe	No
5. Ability to correct mistakes	ENGAGE (80 %)	ENGAGE (20 %)	ENGAGE (0.00 %)
	TBLT (70%)	TBLT (10%)	TBLT (20%)
	ALM (20 %)	ALM (30 %)	ALM (50 %)

The next item probed if learners and teacher negotiate on decisions to be made about assignments and activities. The most frequently mentioned viewpoints by the students of the three groups concerning their feelings about decisions to be made about assignments and activities through teacher-student negotiations were categorized in Table 9 below.

Table 9
Students' Viewpoints Aabout their Teacher-Student Negotiations on Decision Making

	Much to Very Much	Moderately	Little to A little
1.Taking the responsibility of learning	ENGAGE (80 %)	ENGAGE (20 %)	ENGAGE (0.00 %)
	TBLT (70%)	TBLT (10%)	TBLT (20%)
	ALM (30 %)	ALM (10 %)	ALM (60 %)
2.Feeling autonomous in learning and promotion of the power of learning	ENGAGE (80 %)	ENGAGE (10 %)	ENGAGE (10 %)
	TBLT (60%)	TBLT (30%)	TBLT (10%)
	ALM (10 %)	ALM (20 %)	ALM (70 %)
3. Accurate mastery of language forms	ENGAGE (80 %)	ENGAGE (10 %)	ENGAGE (10 %)
	TBLT (70%)	TBLT (20%)	TBLT (10%)
	ALM (10 %)	ALM (20 %)	ALM (70 %)
4. Application of learned material to new contexts	ENGAGE (80 %)	ENGAGE (10 %)	ENGAGE (10 %)
	TBLT (70%)	TBLT (20%)	TBLT (10%)
	ALM (10 %)	ALM (10 %)	ALM (80 %)
5. Understanding of language rules	ENGAGE (80 %)	ENGAGE (10 %)	ENGAGE (10 %)
	TBLT (80%)	TBLT (10%)	TBLT (10%)
	ALM (20 %)	ALM (20 %)	ALM (60 %)

6.Facilitating the learning process	ENGAGE (90 %)	ENGAGE (20 %)	ENGAGE (0.00 %)
	TBLT (70%)	TBLT (10%)	TBLT (20%)
	ALM (20 %)	ALM (10 %)	ALM (70 %)

In terms of taking the responsibility of learning, which is one of the most significant factors in the negotiated syllabus focused on in the ENGAGE model, the majority of the learners (80 %) indicated that they could take the responsibility of their learning. Similarly, the majority of the learners in the TBLT group (70 %) expressed the same idea, while in the ALM group, 60% mentioned that they did not take the responsibility of their learning. Likewise, the majority of the ALM group students (70%) did not feel they could be autonomous in learning and promote their power of learning. Concerning the accurate mastery of language forms, the vast majority of the ENGAGE group learners (80 %) and TBLT group (70%) thought that teacher-student negotiations on decision-making had helped them gain proper mastery of language forms, while only a minority of ALM individuals taking part in the study (10 %) supported this idea. In addition, the majority of ENGAGE (80 %) and TBLT (70 %) learners thought that teacher-student negotiations on decision-making had helped them apply the learned material to new contexts, while only a small number of ALM individuals taking part in the study (10 %) supported this idea.

In terms of understanding of language rules, only a small number of ALM learners (20 %) thought that teacher-student negotiations on decision-making had helped them understand language rules well, while most of the ENGAGE and TBLT individuals taking part in the study (80 %) supported this idea. Likewise, only a low number of ALM learners (20 %) thought that teacher-student negotiations on decision-making had facilitated the learning process for them, while a vast majority of the ENGAGE (90 %) and TBLT (70%) individuals taking part in the study supported this idea.

The next question asked if students thought they could employ their classroom learning in their daily life. Almost all of the learners from the three groups who were interviewed presented similar ideas in this regard. The notions presented by the learners in the three groups were: using classroom learning for academic purposes, reading literary books, watching films, listening to music, and overseas and business trips as well as communication. In addition, some of the students had mentioned that they could use their classroom learning for emailing and using the Internet. Table 10 below summarizes the ideas expressed at the posttest level by the 10 students randomly selected from each group from among the study participants.

Table 10
Students' Views About Using Classroom Learning in Daily Life

No.	Views	Frequency (*f*)			Percentage		
		ENG.	TBLT	ALM	ENG.	TBLT	ALM
1	Academic Purposes	10	10	10	100%	100%	100%
2	Read Books (Literature)	10	10	10	100%	100%	100%
3	Watch Films /Listen to Music,	10	10	8	100%	100%	80%
4	Overseas Trips/Communication	10	10	10	100%	100%	100%
5	Emailing/Internet	10	10	10	100%	100%	100%
6	Business	8	8	7	80%	80%	70%

The next item examined if the students could assess their own speaking in terms of fluency, grammar, and pronunciation in speaking English. The most frequently mentioned viewpoints by the students concerning their ability to assess their speaking ability and its components are categorized in Table 11 below. As the table displays, the participants' preferences of types of errors to be focused on are important to all the groups. The results showed that:

A. All groups preferred pronunciation errors to be focused on as much as possible (100%)

B. The ENGAGE model group (100%) preferred lexical resource errors to be focused on more than the TBLT (80%) and the ALM (70%) groups.

C. Grammatical errors were preferred by the ALM model group (90%) more than the other two groups.

D. Errors related to fluency and coherence were said to be focused on by the ENGAGE model (80%) and TBLT (80%) more than the ALM group (50 %).

Table 11
Types of Errors Focused on in Assessing L2 Speaking (by Groups)

			Methods		
			ENGAGE	TBLT	ALM
Errors to be focused on in assessing L2 speaking in the Self-assessment process	Pronunciation	N	10	10	10
		%	100%	100%	100%
	Lexical Resource	N	10	8	7
		%	100%	80%	70%
	Grammatical Accuracy	N	7	8	9
		%	70%	80%	90%
	Fluency and Coherence	N	8	8	5
		%	80%	80%	50%

Finally, the last item probed if there is anything learners would like to say about the method their teacher used in the classroom in the semester just finished. The students of the three groups who were interviewed mentioned some significant points concerning the positive points of the methods and techniques they had experienced in their respective instructional types in the current study. They are presented in Table 12 below.

Table 12
Students' Views About Positive / Negative Points of the Methods Just Received

No.	Views	Frequency (*f*)			Percentage		
		ENG.	TBLT	ALM	ENG.	TBLT	ALM
1	The class was very friendly	10	8	6	100%	80%	60%
2	Motivating students to go on	10	7	5	100%	70%	50%
3	Using films, clips, and teaching aids	10	7	4	100%	70%	40%
4	Emphasizing L2 speaking	10	8	7	100%	80%	70%
5	Making students work hard	10	8	7	100%	80%	70%

The learners in the ENGAGE model group mentioned that they liked the classroom and found it absolutely friendly compared to the previous classes and methods. Also, they emphasized that the knowledge and information they could receive throughout the semester was more than what they had received in the previous semesters. In addition, they felt highly motivated in the classroom and could connect the classroom learning to their extracurricular activities and studies. However, the weak students in the ENGAGE model, TBLT, and ALM had reported to have gotten tired as the assignments were beyond their ability and they had not been able to cope with all of them.

Discussion

The present study found that, compared to TBLT and ALM methods, the ENGAGE model had a more statistically significant effect on the English language speaking development of Iranian EFL learners. Likewise, the interview results showed that the learners in the ENGAGE model group liked the classroom and found it absolutely friendly compared to the previous classes and methods. As this is the first time the ENGAGE model has been used in the domain of L2 classroom, no previous studies exist in this regard. However, the implications of ENGAGE model in other disciplines and the window it has opened to the new scientific horizons can be discussed here and now. Then, the six steps of ENGAGE will be taken into consideration and the findings of the study will be discussed with regard to the notions and concepts ensued from those steps. The first point worth mentioning is that the priority of ENGAGE based L2 speaking model over the TBLT which is one of the most successful method in the ELT domain (Ellis et al., 2019) is stunning and attractive. This indicates that, irrespective of its novelty and lack of a theoretical linguistic background in this teaching approach, ENGAGE model has been successful.

Having been inspired by Halsey's (2011) ENGAGE model, Kilbourne (2011) developed his own model for improving safety training which relied on the three notions of connect, inspire, and ENGAGE. In fact, implicitly, he refers to the significance of metacognitive strategies (Novak, 1990; Oxford, 1989). In this regard, the present study's findings could find support in the learning psychology operationalized in the preplanning of activities before training the learners.

Halsey et al. (2018) suggest that the ENGAGE model can stimulate active learning and increase retention (Kilbourne, 2011). Since neuroscience and cognition are interwoven, therefore, it can be assumed that L2 speaking

development of the participants has been affected by their cognition and metacognitive strategies operationalized in the ENGAGE model.

In terms of educational significance of the ENGAGE model, Rundel (2018) signifies that ecosystem issues should be operationalized in the educational systems and any area, and its global significance should be first recognized by the students. It is likely that EFL learners not only improve their L2 abilities through paying attention to such concepts as those of the environment and social life, but also learn how to connect what they read and learn to the immediate social or environment context.

The success of the ENGAGE model in the present study can take support from Kim et al.'s (2017) study on the impact of using this model in the domain of nursing practices. In this regard, they found that "improvement in EBP beliefs had direct effects on improvements in job satisfaction of the participants" (p. 90). It is assumed that the L2 learners taking part in the present study also benefited from *navigating content* and connecting their learning to the real life situations. On the other hand, this teaching model relies on Bloom's taxonomy and its highest levels. It can be argued that the principles presented in LEE supported by ENGAGE model might be found useful, should they be used in the EFL classroom.

It is crystal clear that L2 speaking takes the responsibility of facilitating communication between interlocutors. L2 development has also been notified as a life learning concept (Leki, 2017). From this perspective, the present findings are in line with another study conducted by Underwood et al., (2018) which has been inspired by the ENGAGE model. They proposed that ENGAGE model can be used for curriculum development in the educational settings aiming at paving the ground for more awareness toward environment, wild life, global issues, and consequently more responsible learning and getting prepared for life learning. ENGAGE model which proved effective in L2 speaking development can be discussed in terms of its steps and their operationalization in the EFL domain.

Energizing learners: In the L2 speaking classroom, warm-ups, ice-breaking discussions, talking about daily life issues, and motivating students through using gestures and postures were taken into consideration. Also, this step deals with motivation, both internal and external, which have been researched concerning their effectiveness in L2 development (Csizér, 2017; Ushioda & Dörnyei, 2017).

Navigating content: In the L2 speaking class, asking the students to navigate what they had gained in the energizing session and develop the new content was of paramount significance. Likewise, the teacher and learners negotiated on decisions to be made about assignments and activities. This indicates the application of process-based syllabus (Breen, 1987) and negotiated syllabus (Clarke, 1991) in the EFL pedagogy.

Generating meaning, as the third step, urges the learners to clarify the worth of the new information they have learned. In the L2 speaking class, this step was operationalized through asking the students to present oral reports to the classroom about the current events, their life and their feelings about recent events in the immediate social context and the like. This is partially in line with TBLT principles proposed by Ellis (2003), especially the real language tasks.

Likewise, this finding can take support from Ellis, Skehan, Shintani, and Lambert (2019) who proposed meaning-oriented tasks in speaking and communication.

Applying to the real world, as the fourth step, signifies that learners need opportunities during the teaching/learning process to testify their proficiency of the new skills (e.g., learning pronunciation, intonation, lexical resources, or real-world practice). In the L2 speaking class, this notion was implemented through asking the students to study about the topic selected in the classroom, use the internet, get involved in the social media, collect information about a specific issue, and then present their own perspectives in the classroom.

Gauging and celebrating, as the fifth step of ENGAGE model, concentrates on learners' assessing their own learning and development and how much they have learned through a quiz and celebrate their accomplishment. This concept was operationalized by employing teaching self-assessment (SA) principles and how to develop SA speaking checklists in the classroom context.

