Learning spatial prepositions by Iranian EFL learners

Azam Fallahi

Islamin Azad University, Takestan Branch

Abstract

The aim of the present study is threefold. The first is that whether there is any difference between different proficiency level language learners 'use of spatial prepositions. The Second aim is to reveal that if the native language of the participants has any effect on applying the appropriate prepositions and also to find which spatial preposition is difficult to acquire. The present paper examines the usage of English spatial prepositions by selected Persian- speaking English learners in Mehr Aein institute in Ghorveh, Kurdistan. To do the study, 100 Persian-speaking learners of English language from different classes in Mehr Aein Institution, Ghorveh were randomly Chosen. The participants were female and male EFL learners. Their ages were ranging from 10 to 27 years old. In order to determine their level of proficiency, the participants were asked to answer an English placement test. Based on the results of the placement test they were classified into three levels, Elementary (n=13), intermediate (n=49) and advanced (38). Then considering their levels, they were given a questionnaire assessing their knowledge of English spatial prepositions and they were asked to answer it. Finally the errors on preposition usage were extracted and analyzed. The results of the study indicate that there is a significance difference among different proficiency level language learners' use of spatial prepositions. Findings indicate that most Iranian learners of English had difficulty in finding appropriate preposition. It was also found that a large number of errors were due to the interference of the learners native language (Persian). The results show the prominence of inter-lingual errors compared to the intra-lingual errors. The paper is written on the idea that the Persian language as the native language interferes with using English prepositions by Iranian EFL learners and leads to lots of prepositional difficulties. After the data were collected and analyzed, L1 interference was proved. The implications of the present research can be used for researchers, teachers and learners.

Keywords: preposition, spatial prepositions, aspect, prepositional aspect.

Introduction

Learning a new language is a long-term process and it entails years of continuous practice. Learners are constantly exposed   to new areas. One of the most problematic areas in second language Learning is applying the suitable preposition.

According to Feist and Gentner (2003), in recent years , the semantics of spatial relational terms has excited substantial interest in linguistics and cognitive science. This is due in part to a paradox presented by spatial terms. On the one hand, spatial terms seem simple, tractable, and obvious. It means that there are no doubt in the minds native speakers of English which term to use to describe

the position of the located object. On the other hand, there is marked cross-linguistics variability in how linguistic terms map on the world.

Preposition usage is one of the most difficult aspects of English grammar for non-native speakers to master (Jalali & Shojaei(2012). The majority of Iranian EFL learners have good knowledge of English grammar and vocabulary; however, they seem to have serious problems with the production of collocation patterns, specifically collocation of prepositions (Jafarpour& Koosha, 2006).

Most EFL learners aren't able to acquire L2 properties that are not in their first language and will therefore experience problems in the course of language learning. Moreover, due to the differences in the conceptualization in different languages, and the grammatical differences between Persian and English prepositional systems, learning spatial expressions is a very demanding process. Prepositions bring about significant difficulties for non-native learners and users of English. In English prepositions do not follow predictable rules so learners learn them better in context.

To my knowledge, there is no correspondence between languages considering their spatial prepositions. For example, the English sentence "Sara walked in the rain" can be translated into "Sarah walked under the rain" in Persian (Sara zire baran ghadam zad). In English we say "I am on the bus" in Persian we say "I am in the bus"(man dar otoubous hastam). Another reason for difficulty in acquiring English prepositions generally and spatial prepositions specifically are due to multiplicity of English prepositions meaning. According to Tyler (2011) drawing on insights from CL (cognitive linguistics), the multiple meanings associated with English prepositions can be represented as being systematically related within a motivated semantic network.

In this regard, this study sets to investigate the difficulties Persian-speaking learners experience in the course of acquiring English prepositions. Also, in this study, the researcher investigates the effect of the learners 'native language (Persian) on choosing appropriate English prepositions.

Statement of the problem

The numbers of the studies investigated spatial prepositions are limited. The necessity of research on the acquisition of English prepositions by Iranian students is out of the question. Learning English prepositions is specifically difficult for students learning English as a second language.

Natural use of language is the most important thing for a language user. Since individuals are under the influence of their first languages and their own cultures when learning a second/foreign language, acquiring some structures of that language is a very difficult task.