Extending learning to action, as the sixth step of ENGAGE model, pertained to follow-up activities to help ensure that learners act on their intentions to use their new knowledge (Halsey, 2011). They were encouraged to talk about various topics, take part in debates and discussions in English and if possible use what they have learned in the social media to find international friends, watch films, and solve the daily life issues and enjoy living through the English language world. This is in line with competency-based learning in the ELT domain (Nodine, 2016; Waddington, 2017).

Conclusion

The quantitative data analysis provided the researcher with two sets of findings: a) there were significant differences between the TBLT, ENGAGE, and ALM groups' means on the posttest of speaking. The ENGAGE group significantly outperformed both the TBLT and ALM groups on the posttest of speaking. Likewise, the TBLT significantly performed better than the ALM on the posttest. The qualitative findings were also in line with the quantitative findings, supporting the idea that ENGAGE model could be more helpful than the TBLT and ALM for the development of L2 speaking of Iranian students. However, in terms of factors such as creating a friendly atmosphere in the classroom, motivating students to continue their L2 development, using films, clips, and teaching aids, emphasizing L2 speaking, and making students work hard, almost all the three groups of the study were in agreement, though the concordance between the ENGAGE model and TBLT was more. Another point of divergence could be focusing on the grammatical accuracy in assessing L2 speaking. The ALM group mainly stressed on the grammatical errors, while for the ENGAGE and TBLT groups, pronunciation and lexical resource were more important, followed by fluency.

To sum up, the results of the present study showed that learners experiencing ENGFAGE model teaching techniques resulted in better speaking commands compared to their counterparts receiving TBLT or ALM. Hence, it postulates that ENGAGE-based teaching techniques provide a better learning context for EFL learners' L2 speaking compared to those of the TBLT and ALM methods.

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The Role of Iranian EFL Learners' Motivation and Beliefs in Their Reading Comprehension Scores

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Abstract
Learners owe their success to various factors that may lead to individual differences. Among those contributing factors, motivation and learners' belief as two distinct features have been investigated in this research. To this end, 120 intermediate EFL learners in the 15-30 age range, studying in different English language institutes in Tehran participated in this study. They were asked to complete the Motivation Questionnaire (Dörnyei & Taguchi, 2009) as well as the Beliefs about Language Learning Inventory (Horwitz, 1988). The results of the regression analyses revealed that there was a significant relationship between learners' motivation, learners' belief, and their reading comprehension scores. The results also indicated that 42% of variability in the Iranian EFL learners' reading comprehension scores was predicted by their motivation, and 27% of variability in their scores was predicted by their beliefs toward EFL learning. In fact, both motivation and learners' beliefs were significant predictors of the participants' reading comprehension scores. These findings showed that motivation and learners' beliefs can be used to predict students' reading comprehension scores to some degree. The implications and suggestions for further studies were also highlighted.

Keywords: motivation, learners' beliefs, reading comprehension scores, EFL learners, BALLI

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Introduction

Motivation has been proved to have a significant impact on students' behavior and learning (Mayer et al., 2005). Different researchers have analyzed motivation patterns in various contexts over the past couple of decades (Cheng & Dörnyei, 2007; Dörnyei, 2001). The significant role of learners' beliefs in academic achievements has been also stated in several studies (Abisamra, 2000; Brackett & Salovey, 2006; Mayer et al., 2004; Pishghadam, 2009). Teachers and learners are always engaged in teaching and learning challenges and experience many difficulties during the learning process (Tomlinson, 2014). Learners' belief might originate from life experiences as confirmed by Liando et al. (2012). It can produce an encouraging situation for learning and teaching.

In other perspective, reading comprehension can be mentioned as a skill which can be achieved through students' efforts. It denotes that students should have active roles in improvement of their reading skill. Reading in L2 is a productive and collaborative system as confirmed by Aebersold and Field (1997), in which students use a variety of skills and strategies along with the background information, first language knowledge, and real-life knowledge in order to get the perception of the written texts. The current study tried to explore the impact of Iranian EFL learners' beliefs and motivation on their reading comprehension scores.

Literature Review
Motivation

Factors contributing to the learners' academic achievements including age, gender, aptitudes, motivation, and learning approaches have already been emphasized in different studies (Liando et al., 2005; Ghenghesh, 2010). Dörnyei (2001) states that motivation has a key role in learning a foreign language. Gonzales (2010) referred to integrative vs. instrumental dichotomy in motivation based on pioneering works of Gardener in 1985. Integrative motivation refers to the use of language for the purpose of communication, and instrumental motivation embraces practical goals. In spite of the fact that Gardner's work was quite significant in L2 motivation, it was criticized by some scholars. They believed such a dichotomy was unable to manifest the complexity of motivation construct.

Learners' Beliefs

Many researchers have carried out studies on learners' beliefs within the few past decades (Simin & Ketabi, 2009). Brown (1994) suggests that "beliefs, like any other aspects of cognitive and affective dimensions, are often developed in childhood. Beliefs are formed through the parents' and peers' attitudes, various ways of communication, different affective features, etc." (p. 168).

The concept of learners' beliefs can be viewed from three dimensions (Bernaus et al., 2004). These could be behavioral, cognitive, and affective features that are closely related to behaviorism, cognitivism, and humanism. Behaviorism refers to individuals' behaviors and reactions in different situations. As Kara (2009) put forward, learners' positive beliefs give rise to the

positive behavior on their part. Cognitivism deals with the learners' beliefs about the input they receive and the way they understand the learning materials. According to Feng and Chen (2009), cognitivism has four stages: making connection between the previous knowledge and the new one, developing new knowledge, analyzing new knowledge, and using the new knowledge in different settings.

Reading Comprehension

Kintsch and Rawson (2005) believed, in order to understand a text, different variables are to be taken into account. This view implies that readers need to build a system of beliefs based on semantic features. They should apply language and visual skills to construct meaning out of the text. The situation model comes into being as readers integrate background knowledge with the information provided by the text. In essence, various strategies and implicit and explicit parameters are at work to construct the meaning.

The current investigation has attempted to examine EFL learners' beliefs and motivation as two affective factors having decisive roles in language learning and examined their impacts on the learners' reading comprehension scores. To the end, the following research questions were raised:

RQ1. Is there a significant relationship between Iranian EFL learners' motivation and their reading comprehension scores?

RQ2. Is there a significant relationship between Iranian EFL learners' beliefs and their reading comprehension scores?

RQ3. Does Iranian EFL learners' motivation predict their reading comprehension scores?

RQ4. Do Iranian EFL learners' beliefs predict their reading comprehension scores?

Methodology

Participants

This study included 120 male and female intermediate participants. The age range of these students was between 15 to 30. They were studying English language in different language institutes including Mehrpooyan, Shayestegan, and Nami in Tehran. They were selected based on their results on the Michigan English Test, the results of which confirmed that these learners were truly homogenous with respect to their English proficiency levels.

Instruments

Drawing on research priorities, the researchers employed the following instruments:

Michigan English Test. Participants were chosen according to their scores on the Michigan English exam and were proved to be homogeneous. After obtaining the scores of the proficiency test, only examinees with one standard deviation above and below the average were chosen for the study. The test included 100 multiple choice items and took one hour and fifteen minutes. It had different sections as below:

1. Grammar - 40 questions.
2. Vocabulary - 40 questions.
3. Reading Comprehension - 20 questions.

Motivation Questionnaire. After homogenizing the participants, they completed the English version of Motivation Questionnaire developed by Dörnyei and Taguchi (2009). This questionnaire contains 40 statements to be responded to on a Likert scale (strongly disagree to strongly agree), provided in three sections with fully described instructions. It took 45 minutes to answer. This questionnaire measures the following factors in-depth:

- Ideal L2 Self
- Ought-To L2 Self
- Instrumentality (promotion or prevention)
- Parental Encouragement (Family Influence)
- Attitudes toward Learning English
- Travel Orientation
- Linguistic Self-confidence
- Fear of Assimilation
- Ethnocentrism
- Interest in the English Language
- English Anxiety
- Integrativeness
- Cultural Interest Attitudes toward L2 Community.

Learners' Belief Questionnaire. In this study, the English version of Beliefs about Language Learning Inventory (BALLI) developed by Horwitz (1988) was also used to assess the learners' beliefs about learning a foreign language. The 34-statement BALLI employs a 5-point Likert-scale ranging from "strongly disagree" to "strongly agree" for the answers. The participants had 30 minutes to respond to the items. This questionnaire measures the following factors in detail:

- Learners' beliefs about learning strategies
- Learners' beliefs about learning English
- The difficulty of learning English
- Attitudes towards learning English
- The importance of the learning Environment
- Motivation and Confidence in learning English

Reading Comprehension Exam. A reading comprehension exam was developed by the researchers in order to assess the learner's reading skill. It was taken from English Grade 9 Tests. These tests were designed for students who are at grade 9 (or at the same level) to practice reading comprehension. It comprised 27 items, and had 40 points. The time allocated to do this exam was 90 minutes.

Design and Context of the Study

The present research was of a descriptive correlational design, as the researcher sought to understand the relationships among the variables. In other words, correlational research seeks to figure out if two or more variables are related and if so, in what way. The correlational phase of the study showed the probable relationships among variables. It should be noted that motivation and learners' beliefs were considered as the independent variables and the participants' reading comprehension grades were regarded as the dependent variable of the research.

Data Collection Procedures

The data needed for the current work was gathered through several steps. Firstly, homogeneity procedures were applied in order to evaluate learners' general English knowledge. The participants were totally 150 female and male students. The Michigan English Test was administered to all students in order to select the ones with an appropriate English proficiency for the purpose of the study. It has to be noted that only students whose scores were one standard deviation above and below the mean were chosen as the suitable proficiency level (intermediate); therefore, the number of students decreased to 135 students. After doing the first part, they were asked to complete the relevant questionnaires of the study. Fifteen learners refused to complete the questionnaires. They were thus removed from the study and the number of participants decreased to 120 learners. After administering the Michigan English Test and homogenizing the learners, two questionnaires, i.e., the Learners' Belief Questionnaire and the Motivation questionnaire were given to the participants. Moreover, the researchers provided further explanation for any ambiguous questions before and during the questionnaires' administration. Then, a test of reading comprehension was taken by the participants. Persian and English description about the questions and scales used for collecting the required information were given to the participants in order to prevent possible misunderstandings of the questions in the context of Iran. Participants were assured that their personal information would be kept confidential and would only be used for research and not for any other purposes.

Data Analysis Procedures

In the next stage, the collected data were transformed to codes and then entered into SPSS program. Then the correlational analyses were applied to examine the relationships among the variables under investigation. The amount and degree of the relationships were also presented. Regression analyses were also conducted to indicate whether the independent variables of the study can be used to predict any changes in the dependent variable or not. The results were discussed and reported accordingly.

Results
The Results of the Proposed Research Questions

To answer the four research questions, one multiple regression was run. More specifically, learners' motivation and learners' beliefs were entered into a model as predictors to predict reading comprehension scores, which served as the criterion variable. As recommended by Plonsky and Ghanbar (2018), before conducting the regression analysis, the statistical assumptions of it, including normality, linearity, homoscedactity, and the independence of error terms (Durbin-Watson test of autocorrelation of residuals) were investigated and no violations were identified. Moreover, no outlier was found after data screening.

Table 1 presents the descriptive statistics of all the predictors and the criterion variable in the regression model. It should be noted that no sign of multicollinearity was identified as all the VIF values were less than the recommended value of 10 (Plonsky & Ghanbar, 2018), and the matrix of

correlations (Table 2) depicts the optimum correlations between the predictors and the criterion variable. It should be mentioned that motivation and learners' beliefs were considered as latent composites, so the means of students' responses to questions of the two scales were estimated and used in the regression analysis.

Table 1
The Descriptive Statistics of Predictor and Criterion Variables in Regression Equation

	Mean	Std. Deviation	N
RSC	33.78	4.73	120
MQS	16.48	2.26	120
BQS	16.49	2.09	120

Note: RSC = Reading Scores, MQS = Motivation Scores, AQS = Learners' Belief Scores

Table 2
Matrix of Correlations between Criterion and Predictor Variables

	RSC	MQS	BQS
Pearson Correlation	1.00	0.60	0.50
	0.60	1.00	0.44
	0.50	0.44	1.00
Sig.		0.00	0.00
	0.00		0.00
	0.00	0.00	

The unstandardized regression coefficients (B), standardized regression coefficients (β), R, R2, and adjusted R2 are shown in Tables 3, 4, and 5. According to Table 3, students' motivation (B = .98, S. E = .16, β = .47, t = 6.04, p = .00, predicting 42% of reading comprehension scores) and learners' beliefs (B = .67, S.E = .18, β = .29, t = 3.78, p = .00, predicting 27% of reading cmprhension scores) were statistically significant predictors of reading comprehnsion scores.

As can be seen in Table 4 and Table 5, R for regression was significantly different form zero, F (2, 117) = 44.02, p = .00, with R2 at .43 , suggesting the significance of this regression model. The value of the adjusted R2 was .42, showing that 42% of variability in reading comprehension scores can be predicted by motivation and learners' belief as a whole (Plonsky & Ghanbar, 2018).

Consequently, the reading comprhension scores had a significant correlation with both motivation and learners' beliefs, so the answers to the first two resaerch questions were positive. Concerning reseacrh questions 3 and 4, as it was shown before, both motivation and learners' beliefs were found to be significant predictors of students' reading comprehension scores; hence, the answers to these questions were both positive as well.

Table 3
Regression Coefficients of Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	6.61	2.98		2.22	0.03		
MQS	0.98	0.16	0.47	6.04	0.00	0.81	1.24
BQS	0.67	0.18	0.29	3.78	0.00	0.81	1.24

Table 4
Test of Significance of Regression Equation

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1143.16	2.00	571.58	44.02	.000
Residual	1519.20	117.00	12.98		
Total	2662.37	119.00			

Table 5
R, R2, Adjusted R2, and Test of Independence of Residuals of Simple Regression Analysis

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
0.65	0.43	0.42	0.36	1.80

Discussion

The current study investigated the possible effects of motivation and learners' beliefs on Iranian EFL learners' reading comprehension scores. The results of the study regarding the first and second research questions revealed that there were significant relationships between learners' motivation and beliefs with their reading comprehension scores. Motivating activities and materials along with positive beliefs towards the learning context and the teacher seem to strongly affect learners' reading comprehension scores. Thus, our findings be consistent with those reported by Csizer and Kormos (2009). In this respect, Dörnyei (2001) emphasizes the key role teachers play in motivating learners.

In addition, the findings regarding the third and fourth research questions showed that, in fact, motivation and learners' beliefs *do* predict differences in learners' reading comprehension scores. In particular, motivation, in line with other studies (e.g., Jafari & Shokrpour, 2012; Marsh et al., 2019; McGrew & Wendling, 2010) proved to be a significant predictor of learning outcomes as it had a relatively substantial and statistically significant effect on learners' reading comprehension scores and cleared up 42% of the variance in it. Learners perceived to be the most motivated were reported to have gained higher reading comprehension scores whereas learners perceived to be less motivated got comparatively lower scores. As learners' motivation is a vital variable that is frequently noticed and challenges practitioners in language classrooms (Dörnyei, 1994; Dörnyei & Csizer, 1998), outcomes of the research indicated that motivation can be closely related to reading

comprehension skill. Moreover, learners' belief as an impartial and objective disposition is said to influence language learning considerably (Al-Magid & Al-Mamun, 2009). In this regard, the results of the present study indicated that learners' belief was a good predictor of their reading scores to some degree and accounted for 27% of the variance in it. In line with the mentioned results, individuals with higher beliefs are more likely to be open to new and different experiences because of their positive beliefs toward unique or different situations. The studies conducted by Steinmayr et al. (2018) and Shang (2010), just like the present research, also found a moderate correlation between learners' beliefs and reading comprehension scores. However, the findings are not in line with Choi's (2005) study, where he found no significant correlation between learners' beliefs and students' scores. In sum, both motivation and learners' beliefs were significant predictors of learners' reading comprehension scores, yet the effect of motivation somehow overshadowed the effect of learners' beliefs.

Conclusion

This investigation showed that reading comprhension scores had a significant correlation with both motivation and learners' beliefs, so the answers to the first two research questions were positive. Concerning reseacrh questions 3 and 4, as it was shown, both motivation and learners' beliefs were found to be significant predictors of the students' reading comprehension scores. Thus, the answers to these questions were both positive as well. Furthermore, the results of the study imply that those EFL participants who are associated with high levels of motivation can have a better performance in reading comprehension; therefore, it can be claimed that ESP or EFL teachers can benefit from these results. The outcomes of the research also revealed that learners who have high beliefs are much eager to depend on themselves and can improve their abilities without the help of teachers and instructors; thus, learners' beliefs can facilitate learners' performance on acquiring a foreign language with special purposes.

In all research studies, there are certain limitations that may affect the results of the research and may lead to problems with its extension to other contexts. These conditions may also affect the analyses and descriptions of the results and influence them. This study also had several drawbacks that are to be regarded while making generalizations about the findings. The first one is that the researchers had only access to Iranian EFL learners studying English in Tehran's language institutes. The numbers of male and female participants were not equal in the study. This unbalanced design might have cause gender to act as a moderator variable. Moreover, age of the learners can be considered as another limitation because of its effect on learners' background knowledge.

The implication of this study is that, even if the learners are not very proficient, their reading comprehension skill can substantially be improved by their motivation and belief toward the foreign language. One of the recommendations of this research is to carry out more studies on other variables such as the learners' pragmatic competence strategies, self-regulation, and personality traits, etc. and their relationship with English skills (e.g. reading, writing, listening, and speaking). More studies can be done with

learners in different age groups who tend to be more eager and use specific strategies to have an acceptable performance. This investigation can be replicated with participants of different ages and different levels of English knowledge. It would be more interesting to complement this study with more psychological objectives. Future research may benefit from identifying the students and parents' internal and external motivation and desire instead of traditional classrooms or the levels of autonomy, aggression and resilience, emotional regulation, and self-efficacy. Practical recommendation would be to conduct this research with EFL teachers in other contexts such as schools, universities, and other pedagogical settings. This would provide an understanding of the generalizability of the results of the study. Another suggestion for future research would be considering background variables such as age, experience levels, number of students, subjects taught, and teachers' gender, etc. Different scenarios in English for Foreign Language Learners (EFL) settings can be practically used and would be interesting for enhancing language learning among the EFL learners.

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Tristram Shandy and the Problematics of Origin: The Hobby-Horsical World of Infinite Jest

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Abstract
The Life and Opinions of Tristram Shandy, Gentleman, one of the most unorthodox works ever written, substantially differs from most of the novels of its time and later eighteenth century in its plot, narration, and treatment of characters. In this paper, different aspects of the novel that challenge and deconstruct the points of origin in the life and character of Tristram Shandy are examined. It is demonstrated that *Tristram Shandy* detaches itself from the unconditional stages in the traditional narratives that are often taken for granted, including the birth as the genesis of the characters, a solid belief in the purposefulness of a narrative for moral or educational ends, the fixity of beginnings, and the rational order of ideas in the human mind. The article is divided into four major parts, including the birth, history, life, and human subjectivity, and aims at showing several unique aspects of the novel while being mindful of the close reading of the text as well. To this end, the article concentrates particularly on the events revolving around Tristram Shandy, his father Walter, and Uncle Toby. The Lockean association of ideas, which Sterne turns into a parody of Locke's original thesis later in the narrative, is explored in the article as well.

Keywords: association of ideas, origin, history, self, Sterne, Locke

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Introduction

When *Tristram Shandy* was written and published in nine volumes during the course of eight years from 1759 to 1767, it shocked Sterne's contemporary *men of letters* and received many negative reviews from them. This novel, with two different plots[1] (Tristram`s account of his own life and his father and Uncle Toby`s stories), is so amorphous and unconventional that upon first picking it up- "we are overwhelmed by a sense of chaos" (Shklovsky, 1991, p.147). *Tristram Shandy*, however, is not confined to these plots and sometimes even mocks the concern for a "plot" (Hall, 1963, p.136). Obsessed with what is known as the "*digressive* method," that is, explaining the present conditions just by referring back to the past, Tristram sets out to write his own biography. However, this attempt goes haywire as Tristram learns how uncertain, far-fetched and *ungraspable* the origins of birth, life, and mind are. In other words, Tristram, quite unprecedented except perhaps for the hero of Cervantes, learns to live a life without origins or foundations; as his narrative unfolds his life, he decides to be *joyful* rather than *dismal* or melancholic about it. This article endeavors to bring together different points of unconditional origins of narrative or characters in the eighteenth-century novels and demonstrate how *Tristram Shandy* not only deconstructs these points of origin, such as birth or opening of the narrative, but also provides a new philosophy of mirth and jest. The *indecisive* nature of beginnings, the protean life, and the disruption of selfhood and ideas are the central themes of the present study. Although numerous works have been written on the unconventional narration of the novel or the association of ideas, few have focused on the problematics of origins and the philosophical *implications* that it brings about.

The stereotypical eighteenth-century novels almost always set off with the protagonist's birth; it is always taken for granted that the life of the hero must start with his birth. Since birth does not require an explanation for itself and is the unconditional stage of all individuals, writers often set off their novels with the birth and the genealogy of the protagonist. For example, chapter II of Henry Fielding's *Joseph Andrews* (1742) is titled, "of Mr. Joseph Andrews, his birth, parentage, education, and great endowment; with a word or two concerning ancestors" (2001, p. 2). Fielding tries to come up with an objective account for the origin of Joseph Andrews and makes sure that all things are straightened out; characters, for instance, are introduced before the story is narrated. The rock-solid confidence in human origins, embedded in the Christian tradition, marks the eighteenth century's novels; whereas, Tristram is obsessed with the idea of his birth from the very beginning and does not wish to take it for granted.

The Eighteenth-century novels were often considered to account for psychological and moral growth along with the physical growth of the protagonist. The *bildungsroman* of the story was *essential* to the didactic purposes, which had cast a long shadow over the novels at the time. Johnson (2009) wrote in the "Preface to Shakespeare" that "the end of writing is to instruct; the end of poetry is to instruct by pleasing" (p. 359). Even when Shakespeare, "the faithful mirror of manners and life" (p. 355), did not follow the required instructions, his genius would fall short: "he sacrifices virtue to convenience, and is so much more careful to please than to instruct, that he

seems to write without any moral purpose" (p. 362). This *didacticism* is implicit in most novels in eighteenth-century English literature, especially those starting with the words: *the history of...* where the course of events is *teleological* and *consequential*. In such histories, all the events bind up for an ultimate meaning right at the end. *The Life of Tristram Shandy* is a *life* rather than a *history*; it is not a teleological and purposeful course of events but *rather* an arbitrary or chaotic one. "Commitment in the Shandy world is by hobbyhorse"[2] (Hall, 1963, p.132); in other words, the life of Tristram could have taken a completely different course than it did in the story and the events which follow up are only *fragments* of Tristram`s life. *Tristram Shandy* represents such a chaotic and amorphous life that it cannot fit into a preordained shape.

In the context of eighteenth-century thought, subjectivity and self were deemed reliable and utterly accessible to the writers of the time. On the one hand, Cartesians regarded the human subject as reliable, containing archetypical elements and innate ideas that referred to God and was warranted by God (Descartes, 2008, p. 38). Sterne, on the other hand, implements Locke's empirical epistemology to describe a human self with no point of *absolute* reference. In this respect, Locke (1959) divided the ideas into *simple* and *complex* ones and believed "knowledge is nothing but the perception of the connection and agreement [between ideas], or disagreement and repugnancy of any of our ideas" (p. 167). Sterne takes on this view and adopts it for his own purposes by rejecting that the association of ideas follows up a *regulative* pattern in nature.