In addition, the grammar of English and Persian language has both similarities and differences in common. Through these similarities and differences, Persian speakers face some difficulties and misunderstandings in the English learning process. One of these difficulties is related to learning

and producing preposition because most of learners have difficulty in distinguishing the correct one. In the other word, some students "do not know the exact place to put it" (Mirhassani, 2001, p. 101). This causes "a tendency towards a learner's preference in selecting a special category, while avoiding another and this causes different types of errors" (Rahbarian, Oroji & Fatahi, 2013, p. 212)

In this regard, this study tries to find out what is the role of Persian language in the acquisition of their equivalents in English.

Significance of the study

The present study aims at comparing and contrasting two language systems (Persian and English) in terms of spatial prepositions.

If we analyze the type of errors that learners, actually nonnative learners of English have committed, we can reveal their deviation from the standard of English in their non-native production.

According to Ellis (2003), there are good reasons for studying learners' errors. First, they tell us why learners make errors and provide us with useful information on learners' language. Second, the type of errors learners make can help teachers. Third, it is possible that making errors may actually help learners to learn when they self-correct the errors that make.

In this regard, the importance of the present study is twofold and may be beneficial for different individuals. First, it helps teachers to identify potential factors which may affect students' use of foreign language, i.e. transfer. Also, it helps teachers to identifying the areas of weaknesses in which learners have difficulty in producing the second language (Karshen,1982).

Second, the results of the present study help students to be consciously aware of natural use of language, to know about the correct and natural forms which all are very important in language learning. Moreover, it provides necessary information for students to find out the positive and the negative effect of the transfer of their first language in learning preposition.

It is also hoped that the results of the study contribute to curriculum design and development. The study may also promote the researchers to do further research on the other types of prepositions.

Research questions

The purpose of this research is to answer the following questions:

1. Whether there is any difference between different proficiency level language learners' use of spatial prepositions?

2. Among the most basic spatial prepositions, which one will be the most difficult to acquire?

3. How much of the prepositional errors which are committed by Iranian students are due to their native language?

Previous studies on learning prepositions by EFL learners

There are different studies which attempted to address the problems and difficulties of EFL learners with regard to the usage of prepositions.

It is not surprising that EFL learners always encounter problem in learning English prepositions. Hamdallah & Tushyeh (1988) in a study investigated some selected English and Arabic prepositions. They discussed the general characteristics of English and Arabic prepositions. They found sources of difficulty and linguistic problems faced by Arabic EFL students in learning English prepositions. Types of the errors made by them discussed. The findings showed that omission, preposition substitution of prepositions were among the common types of errors.

Finkbeiner (1998) in a study analyzed CS-SR mappings for the English polysomic special prepositions OVER and its Chinese counterpart. The difference between some CS-SR mappings for different relational schema of English and Chinese OVER was determined. The results show that learning a new L2 spatial preposition means learning how to embed particular SRs with particular CSs in ways that have never been done before in L1.

Pakhumov (1999) attempted to investigate the acquisition of some prepositions in Second language Acquisition (SLA). The subjects of the study were students, faculty or staff of the University of Minnesota, Twin Cities, USA. Two groups were selected for the study. Group (A) include 21 native English speakers with different backgrounds. Group (B) include 29 non-native speakers of English. They had different backgrounds. He used two kinds of instruments: close test which included 4 sentences. The test first administered to the Group (A) to find which prepositions are preferred by native speakers in the given contexts. Then the same test was administered to Group (B). Then the researcher interviewed the participants to find out the strategies they used in choosing prepositions. The results of the study indicated that metaphorical imagery may be a cognitive process contributes to shaping inter-language along with L1 interference and overgeneralization.

Froud (2000), tried to shed light on the ambiguity whether we should consider the prepositions as lexical or functional. In her paper, she examined MC, an aphasic patient who demonstrates an extremely robust dissociation between lexical and functional categories. MC was not able to read functional categories but he was relatively unimpaired regarding to reading substantives. Therefore, he was considered as a good testing ground to decide whether prepositions are lexical or functional. The obtained results showed that prepositions cannot be straightforwardly lexical and he treated them as they are functional. She concluded that the distinction between function and content words should be revised.

To explore why and how learners experience difficulty in learning spatial semantics in the second language, Landau&Munnich(2003) conducted a study in which they asked adult native speakers of Spanish and Korean to produce and judge applicability of English spatial prepositions that describe relationships of support, containment, and vertical displacement. The age at which spatial terms were first learned in English (age of immersion) but not years of experience (length of immersion) reliably predicted participants' accuracy, with effects focused on those senses of spatial terms that rely on abstract representation of reference objects. The locus of effects was broadly similar across native Korean and Spanish speakers, suggesting that interference from the first language was not solely responsible for performance. Taken together, these findings suggest maturational constraints on receptivity to spatial semantic input and raise questions about mechanisms that spatial semantic learning may have in common with other areas of language.

Lots of Arab researchers indicated that Arab EFL learners show difficulty in using English prepositions.

In English language, there are lots of prepositions which both show the spatial and temporal relationship. Kemerer(2004), examined this space-time parallelisms. He believes that humans have a cognitive predisposition to organize temporal concepts in terms of spatial schemas which is influenced by the metaphor Time is Space. The researcher wanted to know that weather this metaphor has any impact on the way that learners process prepositional meaning during language use. To answer the question, some experiments was conducted with four brain-damaged participants with left perisulyian lesions. They failed in the test that evaluates knowledge of the spatial meaning of prepositions, but they passed a test that assesses knowledge of the corresponding temporal meaning of same prepositions. Two other participants exhibited the opposite association: they showed better result on the spatial test than on the temporal test. The findings showed that in spite of the fact that the spatial and temporal meanings of prepositions are historically associated using the Time is Space metaphor, they are represented and processed independently of each other in the brains of the learners.

Evans and Tyler (2005), have suggested a new system for acquiring prepositions. It is called Cognitive linguistics (CL). It indicates that how we think of preposition in a subconscious way. There is a central meaning in each preposition, the picture of spatial relationship inside the mind. When the learner finds the meaning of the preposition, various meaning appear in a polysomic network and Evan and Tyler call it the semantic network.

Kodachi(2005) in a study investigated the impact of learners' L1 in the course of learning to use prepositions in a semantic network. The participants were given a test consists of 101 sentences and they were asked to fill in the blanks in the sentences with the prepositions they thought to be suitable. There were two test sentences for each usage of preposition which were different in terms of their tense in order to determine the effect of tense differences. The results showed both the positive and negative role of prepositions. Also, the findings proved the effect of the learner's proficiency on the usage of prepositions.

Koosha and Jafarpour (2006) in their study about Iranian learners' problems with English preposition investigate into the effect of DDL (Data-driven learning) approach in teaching or learning collocation of prepositions. They concluded that DDL and concordance materials play a positive role in the production of collocation of preposition. They attributed learners' problems with regard to prepositions to their lack of collocation knowledge.

Chun-Ching(2006) Hsieh in a study investigated which input can better reinforce learners' familiarity with the proper combination of verbs and prepositions. Eighty-eight freshmen from the same university in southern part of Taiwan participated in this study. In the first stage, a pre-test of twenty phrasal verb questions was implemented. Then extensive reading material was given to one group and the other group was provided with a corpora/ concordance printout with distinct examples and texts. They had only forty minutes to complete studying the material. Then the participants were given the same questions as post-test. Then the data were analyzed and the difference between pre-test and post-test for each group was determined. The results showed that the performance of the group with corpora/concordance printout is significantly better than the other group.

In another study, Okanlawon & Ojetunde(2007) in their study of Nigerian learners problems in terms of English prepositions usage indicated that the learners encounter difficulties because the rules of prepositions cannot be predicted. Their findings are in accordance with that Koosha and Jafarpour. They claimed that correct using of prepositions is achieved through using them in certain contexts.

Boquist (2009) studied the second language acquisition of English prepositions. Drawing on Cognitive Linguistics (CA), he suggests an alternative method to teach English prepositions to the second language learners. The approach holds that visual representation is helpful so it is better to teach the prepositions in the classroom using pictures. The study also indicates that acquiring English prepositions is a demanding task to those students learning English as the second language for various reasons. First, the nature of second language acquisition makes some clash points (mismatches) and the problem has not been thoroughly addressed in various literatures.