In contrast, Sterne maintains that the association of ideas in mind is quite *haphazard* and most of Tristram Shandy`s ideas are just *random* associations, thus making "the first stream of consciousness novel" (Cash, 1955, p. 125). For Tristram, the association of ideas does not follow any regulative or archetypical pattern; instead, it follows habits, passion, social, and cultural conditions. As exposited in the article, such a free association of ideas demonstrates how difficult it is to believe that our ideas could have a solid foundation.

Discussion

Once it was published, *Tristram Shandy* received many negative reviews from Sterne`s contemporaries. Samuel Johnson solemnly promised that "Nothing odd will do long, Tristram Shandy did not last" (Boswell, 1953, p. 696). Moreover, Samuel Richardson (2002) called it "execrable I cannot but call them [characters]" (p. 128). One of the main reasons for Sterne's contemporaries to take issue with the book was its *structure*; it abrogated almost all the standard conventions extant in the eighteenth-century British novels, including the concerns of the beginning and history of characters` development from infancy to maturity. *Tristram Shandy* is, in this sense, a novel *off-limits*, as is evident in Tristram's self-proclamation, "I should beg Mr. Horace's pardon; for in writing what I have set about, I shall confine myself neither to his rules nor to any man's rules that ever lived" (Sterne, 1980, p. 4). His approach to different confinements of his time was to go beyond them, provide his readers with an unorthodox experience of narrating his own life and ultimately dedicate his novel to the moon (p. 11).

Subversion of the Birth as the Genesis of Characters

Since the advent of the novel in English literature, there was little concern for the beginning of the story; in fact, it was quite straightforward that the best start for a novel was the birth of the main protagonist. The plot unfolded with the birth and continued until the growth and maturity. There are many such novels in the context of eighteenth-century literature; for instance, *The History of Tom Jones* (1749) starts with introducing a *supposedly* illegitimate child into the house of Mr. Allworthy (1985, p. 55). To narrate the stories, the protagonist should come into the world in the first place and by the grace of nature, it is his/her birth into the world that could be taken for granted. The notion of birth implied that no external forces determined the character of a child and his nature could be molded into a good shape by education and moral teaching later on in the future. Therefore, individuals, particularly children, could be controlled and handled *rationally* through pedagogical and religious disciplines; in other words, to begin the protagonist's narrative, it was *naturally* and *metaphysically* sufficient to set off with birth. There was nothing before it that could affect the narrator's life except perhaps a non-deceiving God who guaranteed the reliability of human perception and cognition.

In this regard, *Tristram Shandy* is pretty much against the current of eighteenth-century fiction; Tristram's birth is not taken for granted. The narrator does not regard his birth as the beginning of the story; instead, his life has begun much earlier than he is born. His Uncle Toby states: "*My Tristram's misfortunes began nine months before ever he came into the world*" (Sterne, 1980, p. 3).[3] His birth is precisely what strikes Tristram that this event is not only a beginning but an end to a chain of somehow sad and melancholic events. The birth is not regarded as something *given* but is the result of certain material conditions such as conception, the marriage of his parents and their social status that determine all aspects of his life later on, as Tristram confesses at the opening of the novel:

> I wish either my father or my mother, or indeed both of them,
> as they were in duty both equally bound to it, had minded
> what they were about when they begot me; had they duly
> considered how much depended upon what they were then
> doing (p. 1).

Apart from Tristram's digression to events in the past to explain what he is at present, Tristram's conception suggests his lack of control in his "cast of mind" (p. 1). Besides the material conditionality of the birth, perhaps the most remarkable thing about Tristram's birth is his reliance on *chance* in the events relating to his birth. Tristram questions his parents' control over their actions during his conception or the event of his naming (Tristram is the accidental conflation of *Trismegistus*). "Tristram no more than starts the story of his life by describing his conception than he interrupts its progress" (Hall, 1963, p. 131) and forces the reader to face up with the problem of birth at the beginning of the novel. The birth, viewed from a conventional standpoint, is problematic because it is inconceivable how to trace the birth back to solid ground as the beginning of Tristram`s life. Since the forces that govern his humor, body, and temperament before the birth are haphazard and sometimes authorized by

mere chance, it is impossible to mold them into one singular narrative.

Since the beginning parallel to birth is ruled out and the birth of Tristram is the ending result of many courses of events, he can hardly be responsible for what happens to him, much like his uncle`s lack of control over the results of his hobbyhorse (i.e., sieges and war). Tristram stops to be a carrier of meaning for the story's overall purpose and turns the traditional narration over its head by making himself the object of scrutiny rather than proceeding the narrative to introduce the characters, settings, and events (Iser, 1988, p. 25). Unlike the traditional eighteenth-century protagonist whose blank slate of his/her nature is developed a straightforward manner *willingly*, Tristram's character is already hard-wired and conditioned; his ship is already embarked. Thus, his task is to go back to his earlier life to trace and explore the causes of his character and humor. Tristram *regresses* into his past and usually before his birth to unlock traces of his origin and temperament. The notion of birth as the most significant and unconditional state of man is thereby subverted and supplanted by material conditions, chance and *selective* events, which take place before his birth.

The notion of birth is deconstructed through the fact that every interpretation of birth is conditional, selective, and subjective. Therefore, one cannot locate the truth of Tristram's birth because there is no such a thing as the absolute beginning for man. The previous idea conditions every subsequent idea of birth; the birth is preceded by conception and conception by the political and economic state of the parents, their marriage, etc. The more we get back, the more haphazard and divergent the events would become. According to this *Shandean* philosophy, birth is an ending to a whole chain of events. When the definition of birth has turned out to be selective, it also becomes subjective or, as Tristram puts it, a *hobby-horsical* matter. The narrative of birth is not accomplished at the end and goes on *ad infinitum* from one point to the next. Tristram never really gets to start his novel; instead, he selects a stage to start from, *merely* for the practical purpose of writing a novel. Therefore, when he cannot ground the notion of birth on any solid foundations, he turns to pragmatic reasons that one must select a starting-point, however *arbitrary* it might be, to write the life of oneself.

History vs. Life

As mentioned previously, a typical eighteenth-century protagonist has his life started with his birth and then aspires to grow morally, mentally, along with his natural biological growth. The course of his life has a teleological movement towards the future in which his *history* is fulfilled and the protagonist is finally in a blissful and satisfying condition at the end. In the eighteenth century, most English novels follow up this pattern, such as *Tom Jones, Pamela*, *Joseph Andrews* and *Moll Flanders.* Sterne, however, is no such writer; he makes Tristram defy any attempt at self-perfection and moral or mental growth. On the one hand, Tristram is the narrator of his life and his confrontation of past events is quite conspicuous; on the other hand, he is not entirely successful with the *progress* of his story from the very start or, better still, he never gets wiser or even better looking. It takes three volumes for him to be born; the first one deals with his baptism and one volume with five-year-

old Tristram, who gets himself involved with the sash window accident. The rest of the narrative is not so much about Tristram himself and shifts its focus from Tristram to Uncle Toby with his campaigns and abortive love affair. This type of writing stands in sheer contrast with *histories* rampant in the novels of the time. Iser (1988) meticulously contrasts *life* with *history*:

> This kind of life is in direct contrast to the history, for instead of binding all events together in an ultimate meaning, it expands every single incident out into its prehistory, showing that the character of events is such that they need not necessarily have taken the course that they did. While the history is drawn together by the meaning of its end, life explodes into the imponderable. (p. 3).

However, Tristram's life is not narrated just to contrast with the novels of the time; it goes beyond the merely critical stance towards writing and narration. It is safe to say "that structure of the novel is not completely defined by the plots" (Hall, 1963, p. 136) and is turned into comical gesture with disruption, digression, and flashbacks. Tristram plays with some of the deliberate misunderstandings in the novel like trying to unravel Uncle Toby's affliction by explaining "monstrous wound upon his groin" (Sterne, 1980, p. 411) where, in fact, he is not hit in his genitals, "We thought, Mr. Trim, it had been more in the middle" (p. 451). The reader's expectation is thus disrupted and one of the supposed themes (i.e., malfunction of Uncle Toby) of the novel is not at all there in the first place. Tristram allows his narrative to be steered by his fancy that diverts the course of narrative with its whimsical twists and turns, for example, in the case of his exploration of the history of noses (Vol. IV), or Walter Shandy's encyclopedia for Tristram. Sterne "mocks the concept of a novel as a vehicle moving towards a climax, and… also mocks the reader's concern for reaching that climax" (Hall, 1963, p. 143). Besides, the narrative can distract the reader by a series of never-ending accidents and misunderstandings that get in the way of *unraveling* any past events.

His slow progress in the story is due to his commitment to the principle of causality and, in part, Locke's notion of causality. It functions on the assumption of the association of *ideas*: "a cause is that which makes any other thing, either simple idea, substance or mode, begin to be; and an effect is that which had its beginning from some other thing" (Locke, 1959, p. 434). Even though it is plausible that one should assume a cause for an effect, Sterne, unlike Locke, claims that it is not so much clear whether causes themselves are not the effects of other causes and *ultimately* are not grounded in the natural world. Tristram is dubious of Locke's overt proclamation of finding origins and final causes in nature since every event introduced in the story has a pre-history. Tristram endeavors to grasp the unconditional origin of his life with his writings, but every time he is confronted with a loose chain of association of ideas and fails to trace the life back to its absolute, unconditional beginning. Therefore, he falls into *regressus ad infinitum,* a world where the final causes cannot be determined (Iser, 1988).

This issue becomes fully-fledged when Tristram tries to explain his birth. He pretends to follow the principle of causality to keep the story *coherent*. After all, "a plot is also a narrative of events, the emphasis falling on causality"

(Forster, 1955, p. 86) and that one could assume that *Tristram Shandy* obscures the causality principle; in other words, he sometimes changes or reverses the order of cause and effect. The life that is supposed to move forward is forced to turn back to explain the previous events. This type of narrative is hard to follow, making it impossible to find a final cause for a particular event. This problem of causality makes many readers confused over the causation principle at work in the story since it is not founded on any *regulative* pattern; rather, it is based on the *subjective* and *contextual* association of cause and effect. As a result, this association of ideas cannot represent past life because of its constraint to a particular context; the cause and effect do not regulate based on *a priori* principles but are dependent on the context and the whims and wishes of the narrator's subjectivity:

> When a man sits down to write a history…he knows no more than his heels what lets and confounded hindrances he is to meet within his way, or what advance he may be led, by one excursion or another, before all is over. Could a historiographer drive on his history, as a muleteer drives on his mule, straight forward; for instance, from Rome all the way to Loreto, without ever once turning his head aside either to the right hand or to the left, he might venture to foretell you to an hour when he should get to his journey's end; but the thing is, morally speaking, impossible: For, if he is a man of the least spirit, he will have fifty deviations from a straight line to make with this or that party as he goes along, which he can no ways avoid (Sterne, 1980, p. 26).

For Tristram, writing down a *history* is next to impossible since *life* cannot be adequately represented in words and some events include experiences that are unfathomable like those of moods and passions; Tristram also refers to several "irrelevant" events. Do we have to know all of his father's theories or the events about the midwife? Why does Tristram insist on irrelevant stories?

His deliberate reference to these events marks a unique aspect of the novel: its representation of *life* that does not have to be reduced to plots. As in *life*, novels can also be without directions and purposes. *Life* cannot always be headed in a steadfast direction and Tristram's hobbyhorse "delays the final illumination" (Hall, 1963, p. 135), making it all the more difficult for the plot of the story to go on a straight line. From another perspective, life can never be reduced to a chronological order of *history* because it is not identical to its representations. A representation is a frozen image of thought grasping different moments, whereas life is a dynamic, moody and sometimes an unconscious stream of thoughts, emotions and irrelevant events. Tristram criticizes the eighteenth century's autobiographical novels for ignoring the gap between life and its representations, yet he ironically continues to write down his life to expose the very *illusory* framework that he finds fault with. Thereby, for Sterne, the task of *Tristram Shandy* is to find loopholes in the narrative techniques of the eighteenth-century novelists while representing life in its full potential and vitality.