Consisting with the previous studies , Asma(2010), investigated the transfer of preposition from standard Arabic into the English by Algerian EFL learners. The participants were thirty students at the English Department, Mentouri University, Constantine. They were given twenty sentences and they were asked to fill in the blanks with the correct spatial or temporal prepositions. Analyzing the obtained data, acknowledged the effect of Native language in understanding prepositional usage in English.

Mohammed (2011), believes that learning English prepositions are difficult for a number of reasons such as large number of prepositions in English, the complexity of preposition system, and the mismatch between the first language and EFL, and lack of rules of usage in most cases. He conducted a study to investigate the usage of prepositions by Arab EFL learners and his findings

run counter to the results of the previous studies. He analyzed compositions written by Arab-speaking EFL university students and he saw that more than 80% of prepositions were correct.

In the same way, Sakurai (2011) analyzed the errors that the Japanese students made in oral tests and translation tests (translation from Japanese into English). Six Japanese students at a center of English as a second language and southern lllinois University participated in the study. Findings revealed that most prepositional errors were due to interference. The researcher believed that both the English prepositions and the Japanese prepositions are the systems to reflect temporal, spatial or the other kinds of relations. It is the linguistic relativity within a system that differentiates the English-speakers concept from that of the Japanese- speakers. The researcher also suggested that the best way to teach English prepositions is that using visual and other aids, teacher contribute the learners to internalize the linguistic relativity of English prepositions and learners avoid translation method to learn prepositions.

Tyler, Mueller and Ho (2011) in a study investigated the impact of applying a cognitive linguistics (CL) approach to teach semantics of English prepositions **to**, **for** and **at** in a group consists of 14 Italian advanced English Language learners. He criticized the traditional approaches in teaching English prepositions to non-native speakers. He also pointed out the usefulness of accepting a CL approach to teach the semantics of the three English prepositions *to, for and at* to FLL (foreign language learners). Findings of the study indicated that the group who received instruction based on a CL approach show significant improvement in perceiving the semantics of the three given prepositions.

Quynh (2011) analyzed semantic features and collocations of complex prepositions and their equivalents in Vietnamese. The data mainly came from formal documents. Semantic features and collocations of complex prepositions in English were analyzed using descriptive method. Then, the contrastive analysis method used to identify equivalents between English language and Vietnamese language in terms of complex prepositions. The results showed that the context in which English complex prepositions are used plays an important role in predicting their meanings. The study also showed that complex prepositions in English are constructed using nouns or noun equivalents such as noun phrases, gerunds but in Vietnamese, prepositions used in formal can be constructed using verbs as well as nouns. He comes to the conclusion that semantics areas of complex prepositions in formal English are diverse compared to those of Vietnamese language.

Participants

In this study, the researcher considered Iranian EFL adults and young learners at different classes in Mehr Aein Institute as participants of the study. All the learners studying English at a foreign language institute in Ghorveh, Iran. The number of the participants was 100. They were both female and male. All of the participants L1 were Persian. Some of the participants have learnt English since they entered kindergarten or elementary school and some of them started to learn English when they entered high school. Participants were studying English at a foreign language

institute in Kurdistan province, Iran. At first, an Anglia placement test was administered and used as a criterion to determine the level of participant's English proficiency. According to the results of the placement test they were assigned into three groups: elementary, intermediate and advanced. Their frequency was as follows: 13 elementary learners, 49 intermediate learners and 38 advanced learners. The participants in the elementary group were provided with 20-item questionnaire (13 multiple choice questions and 7 fill in the blank questions). The participants in the intermediate group were provided with a 20-item questionnaire (13 Persian sentences including spatial prepositions to be translated in English and a picture the learners were asked to describe the locations of different things in it). The third group was given a 20-item test (20 multiple choice questions on spatial prepositions).

Instruments

The researcher prepared an instrument to identify the type and the extent of spatial prepositional errors committed by EFL learners in Iran in an English Language institute in Ghorveh, Kurdistan. the instruments of the study included two questionnaire and test. Following is the description of each.