Whence to Begin? That is the Question!

The question of why *Tristram Shandy* has no fixed beginning still remains provocative and controversial among critics. The act of beginning the novel is always *deferred* by Tristram and is *intentionally* played out throughout the narrative. Perhaps the most crucial aspect of his beginnings is his reluctance to start the novel from one point rather than the other. Every time the association of ideas coerces him to continue the narrative before establishing the beginning, be it his birth, death of his brother, or even uncle Toby's story. If we take his conception as the beginning of the novel, then he must return to describe his father's habit of winding the clock and uncle Toby's sieges, yet he is not born until the end of volume III. In other words, the opening of the novel emphasizes the procedure of *conditionality*; all facts, presented in the beginning, refer back to conditions, which *ceaselessly* turn incomprehensible and inaccessible and keep pushing back the narrative further into the past. *Tristram Shandy* does not point to a fixed beginning but reveals the unstable and fluctuating nature of beginnings in general.

As was mentioned in the first part, one of the beginnings of the novel is his conception or his birth. In contrast to his birth as the beginning, Tristram marks the death of his brother Bobby as the beginning in volume IV:

> From this moment, I am to be considered as heir-apparent to the Shandy family and it is from this point properly, that the story of my life and my Opinions sets out; with all my hurry and precipitation I have but been clearing the ground..." (p. 236).

Death, just like birth, can be both a beginning and an end. Birth, as the beginning, introduced us to an endless pre-conditional complication before Tristram's actual birth. Death is an end for his brother, Bobby, but is a beginning for Tristram as the representative of the house of Shandy and heir to his father's land and title. However, instead of following in his father's footsteps, Tristram, appareled in his eighteenth-century breeches, waistcoat and periwig, lays claim only to his own wishes and *idiosyncrasies*. It appears that "the end seems like a beginning and the beginning like an end" (Iser, 1988, p. 9) and no character could ever have an original opening in the novel. Tristram's strive for originality creates "the comic confusion" (Hall, 1963, p. 134), making him try his luck for an original set-up, even when he knows it fails.

In Volume. VI, where the novel is halfway through, Tristram speaks of beginning his novel again: "I am now beginning to get fairly into my work...I make no doubt but I shall be able to go on with my uncle Toby's story, and my own, in a tolerable straight line" (Sterne, 1980, p. 333). However, the result is not the beginning in a straight manner; if running into a straight line is the way to begin the story, then Tristram counters the very possibility of a straight narrative and thereby a genuine beginning. The straight line of narration does not only require a fixed beginning but an end as well. If the straight line from beginning to end is the simplest way forward, does Tristram follow the straight line?

The answer might be negative without a second thought; however, Tristram equivocates the straight line with the law of gravity: "Pray can you tell

me, that is, without anger, before I write my chapter upon straight lines by what mistake…your men of wit and genius have all along confounded this line, with the line of GRAVITATION?" (p. 334)

The straight line of a story must have a stable beginning and an end so that it can be narrated with ease, whereas gravitation is a reminder of the free fall of objects. It is readily discernible that *Tristram Shandy* is somehow shaped by the *continual* fall of objects. Contrary to the association of ideas, which is far-fetched and abstract, "the word 'gravity' [has] the physical weight and concreteness" (Burckhardt, 1961, p. 70) in the novel. For example, the sash window accident or the stone falling on uncle Toby's groin are all the consequences of gravity. If we think about it, a significant part of the story depends on the notion of free fall. Indeed, free fall is more or less a straight line, except that it is a straight line without *teleology* and purpose; it is not clear where the object during the free fall winds up. Therefore, this straight line does not reach the fulfillment of a goal; rather, it is *unpredictable* and *gratuitous*. Here, Tristram *playfully* introduces us to a straight line that lacks direction and purpose. Tristram is thereby confounded by men of wit and learning who have mistaken gravitation with a straight line, whereas he thinks of gravity as a kind of gap that will get indirect, parabolic, or in any direction by chance (Burckhardt, 1961, p. 80).

Sterne provides multiple beginnings, and each one has many pre-histories that make the beginnings seem like an end to a whole chain of process. None of them solves the problem of the conditionality of beginnings. By applying the same storytelling principles in the eighteenth century, Sterne criticizes the *apparent* naturalness of conventional beginnings. This multiplicity of beginnings undermines the validity of the unconditional aspects of the novels as well as exposing the selective nature of origin, that is, where to begin the narrative. The ending of the novel also appears to indicate the same interpretation. However, this issue is disputable among Shandean scholars. Most of Sterne's contemporaries and later Victorian critics like Bagehot (1891) agreed that Tristram Shandy is a "book without plan or order" (p. 104) and without an actual opening and closing, though some other critics like Wayne Booth have a different view. Booth (1951) considers the *haphazardness* of the ending to be historically inaccurate and contrary to the process of its writing. He asserts that "Sterne's work was not so haphazard as has been believed" (p. 173). Historically speaking, Sterne (1935) had more or less determined the end of the novel in his letters and had planned initially to go beyond nine volumes, then he probably grew tired of the book due to its reception and his ill conditions made him change his mind (p. 284).[4] Booth (1951) also points out that, at the end of the ninth volume, Sterne should have left something behind for the next volume as he titillates his readers` curiosity at the ending lines of the previous eight volumes (p. 175). Therefore, for Booth, the ending seems more decided and less rickety than the beginnings.

The Hollowness of the Subject

One of the most significant aspects of *Tristram Shandy* is the reference to the philosophy of John Locke, one of the leading figures in the British Empiricism of the seventeenth century whose influence on Sterne is enormous.

Sterne once remarked to Jean-Baptiste-Antoine Suard, a French journalist and his friend, that Locke's philosophy everywhere had "shaped his thought and manner of procedure" in writing *Tristram Shandy* (Cross, 1925, p.277). Locke's notions of self and epistemology play a critical role in the exposition of the story where the "train of ideas" and their associations are concerned.

Locke (1959) believed that all our knowledge comes from our senses and there is no other gateway to acquire knowledge; therefore, the first principle of knowledge derives from *sense* experience (p. 48-9). The knowledge is shaped in the form of *ideas,* which are abstract entities organized in the human mind. The primary form of knowledge arises from the combination of *simple ideas*: the ideas that are immediate and essential for an experience like the idea of shape, size, motion, and solidarity (*primary* qualities), color, smell, taste (*secondary* qualities), and the like. They ultimately form *complex ideas,* which are the real source of knowledge and data; they are unconsciously formed in mind and prepare the next stage for combining these associations. Locke (1959) maintains that the association of simple ideas is caused by archetypes dependent on the natural world: "for the attaining of knowledge and certainty, it is requisite that we have determined ideas: and, to make our knowledge real, it is requisite that the ideas answer their archetypes" (pp. 232-3). Of course, Locke initially considered the association of ideas as a flaw and a hindrance to natural reason and even madness (Cash, 1955, p. 127). There is a dispute about whether Locke confuses the association of ideas with the train of ideas and vice versa, particularly when they were brought together later on by philosophers like David Hartley and used under the same name. The dispute, however, is quite harmless for our present argument since Sterne thought of the mind as a constant flux of ideas, rather than an exposition of human knowledge in general. "The psychology of the train of ideas, central in Locke's epistemology, is a more likely explanation of Tristram's consciousness" (p. 133); however, it must be noted that Sterne seems to regard the train of ideas as synonymous with the association of ideas.

Then, Sterne comes along to grapple with human subjects and utilizes Locke's association of ideas for his own *purpose*. While Locke found confidence in the association of ideas regulated by archetypes, Tristram Shandy is skeptical of the naturalness of this association:

> That, from an unhappy association of ideas which have no connection in nature, it so fell out at length, that my poor mother could never hear the said clock wound up, but the thoughts of some other things unavoidably popped into her head, vice versa: which strange combination of ideas, the sagacious Locke, who certainly understood the nature of these things better than most men, affirms to have produced more wry actions than all other sources of prejudice whatsoever (Sterne, 1980, p. 5).

If the human mind shapes the formation of complex ideas and it tends to use these ideas *freely*, how can these archetypes regulate such association in the subject? It is Locke's task to pinpoint precisely the archetypical relation of ideas. He maintains that these archetypes are the result of the natural understanding of the world created by God. Our job is to build upon this system

of ever-growing knowledge by enriching our experience. Stern maintains, however, that the tension between vague archetypes and human freedom is unresolvable in the philosophy of Locke, and often the human freedom takes over our ideas and combines them *haphazardly*. In other words, the foundation of Locke's association of ideas based on ontology (i.e., nature) is substituted by psychology (i.e., motives of subjects). By understanding the association as such, the ideas could be associated because of habit, desire, or whim and *hobbyhorses*. For example, the association of clock sounds with the sexual act is a personal association and entirely subjective for Mrs. Shandy. Although Stern does not reject the view of archetypes and the natural world as the foundation of our knowledge entirely, he believes there is no guarantee for regulated association and this "doctrine imposes a terrible burden of proof on Locke" (Traugott, 1954, p. 34).

What is then the foundation of the association of ideas? Sterne's answer is the human subject. It ditches the Lockean principle into a strict corner where experience loses its touch with the natural world, and the self is guided with no guarantee for cognitive reliability of knowledge. In other words, the association of ideas becomes somewhat arbitrary and self-willed, leaving us with a "solipsistic view of the universe" (Hall, 1963, p. 139). It is no longer a matter of referring back to the natural world in which Locke could determine the formation of complex ideas; instead, "the self is thrown back upon itself" (Iser, 1988, p. 15). The subject loses its archetypical foundation and is ruled by habits, interest, and sometimes *sheer* chance. Locke (1959) somehow had anticipated this by saying "that sometimes a boisterous passion hurries our thoughts, as a hurricane does our bodies, without leaving us the liberty of thinking on other things…" (p. 319).

Nevertheless, Locke never considered the train of ideas as fanciful, whimsical associations since it made his effort for building up a coherent epistemology pointless. Sterne, however, radicalizes Locke`s notion by claiming that various personal tastes and backgrounds govern the succession of ideas in different people. Thereby, it is next to impossible to determine the motivation behind the succession of ideas since such a combination is multi-faceted and often time *topsy-turvy*. Sterne concludes that the succession of ideas is somewhat subjective and personal; for example, there is no reason to generalize why Mrs. Shandy associates winding up the clock with the sexual act or why Uncle Toby's metaphors are all about sieges, garrisons, and soldiers. Therefore, for Sterne, the personal and subjective association of ideas (projected by the mind itself) precede any other definitive principles that can play a role in the process of association, be it time and space, archetypes of nature, or innate ideas.

Since Lockean self has no transcendental origin in practice and cannot avoid the arbitration of association of ideas, the subject, beyond any conceptualization, is responsible for anchoring the complex ideas. Contrary to Descartes, who embedded innate ideas in mind, Locke's mind was a blank slate with no essential aspects written over it. Sterne replaced the Lockean archetypes with norms of communication rooted in history, society and time; furthermore, "the guaranteed reality" is transformed into a normative, contingent interplay of subjects. "This makes it clear that the association of

ideas as a norm of cognition is not an integral component of reality" (Iser, 1988, p. 18). The central doctrine of Locke is thus turned into a hobbyhorse and loses its touch with reality. If we consider the self as the carrier of ideas, then the self as the reflective observer is jeopardized and loses its universality. The self is more about social construction and personal desires than any universal notions.

Therefore, once the self has utterly lost its frame of reference and cannot have any essential parts, the novel turns into a theater for parodying the association principle. Sterne's destruction of the self is accompanied by normative criteria, which reveal the inadequacy of archetypes' universality in Lockean philosophy and innate ideas in Cartesian philosophy. In this respect, the deconstruction of the self makes Sterne's view rather close to the idea of Hume (1968), who considered the self to be an illusion and all concepts as "fictions of the mind" (pp. 48; 220) or for that matter, Nietzsche's view (1968) of the self as a construction: "The subject is not something given, it is something added and invented and projected behind what there is" (p. 267). It is not without occasion that both Hume and Nietzsche applauded *Tristram Shandy*. Hume (1932) called it "the best book that has been writ by any Englishman these thirty years" (p. 269) and Nietzsche (1913) said Sterne was "the most liberated spirit of all time, in comparison with whom all others seem stiff, square, intolerant and boorishly direct"(p. 61).

When the self is void of all essential aspects, all characters are free to ride their hobby- horses and express their singular self in various ways. Tristram can be said to have decentered the subject and made it quite immeasurable for philosophy and science of his time. Characterizing the subject as such, Sterne goes against the entirety of mainstream perceptions of the self as a reliable, transcendental subject. Sterne puts the typical Rationalist's subject in a straitjacket by making it hollow and void of reference; simultaneously, he criticizes empirical associationist`s tendency to ground the association of ideas in the natural world by exposing the *arbitrariness* of the link between ideas; thereby killing two birds with one stone.

Conclusion

In this article, the notion of birth, history, and life in the eighteenth-century context, the problems of beginning a novel, and self and subjectivity were investigated. The relationship between birth and beginning was highlighted and shown to be problematic as much as any other beginning. The inclination of novelists to provide an objective, detailed account of the protagonist's life and growth was compared with *Tristram Shandy*'s refusal to linearity, moral, and mental progress in his narration. The typical perceptions of the subject and the self, prevalent in Empiricism and Rationalism, were sharply criticized by Sterne throughout the narrative. The self was stripped of essential aspects such as innate ideas or archetypes. The Lockean association of ideas, radicalized by Sterne, turned into a game of succession of ideas *ad infinitum.* The origins and motives of these associations were inaccessible and sometimes inexplicable, resulting in the idiosyncrasy of the self and, ultimately, its lack of *originality*. The many beginnings of the story showed how reluctant Tristram is about his origins since every time he tries to grasp the origin of his

story, a set of pre-histories stumbles upon the narration, and the origin story gets lost in the meanwhile. *Tristram Shandy* is, therefore, a novel without points of *origin* and unconditional principles.

Notes:

1. This is Hall's view in the "The Hobbyhorsical world of Tristram Shandy." The plot of the story is one of the most controversial issues of the novel ever since its publication. Tristram jumps over his narrative and often gets it pushed forward by his fancy. See, e.g., Toby Olshin's discussion about digression in Genre and Tristram Shandy: The Novel of Quickness. (1971). *Genre*, (4), 360-75.
2. Hobby-horses were originally figures in the old Morris dances. The literal meaning of the term refers to a stick with a horse's head attached. In the text, the implicit meaning of the term denotes tastes, wishes, entertainments, or any desire and derive which is alogical.
3. This is italicized in the original text.
4. "At present I am in my peaceful retreat, writing the ninth volume of Tristram- I shall publish but one this year, and the next I shall begin a new work of four volumes, which when finished, I shall continue Tristram with fresh spirit" (Sterne, 1935, p. 284). When he changes his mind due to reception: "The public, if I guess right, will have had enough, by the time they get to the end of your eighth volume" (p. 285) and when he was ill: "I miscarried of my tenth volume by the violence of a fever I just got through" (p. 294).

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**Abstracts
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بررسی تطبیقی نشانگرهای فراگفتمانی
در مقاله‌های پژوهشی زمین‌شناسی

عباسعلی رضائی*۱

آرزو قبادی۲

چکیده

علاقه به کاربرد نشانگرهای فراگفتمانی در مقاله‌های پژوهشی رشته‌های گوناگون، در بین پژوهـشگرانِ گفتمـان و ژانر گسترش یافته‌است. در میان رشته‌های علوم سخت، زمین‌شناسی و زیرشاخه‌های آن کمتـر مـورد توجـه قـرار گرفته‌است. این در حالی است که یافته‌هـای پژوهشـی دانـشجویان تحـصیلات تکمیلـی زمـین‌شناسـی در مقاله‌های تخصصی، تا اندازه‌ای به سـبب دانـش انـدک آن‌هـا دربارهٔ کـاربرد درسـت نـشانگرهای فراگفتمـانی در مقاله‌های پژوهشی‌شان، در مجله‌های تخصصی با اعتبار بالای رشته‌های آن‌ها مـورد پـذیرش قـرار نمـی‌گیـرد. در پژوهش حاضر، با اسـتفاده از چـارچوب نظـری هایلنـد و تـسه (۲۰۰۴)، بـر نـوع و فراوانـی کـاربرد نـشانگرهای فراگفتمانی در شش زیرشاخهٔ اصلی زمین‌شناسی (یعنی مهندسی زمین‌شناسـی، رسـوب‌شناسـی، لـرزه‌شناسـی، سنگ‌شناسی، دیرین‌شناسی و ژئوتکنیک) تمرکز شده‌است. بـرای پاسـخ بـه پرسـش‌هـای پـژوهش، ۱۸۰ مقالـه پژوهشی از ۷۳ مجلهٔ با رتبهٔ بالای زمین‌شناسی، از پیکره اصلی انتخاب شد. یافته‌های بررسـی دقیـق واژه بـه واژهٔ مقاله‌ها نشان داد که به جز نشانگرهای درون‌مرجع، شش زیرشاخهٔ اصلی زمـین‌شناسـی از جنبـهٔ آمـاری تفـاوت معناداری در نوع و فراوانی کاربرد ویژگی‌های فراگفتمانی نشان دادند. افزون بر این، نتایج نمایـانگر آن بـود کـه در سنگ‌شناسی، مهندسی زمین‌شناسی و رسوب‌شناسی، فراوانی بیشتری در کاربرد نشانگرهای تعاملی در مقایسه بـا سه زیرشاخه زمین‌شناسی همتایـشان مـشاهده شـد. بـا ایـن وجـود، ایـن سـه زیرشـاخه، یعنـی لـرزه‌شناسـی، دیرین‌شناسی و ژئوتکنیک، فراوانی بالاتری در به‌کارگیری عناصر فراگفتمانی تقابلی نشان دادند. یافتـه‌هـای ایـن پژوهش، کاربردهایی برای پژوهشگران ژانر، مدرسین زبان انگلیسی تخصصی و نویسندگان تازه‌کـار زمـین‌شناسـی دارد.

کلیدواژه‌ها: نشانگرهای گفتمان، عناصر تعاملی، عناصر تعامل‌گر، زمین‌شناسی، ساماندهی بلاغی

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تحلیل سه‌جانبۀ نیازهای زبان انگلیسیِ دانـــشجویاِن ایرانی کارشناسی فیزیوتراپی با اهداف دانشگاهی

اغول گل‌نظری^{*۱}

سونیا ظریف ضروری^۲

چکیده

با توجه به نقشِ مهم نیازسنجی در دوره‌های انگلیسی با اهدافِ ویژۀ دانـشگاهی و لـزومِ بـازنگری ایـن دوره‌هـا در ایران، پژوهش حاضر با سه‌بعدی‌سازی روش‌ها ومنابع پژوهش، به بررسیِ نیازهـای کنـونی و نیازهـای آتـی زبان انگلیسیِ دانشگاهی دانشجویانِ کارشناسیِ فیزیوتراپی می‌پردازد. به همین منظور، داده‌های کمی و کیفی پـژوهش از ۱۳۲ دانشجوی کارشناسی، ۲۰ دانشجوی کارشناسی ارشدِ مشغول به کار، ۲۰ استاد فیزیوتراپی، و ۹ استاد زبان تخصصی از ۴ دانشگاه علوم پزشکی در تهران با استفاده از ۲ نسخه پرسـش‌نامـۀ نیازسـنجی و مـصاحبۀ نیمـه‌بـاز گرداوری شدند. نتایج پژوهش نشان داد که با وجود مهم یا خیلی مهم بودن اکثر مهارت‌ها و ریزمهارت‌های هـدف برای همه گروه‌های حاضر در پژوهش، در اولویت‌بندی‌های گروه‌هـا تفـاوت‌هـایی وجـود داشـت. نتـایج بخـش خودارزیابی همچنین مهارت‌هایی که در آن‌ها دانشجویان نیاز به تقویت داشتند، را مشخص کرد. یافته‌های تحقیق، همچنین مسائل و راه‌حل‌هایی برای دروس زبان تخصصی برای دانـشجویان فیزیـوتراپی را بررسـی مـی‌نمایـد و از طریق مثلث‌سازی نظراتِ گروه‌های مختلف در مورد نیازهای هدف و نیازمنـدی‌هـای شـرایط کنـونی دانـشجویان، پیشنهاداتی برای بهبود و ارتقای دوره‌ها و منابع آموزشی ارایه می‌نماید.

کلیدواژه‌ها: انگلیسی با اهدافِ ویژۀ دانشگاهی، نیازسنجی، نیازهای کنونی، سه‌بعدی‌سازی، دانشجویان فیزیوتراپی

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شناسه دیجیتال (DOI): 10.22051/lghor.2020.32230.1335

تأثیر بازخورد همسانِ باواسطه-رایانه در مقابل رودررو بـر توانـایی نوشـتاری و رخـدادهای زبان-وابـستۀ زبان‌آموزان درون‌گرا در مقابل برون‌گرا

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محمد رحیمی[2]*

چکیده

این پژوهش به بررسی تأثیر بازخورد همسان رو در رو و باواسطه-رایانه بر توانـایی نوشـتاری و رخـدادهای زبان-وابستۀ زبان‌آموزان درون‌گرا و برون‌گرای زبان دوم پرداخته‌است. هشتاد و شش زبان‌آموز انگلیسی سطح متوسط به صورت تصادفی به دو گروه متفاوت بازخورد همسان رو در رو و با واسطه-رایانه دسته‌بندی شـدند. در کـلاس‌هـای باواسطۀ رایانه، شرکت‌کننده‌ها بازخورد همسان و نظراتشان را با استفاده از پلت فرم گوگل داکس رد و بدل کردند. در این میان، در گروه رو در رو، شرکت‌کننده‌ها نظراتشان را بر روی کاغذ رد و بدل کردند؛ آن‌ها همچنین هفته‌ای یک بار هم گرد هم آمدند تا درباره نظراتشان به صورت رودررو گفت‌وگو کنند. یافته‌هـا نـشان داد کـه درون‌گراهـا در گروه باواسطه-رایانه به طور معناداری بیشتر از افراد درون‌گرا در گـروه رو در رو پیـشرفت کردنـد. بـا ایـن وجـود، برون‌گراها در هر دو گروه رو در رو و باواسطه-رایانه به صورتی برابر پیشرفت کردند. یافته‌ها همچنین نشان داد که هم درون‌گراها و هم برون‌گراها در گروه باواسطه-رایانه، رخدادهای زبان- وابستۀ بیشتری در مقایسه بـا همتایـان خود در گروه رو در رو تولید کردند. افزون بر این، بر اساس نتایج الگوهای جفتی زبان‌آموزان درون‌گرا و بـرون‌گـرا تأثیراتی بر تعداد رخدادهای زبان-وابستۀ تولیدشده توسط آن‌ها داشتند.