Placement test (An Anglia Placement Test)

The Anglia Placement Test was administered to determine the proficiency level of the learners and to homogenize them (Appendix A).

Questionnaires

A total of 100 students were asked to answer the questionnaire.

Three different questionnaires were used in this study based on the proficiency level of the participants. They were as follows:

The participants in the elementary group were provided with a 20-item questionnaire (13 multiple choice questions and 7 fill in the blank questions. See Appendix B). They were supposed to answer the questions based on the provided pictures.

The participants in the intermediate group were provided with a 20-item questionnaire (13 Persian sentences including spatial prepositions to be translated in English and a picture the learners were asked to describe the locations of different things in it. See Appendix C).

The third group was given a 20-item test (20 multiple choice questions on spatial prepositions. See Appendix D).

Participants also responded to a questionnaire regarding their proficiency level, elementary, intermediate and advanced.

Procedure

The present study took place in the spring and summer semester 2014 between English learners in Mehr Aein institute. At first, 8 teachers and university professors reviewed the instruments both the placement test and the questionnaires. Based on their ideas wherever necessary some items were omitted, added and changed and were validated by judges.

As it was already explained, then the participants were randomly selected from different classes in Mehr Aein English Institute. In the second step, The Anglia Placement test was implemented to determine the overall proficiency level of the participants. Test was implemented in a distraction free environment. Once the participants arrived, they were reminded that they have only 45 minutes to complete the test. They were provided with the instruction both orally and in writing. They were allowed to leave at any time they wished to. Then based on the obtained scores they were divided in three different levels based on their English grammar proficiency: elementary, intermediate, and advanced. The researcher determined the criterion for dividing the participants. Those whose scores were lower than 30, were assigned to the elementary group. Those whose scores were about 30 to 65, were assigned to the intermediate groups and those whose scores were higher than 65, were assigned to the advanced group. Considering their proficiency, participants were given a questionnaire consisting of 20 questions. The participants were informed that they shouldn't use any kinds of dictionaries. Then after collecting the data, the frequency of the learner's errors was counted.

Normality

To begin with, the data were analyzed to ensure the assumptions of normality. The results of Kolmogorov-Smirnov tests are presented below.

Table 4.1.

Kolmogorov-Smirnov Test Results

Null hypothesis	Test	Sig.	Decision
The distribution of preposition is normal with mean 19.98 and standard deviation 8.56.	One-Sample Kolmogorov Smirnov Test	.08	Retain the null hypothesis.

The results of Kolmogorov-Smirnov tests show that the preposition scores are normally distributed $(p > 0.05)$.

This study was conducted with three proficiency levels of low, intermediate, and advanced. The proportion of each level is indicated in the table 4.2.

The graph below shows the differences in the number of these three groups. As it is evident in the graph below, the proportion of the intermediate participants is greater than both the beginning and the advanced learners.

Table 4.2.
The Proportion of Participants across Level of Proficiency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low	13	13.0	13.0	13.0
	Intermediate	49	49.0	49.0	62.0
	Advanced	38	38.0	38.0	100.0
	Total	100	100.0	100.0	

To achieve the objectives of this study, a one-way analysis of variance (ANOVA) was conducted. Table 4.3 below shows the proportion of these three groups.

Table 4.3.
Descriptive Statistics of Preposition Use across Level of Proficiency

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Low	13	14.77	6.340	1.758	10.94	18.60	6	26
Intermediate	49	18.69	7.142	1.020	16.64	20.75	3	38
Advanced	38	23.42	9.633	1.563	20.25	26.59	5	45
Total	100	19.98	8.556	.856	18.28	21.68	3	45

As table 4.3 shows, there is a significant difference among the three groups of participants who have been categorized according to their level of proficiency. That is, the level of proficiency has an effect on the ability of the participants in the use of English prepositions.

In order to reach to a more detailed and reliable results, a one-way ANOVA was performed, the results of which are displayed in table 4.4.

Table 4.4.