کلیدواژه‌ها: بازخورد همسان باواسطه-رایانه، رخدادهای زبان-وابسته، درون‌گرایی، برون‌گرایی، مهـارت نوشـتاری زبان دوم

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شناسه دیجیتال (DOI): 10.22051/lghor.2020.32628.1353

یادگیری واژگان زبان خـارجی: بـازخورد اصـلاحیِ وابسته به تابلوی هوشـمند در مقایـسه بـا بـازخورد اصلاحیِ مبتنی بر کاغذ

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مهدی نصیری[3]

چکیده

این پژوهش در پی بررسی کارآمدی بازخورد اصلاحی وابسته به تابلوی هوشمند در مقایسه بـا بـازخورد اصلاحی مبتنی بر کاغذ برای گسترش واژگان زبان انگلیسی ایرانی بوده‌است. بـه ایـن منظـور، نمونـه‌ای از ۸۰ زبان‌آمـوز انگلیسی با مهارت متوسط بر مبنـای نمـرۀ بـه‌دسـت‌آمـده از یـک آزمـون مهـارت زبـانی انتخاب شـدند. سـپس شرکت‌کنندهها، به صورت تصادفی به سه گروه دسته‌بندی شدند: دو گروه آزمایشی و یک گروه کنتـرل. نخسـتین گروه آزمایشی (تعداد= ۳۰) در حالی که بازخورد اصلاحی وابسته به تابلو هوشمند را دریافت مـی‌کردنـد، مـورد آموزش واژگان هدف قرار گرفتند، و گروه آزمودنی دوم (تعداد= ۲۵) در حالی که بازخورد اصلاحی مبتنی بر کاغذ دریافت می‌کردند، مورد آموزش واژگان هدف قرار گرفتند؛ گروه کنتـرل کـه مـورد آمـوزش واژه‌هـای هـدف قـرار گرفتند، هیچ بازخوردی از هیچ نوعی دریافت نکردند. یافته‌های آزمون تحلیـل واریـانس نـشان داد کـه بـازخورد اصلاحی مبتنی بر کاغذ ، اندکی، یادگیری واژگان هدف به وسیلۀ شرکت‌کننـدگان را بهبود بخشیده‌است. ولـی، روش بازخورد اصلاحی وابسته به تابلوی هوشمند، تأثیر معناداری در این زمینه نشان داده‌است. یافته‌ها می‌تواننـد بیانگر دیدگاه‌های نوآورانه‌ای در حوزۀ یادگیری زبان به کمک فناوری و فناوری‌های جدید در آمـوزش زبـان دوم فراهم آورد.

کلیدواژه‌ها: تابلو هوشمند، بازخورد اصلاحی، بازخورد اصلاحی وابـسته بـه تـابلوی هوشـمند، بـازخورد اصـلاحی مبتنی بر کاغذ، یادگیری واژگان

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انطباقِ راهبردهای سیاسی با ابزارهای بلاغی در مناظره‌های پیشا-ریاست جمهوری ۲۰۰۸ ایالات متحده: بررسیِ گفتمان سیاسی

مرجان وثوقی*۱

فرنوش کریمی۲

چکیده

در این مقاله سعی شد تا پژوهش بر مبنای رویکردهای اخیر تحلیل گفتمان سیاسی که همسو با دیدگاه ون دایک (۲۰۰۶) متن در انطباق با بافت مربوطه بررسی می‌شود، دنبال شود. هدف اصلی این بود که به گفتمان‌های سیاسی از دیدِ تحلیل گفتمان سیاسی نگریسته شود تا ببینیم آیا ایدئولوژی‌ها و روابط قدرت طرفین در موضعِ هدف این پژوهش، احتمالاً می‌توانند با عناصر زبانی – در این جا ابزارهای بلاغی- همسو باشند و تا چه اندازه چنین انطباق متن-بافتی در داده‌های انتخاب‌شده با ابزارهای زبانی قابلِ تشخیص است. در نتیجه، نگارندگان در پی واکاوی نمونه‌ای از گفت‌وگوی سیاسی - مناظره‌های زندهٔ پیشا-ریاست جمهوری ۲۰۰۸ ایالات متحده- در میان دو کمپین سیاسی «جمهوری‌خواه» در مقایسه با «دموکرات» برآمدند. در راستای این هدف، برخی راهبردهای سیاسی مباحثه در مدل ون دایک از قبیل «سلطه»، «وعده یا بار مسئولیت»، «برنامه‌های آینده»، «مقایسه»، «توافق عمومی»، «تعمیم‌های خلاف واقع»، «مردم‌گرایی»، «همگانی‌سازی» و «بازی اعداد» در انطباق با برخی ابزارهای بلاغی مانند «استعاره»، «مبالغه»، «کنایه»، «حسن تعبیر» و موارد مشابه مورد بررسی قرار گرفتند. حرکت‌های گفتمانی رایج در گزاره‌های گفتاری اوباما در مقایسه با مک‌کین از میان راهبردهای مشابه مورد مقایسه و مقابله قرار گرفت تا هر یک از ابزارهای بلاغی نوظهور کشف شوند. یافته‌ها نشان دادند که ۱) نامزدهای سیاسی از حرکت‌های بلاغی و سیاسی در همراهی با واحدهای گزاره‌ای یکسانی استفاده کرده بودند، ۲) برخی از ابزارهای گفتمانی به‌کاررفته با بیشتر راهبردهای سیاسی مانند تکرار و استعاره موازی بودند و ۳) برخی از راهبردهای سیاسی نیز شامل «مقایسه»، «مردم‌گرایی» و «برنامه‌های آینده» نسبت به دیگر ابزارها و راهبردها به وفور به کار رفته‌اند.

کلیدواژه‌ها: تحلیل گفتمان تقابلی، تحلیل گفتمان سیاسی، راهبردهای سیاسی، ابزارهای بلاغی، گفتار پیشا-ریاست جمهوری ایالات متحده

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تکراریذیری حرکت‌های متنـی-کـارکردی در مقالـه‌هـای پژوهشیِ علوم نرم: انگلیسی زبانان در مقابل فارسی زبانان

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چکیده

پژوهش حاضر، با الهام از نظریه‌های بلاغت بینافرهنگی و تمایزهایشان میان فرهنگ‌های کوچک و بزرگ، کوشـید تا بررسی کند که آیا تکرارپذیری حرکت‌های متنـی-کـارکردی در مقالـه‌هـای انگلیسی علـوم نـرم بـه متغیرهـای فرهنگی و بینارشته‌ای حساس است. به این منظور، ۶۰۰ مقاله پژوهشی انگلیسی، کـه نیمی از آن‌هـا بـه وسـیلۀ نویسندگان ایرانی و نیمی دیگر توسط نویسنده‌های انگلیسی‌زبان در ۶ حوزۀ علـم نـرم نوشته شـده، از ۲۰۰۶ تـا ۲۰۱۸ چاپ شده بودند، انتخاب گردیدند. مدل حرکت ویسبرگ و بوکر (۱۹۹۰) به کار گرفته شد تا حرکت‌هـای فراگیر اصلی در مقاله‌های پژوهشی مشخص گردد؛ سپس، فراوانی‌های حرکت‌های متنـی-کـارکردی در بخش‌هـای مختلف مقاله‌های پژوهشی اندازه‌گیری شود. یافته‌های تحلیل کمی داده‌ها نشان داد که کاربرد حرکت‌های متنی-کارکردی با پیشینه فرهنگی نویسندگان مرتبط نبود. هر چند، برخی تفاوت‌ها در پراکندگی حرکت‌های تکرارپـذیر در حوزه‌ها و بخش‌های مقالات پژوهشی یافت شدند. به این معنا که حرکت‌های متنـی-کـارکردی تکراری، بیشترین فراوانی را در بخش بحث و کمترین فراوانی را در قسمت روش به دست دادند. افزون بر این، غالباً بیشترین میـزان فراوانی در مقاله‌های پژوهشی رشته اقتصاد و کمترین آن در مقاله‌های پژوهشی رشته روان‌شناسی دیده شد که به قراردادهای خاصِ رشته نسبت داده شد. در مرحله کیفی پـژوهش، اسـتدلال‌هـای برخـی نویسندگان مقالـه‌هـای پژوهشی برای بهره‌گیری از حرکت‌های متنی-کارکردی تکراری که با ایمیل بـه دسـت آمـده بـود، مـورد تحلیـل محتوایی قرار گرفت و سه دلیل رایجشان برای استفاده از حرکت‌های متنی-کارکردی، از قبیل راهنمایی خواننـده، قراردادهای حوزه‌ای، و طول مقاله پژوهشی مشخص شد. یافته‌های این پژوهش می‌تواند به عنوان راهنمایی بـرای طراحان دورۀ درسی به کار رود تا مواد خاص رشته برای کلاس‌های نگارش انگلیسی با اهـداف دانشـگاهی کـه در آن‌ها حرکت‌های متنی-کارکردی مورد تأکید قرار گرفته‌اند، فراهم شود.

کلیدواژه‌ها: فرهنگ بزرگ، بلاغت کلامی بینافرهنگی، تکرارپذیری حرکت‌های متنی-کارکردی، فرهنگ کوچـک، علوم نرم

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نگرش دانـش‌آمـوز و معلـم نـسبت بـه اسـتفاده از واژه‌یابی در یادگیری و آموزش باهم‌آیی‌هـای حـروف اضافه: مسئله‌ها و امکان‌ها

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چکیده

پژوهش حاضر به واکاوی تأثیرگذاری و اثربخشی تدریس واژه‌یاب-بنیاد بر یادگیری و استفاده از باهم‌آیـی حـروف اضافه به وسیلۀ زبان‌آموزان ایرانی پرداخته‌است. افزون بر این، مسائل آموزشی آن را از دیدگاه دانش‌آموزان و معلم مورد کنکاش قرار دادیم. به این منظور، ۶۰ زبان‌آموز سطح متوسط همگونِ زبان دوم در قالب دو گروه ۳۰ نفرهای هدف و کنترل در مطالعه شرکت کردند. یـک آزمـون محقـق‌ساخته دربـاره بـاهم‌آیـی حـروف اضافه بـه عنـوان پیش‌آزمون، برای اطمینان از اینکه دانش باهم‌آیی حروف اضافه زبان‌آموزان تقریباً برابر باشد، برگزار گردید. سپس، دو نسخۀ موازی پیش‌آزمون، به عنوان پس‌آزمون‌های بلافصل و تأخیردار با هـدف ارزیـابی تـأثیر(هـای) احتمـالی هشت جلسه شصت-دقیقه‌ای اجرا شد. یافته‌های آزمون تحلیل واریانس اندازه‌گیری‌های-مکرر تفاوت معنـاداری را بین نتایج گروه آزمایش و گروه کنترل از پس‌آزمون‌های پیوسته تا تأخیری نشان داد. همچنین، تأثیر متقابل زمان و گروه معنادار بود. در پایان پژوهش، یک پرسش‌نامۀ بیست‌ماده‌ای به کار گرفته شد تا نگرش شـرکت‌کننـدگان نسبت به استفاده از واژه‌یاب برای یادگیری باهم‌آیی حروف اضافه به دست آید. یافته‌ها نشان داد کـه تقریبـاً همـه پاسخ‌دهندگان نسبت به یادگیری باهم‌آیی حروف اضافه از طریق واژه‌یابی نگرش مثبتی داشتند، اگرچـه برخـی شرکت‌کننده‌ها با دشواری‌های فناوری یا تمرینی در هنگام بهره‌گیری از این فناوری روبه‌رو شدند. همچنین نگرش معلم نسبت به آموزش باهم‌آییِ حروف اضافۀ مبتنی بر واژه‌یاب را با مصاحبه مورد بررسی قرار دادیم که به مسائل و امکان‌های بیشتری برای تمرین آموزش کلاسی اشاره داشت. سـرانجام، کاربردهـای ایـن تحقیـق بـرای بررسـی آموزش زبان و زبان‌شناسی کاربردی مورد بحث قرار گرفت.

کلیدواژه‌ها: واژه‌یاب، باهم‌آیی‌هـای دستوری، باهم‌آیی واژگانی، حرف اضافه، باهم‌آیی حروف اضافه

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شناسه دیجیتال (DOI): 10.22051/lghor.2020.31656.1316

خود-کارآمدی فردی و کارآمدی گروهی معلم به‌عنوان پیش‌بینی‌کننده‌های تعهد شغلی معلم: بررسی موردی معلمان زبان انگلیسی ایرانی

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چکیده

در نتیجۀ نقش عوامل روان‌شناختی تأثیرگذار بر عملکرد معلمان، تمایل روزافزونی به اهمیت ساختارهای تأثیرگذار بر کارآمدی و تعهد شغلی معلمان به وجود آمده‌است. برای روشن‌تر ساختن روابط میان عوامل روان‌شناختیِ معلم در بافت انگلیسی به عنوان زبان خارجی، هدف این پژوهش، واکاوی نقـش خـود-کارآمـدی و کارآمـدی گروهـی معلمان به عنوان پیش‌بینی‌کننده‌های تعهد شغلی در میان مدرسان زبان انگلیسـی ایرانـی بـود. بـه ایـن منظـور، نمونه‌ای از ۱۶۸ معلم انگلیسی، مقیاس‌های خـود-گزارشـی سـاختارهای مـورد بررسـی را تکمیـل نمودنـد. مـدل معادلات ساختاری برای اندازه‌گیری روابط معمولی میان متغیرها به کار گرفته شد. یافته‌هـا نشـان داد کـه حـس خود-کارآمدی معلمان ۲۳/۷ درصد واریانس تعهد شغلی را تبیین کرد، در حالی کـه کارآمـدی گروهـی معلمـان ۱۰/۵ درصد واریانس تعهد شغلی را توجیه نمود. همچنین معلوم شد که اگر چه هر متغیر سهم منحصربه‌فردی در تعهد شغلی داشت، خود-کارآمدی فردی معلمان پیش‌بینی‌کننـدۀ قـوی‌تـری بـرای تعهـد شـغلی در مقایـسه بـا کارآمدی جمعی آن‌ها بود. بر مبنای یافته‌ها، می‌توان کاربردهای مهمی برای برنامه‌های آموزشی معلمان انگلیسی به عنوان زبان خارجی ارائه نمود.

کلیدواژه‌ها: کارآمدی گروهی، معلمان انگلیسی به عنوان زبان خارجی، مدل معادلات ساختاری، خـود-کارآمـدی معلم، تعهد شغلی

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زیبایی‌شناسی تروما در رمان *آوای فاختۀ* فدیا فقیر

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چکیده

از اواخر دهه‌های قرن بیستم، نظریۀ تروما وجهۀ آکادمیکی برای تحلیل نمودهای ادبی فرم‌های گوناگون خـشونت، سرکوب و دگرگونی‌های اجتماعی به دست آورده‌است. این مقاله می‌کوشد تا بر مبنـای دیـدگاه فرویـد از ترومـا و بیشتر ساماندهی‌های اخیرِ ناهنجاری اضطراب پست-ترمایی، سومین رمان فدیا فقیر، *آوای فاخته* را بررسی کنـد. این نویسنده، که دربارۀ دایسپورا و از دایسپورا می‌نویسد، شخصیت زن جوان مسلمانش را به مبارزه برای هـویتش در کشوری غربی هدایت می‌کند. ایـن مقالـه، راهبردهـای ادبـی و تکنیـک‌هـای روایـی در ایـن روایـت ترومـایی فمینیستی را تحلیل می‌نماید تا نشان دهد چگونه نویسنده کوشیده آن‌چه را که اصالتاً با بی‌صدایی نشان‌دار شده، بازنمایی کند. به منظور تقلید از فرم‌ها و نشانه‌های تأثیر تروما، سبک روایی رمان ویژگی‌های ازهم گسیختگی، غیرِ خطی، تکرار، نثر شعرگونه و جریان سیال ذهن را نمایان می‌کند. این پژوهش نشان می‌دهد که تأثیر متقابـل ایـن تکنیک‌ها به خواننده در درک ماهیت گریزانِ تجربۀ تروماتیک کمک کرده و او را از جنبۀ عاطفی با داسـتان روای درگیر می‌نماید. کتی کاروث، آنه وایتهد و لوری ویکروی در میانِ نظریه‌پردازان اصلی این پژوهش هستند.

کلیدواژه‌ها: تروما، دایسپورا، فدیا فقیر، آوای فاخته، تکنیک‌های روایی

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تأثیر آموزش از طریق الگوی تعاملی
در مهارت صحبت کردن زبان‌آموزانِ زبان انگلیسی ایرانی

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چکیده

الگوی تعاملی، به عنوان یک نظام یادگیری منحصر به فرد هوشمند، برای کمک به معلم‌های زبان پیشنهاد شده تا با گذر از محدودیت‌های روش‌شناختی سنتی و ارجاع به ماهیت کلی زبان‌آموزان، تجربه‌هـای فراگیــران دگرگــون شود. پژوهش حاضر با هدفِ بررسی تأثیر استفاده از مدل تعاملی بر مهارت‌های صحبت کردن زبان‌آموزانِ انگلیسی ایرانی انجام شد. به این منظور، از میان جامعهٔ هدف زبان‌آموزان انگلیسی در یکی از مؤسسه‌هـای زبـان در ایـران، صد دانش‌آموز زن در سطح متوسط با ردهٔ سنی ۱۸ تا ۲۵ سال که به صورت تصادفی از میان ۱۵۰ شــرکت‌کننده انتخاب شدند، بر مبنای روش شنیداری-گفتاری (تعداد = ۳۲)، آموزش زبان تکلیف-محور (تعداد= ۳۳) و الگوی تعاملی (تعداد= ۳۵) مورد آموزش قرار گرفتند. با بهره‌گیری از چرخهٔ سه‌گانه‌ای مشتمل بر پیش‌آزمون، مداخلــه و پس‌آزمون، داده‌های به‌دست‌آمده با نرم افزارِس پی اس اس تحلیل شدند. نتیجهٔ تحلیل داده‌های پس‌آزمون نشان داد شرکت‌کننده‌هایی که با مدل تعاملی آموزش دیده‌اند به طور معناداری بـر دیگـر نمونـه‌هـای هـدف در زمینـه تکلیف‌های صحبت کردن زبان دوم برتری داشتند. در نتیجه، شرکت‌کنندگان در هر سه گروه مورد مـصاحبه قـرار گرفتند تا مشاهده شود آن‌ها چگونه مزیّت‌های ذاتی مدل تعاملی در تمرین واقعی را درک کردند. یافته‌های کمـی به‌دست‌آمده از مصاحبه با دانش‌آموزان از طریق تحلیل محتوا با تکیه بر فرم‌های رمزگذاری باز و محـوری تحلیـل شد و نتایج نشان داد که الگوی تعاملی بیشتر از جنبهٔ آموزشـی کارآمـدتر از آمـوزش زبـان تکلیف‌محور و روش شنیداری-گفتاری بود. بی‌گمان، یافته‌ها می‌تواند برای زبان‌آموزان انگلیسی، برنامه‌ریزان و مدرسـان زبـان خـارجی کاربردهای جالبِ توجهی داشته باشد.

کلیدواژه‌ها: روش شنیداری-گفتاری، نظام یادگیری هوشمند، مدل تعـاملی، مهـارت صـحبت کردن، آموزش زبان تکلیف-محور

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شناسه دیجیتال (DOI): 10.22051/lghor.2021.33502.1381

نقش انگیزش و باورهای زبان‌آموزان زبان انگلیــسی ایرانی در نمره‌های درک مطلب آن‌ها

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نسرین گل بخشی[۲]

چکیده

زبان‌آموزان موفقیتشان را وامدار عوامل گوناگونی هستند که ممکن است به تفاوت‌های فردی منجر شود. در میـان این عوامل مؤثر، انگیزش و باور زبان‌آمـوزان بـه عنـوان دو ویژگـی متمـایز در ایـن پـژوهش مـورد بررسـی قـرار گرفته‌است. به این منظور، ۱۲۰ زبان‌آموز انگلیسی سطح متوسط با ردهٔ سنی ۱۵ تـا ۳۰ سـال کـه در مؤسـسه‌هـای مختلف زبان انگلیسی در تهران آموزش می‌دیدند، در ایـن پـژوهش شـرکت کردنـد. از آن‌هـا درخواسـت شـد تـا پرسش‌نامهٔ انگیزش (دورنیه و تگوچی، ۲۰۰۹) و فهرستِ باورها دربارهٔ زبان‌آمـوزی (هـورویتز، ۱۹۸۸) را تکمیـل کنند. نتایج تحلیل رگراسیون نشان داد که رابطهٔ معناداری بین انگیزش، باور زبان‌آموزان و نمره‌های درک مطلـب آن‌ها وجود دارد. یافته‌ها همچنین نشان داد که ۴۲ درصد خطا در نمره‌هـای درک مطلـب آن‌هـا، بـا اسـتفاده از انگیزش آن‌ها پیش‌بینی شد و ۲۷ درصد تنوع در نمره‌های آن‌ها با باورهای آن‌ها به یادگیری زبان انگلیـسی قابـل پیش‌بینی بود. در حقیقت، انگیزش و باورهـای زبان‌آمـوزان دو پـیش‌بینـی‌کننـدهٔ مهـم نمـره‌هـای درک مطلـب شرکت‌کننده‌ها بودند. این یافته‌ها نشان داد که انگیزش و باورهای زبان‌آموزان می‌تواننـد تا اندازه‌ای برای پیش‌بینی نمره‌های درک مطلب زبان‌آموزان به کار گرفته شود. کاربردهای پژوهش و پیشنهادهایی برای تحقیقات آینده نیـز مورد تأکید قرار گرفت.

کلیدواژه‌ها: انگیزش، باورهای زبان‌آموزان، نمره‌های درک مطلب، زبان آمـوزان زبـان دوم، پرسـش‌نامـهٔ باورهـای زبان‌آموزان به یادگیری زبان

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شناسه دیجیتال (DOI): 10.22051/lghor.2020.29260.1221

تریسترام شندی و پیچیدگی‌های خاستگاه: جهان اسبِ ـ چوبیِ بی‌نهایت مضحک

علی حسن‌پور دربندی*۱

روشنک اکرمی۲

چکیده

زندگی و آرای تریسترام شندی، *نجیب‌زاده*، یکی از نامتعارف‌ترین آثاری که تاکنون نوشته‌شده، تفاوت چـشمگیری با سایر رمان‌های هم‌عصر و حتی رمان‌های پایان قرن هجدهم در پیـرنگ، روایت و رفتارِ شخصیت‌هـایش دارد. در این مقاله، جنبه‌های مختلفی از رمان که سرمنشأ را در زندگی و شخصیتِ تریسترام شـندی بـه چـالش کـشیده و ساختارشکنی می‌کند، مورد بررسی قرار گرفته‌است. روشـن اسـت کـه *تریسترام شـندی* خـود را از مرحلـه‌هـای نامشروطی که اغلب در روایت‌های سنتی بدیهی شمرده می‌شوند، از جمله تولد بـه مثابـه پیـدایش شخصیت‌هـا، اعتقادی راسخ به هدف‌دار بودن یک روایت برای فرجام‌های آموزنده یا اخلاقـی، ثبـات سـرآغازها وآرایـش معقـول ایده‌ها در ذهن بشر جدا می‌کند. این مقاله به چهار بخش اصلی از جمله تولد، تاریخ، زنـدگی و ذهـن‌گرایی بـشر دسته‌بندی شده و بر آن است تا چندین جنبه منحصر به فرد رمان را نمایان کند در حالی که، بـه خـوانش دقیقِ متن هم توجه دارد. با این هدف، مقاله به ویژه به روی رویدادهای پیرامون شخصیت تریسترام شـندی، پـدرش والتـر شندی و عمو توبی تمرکز می‌کند. نظریۀ ارتباط ایده‌های لاک، که استرن بعدها آن را به ناقض نظریـه اصـلی لاک در روایت برگردان می‌کند، در این مقاله نیز مورد واکاوی قرار گرفته‌است.

کلیدواژه‌ها: ارتباط ایده‌ها، خاستگاه، تاریخ، خود، اِسترن، لاک

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