ANOVA Results of Preposition Use across Level of Proficiency

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	883.981	2	441.990	6.737	.002
Within Groups	6363.979	97	65.608		
Total	7247.960	99			

The results of ANOVA indicated statistically significant difference between the proficiency groups F(2, 99) = 4.18, p = .01). In order to see the exact points of differences among groups of proficiency, a Tukey post-hoc test was run. The results of Tukey post-hoc test are reported in table 4.5 to isolate the exact points where differences among the proficiency groups occurred.

Table 4.5.

Tukey Test Results

(I) Proficiency	(J) Proficiency	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Low	Intermediate	-3.925	2.527	.271	-9.94	2.09
	Advanced	-8.652*	2.603	.004	-14.85	-2.46
Intermediate	Low	3.925	2.527	.271	-2.09	9.94
	Advanced	-4.727*	1.751	.022	-8.89	-.56
Advanced	Low	8.652*	2.603	.004	2.46	14.85
	Intermediate	4.727*	1.751	.022	.56	8.89

*. The mean difference is significant at the 0.05 level.

The results of Tukey corroborate the findings of descriptive statistics, indicating that there are statistically significant differences between the advanced and low participants (p = 0.004) and advanced and intermediate participants (p = 0.02). However, there are not differences between the intermediate and low level learners in their use of prepositions (p > 0.05).

In order to analyze the error types and examine if the errors are related mainly to interlingual or intralingual sources, a Chi-square test was carried out. The results of presented below.

First, the results for substitution error are presented.

Table 4.6.

Descriptive Statistics of Substitution Error Types across Source

			Source		Total
			Intralingual	Interlingual	
Substitution	At instead of in	Count	16	18	34
		% within Source	41.0%	29.5%	34.0%
	From instead of of	Count	6	13	19
		% within Source	15.4%	21.3%	19.0%
	On instead of in	Count	4	8	12
		% within Source	10.3%	13.1%	12.0%
	By instead of of	Count	1	3	4
		% within Source	2.6%	4.9%	4.0%
	By instead of with	Count	1	3	4
		% within Source	2.6%	4.9%	4.0%
	Between instead of among	Count	9	15	24
		% within Source	23.1%	24.6%	24.0%
	Under instead of at	Count	2	1	3
		% within Source	5.1%	1.6%	3.0%
Total		Count	39	61	100
		% within Source	100.0%	100.0%	100.0%

As the above tale shows, in all the error types, the percent of interlingual effect was higher than the intralingual influence. To get more reliable results, a Chi-square test was run. Results are shown in table 4.7

Table 4.7.

Chi-square Test Results for Substitution Error Types across Source

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.177[a]	6	.048
Likelihood Ratio	3.187	6	.048
Linear-by-Linear Association	.117	1	.040
N of Valid Cases	100		

a. 0 cells (00.0%) have expected count less than 5. The minimum expected count is 1.17.

The results of Chi-square test show that the substitution error types are significantly related to the interlingual and intralingual sources ($\chi 2 = 3.17$, $p = 0.04$). This result confirms the results obtained in descriptive statistics, showing a higher degree of interlingual effect compared to intralingual effect. The results of Cramer's V indicate a medium effect size for this relationship.

Table 4.8.

Effect Size Tests

		Value	Approx. Sig.
Nominal by Nominal	Phi	.378	.048
	Cramer's V	.378	.048
N of Valid Cases		100	

The results of Chi-square analyses for the addition error category are reported in tables below. Table 4.9.

Descriptive Statistics of Addition Error Types across Source

			Source		Total
			Intralingual	Interlingual	
Addition	Addition of 'of'	Count	26	42	68
		% within Source	66.7%	68.9%	68.0%
	Addition of on	Count	13	19	32
		% within Source	33.3%	31.1%	32.0%
Total		Count	39	61	100
		% within Source	100.0%	100.0%	100.0%

Table 4.10.

Chi-square Test Results for Addition Error Types across Source

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.052[a]	1	.038
Continuity Correction[b]	.000	1	.040
Likelihood Ratio	.052	1	.038
Linear-by-Linear Association	.052	1	.038
N of Valid Cases	100		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.48.

b. Computed only for a 2x2 table

The results of Chi-square test show that the addition error types are significantly related to the interlingual and intralingual sources ($\chi2 = 0.05$, $p = 0.03$). This result confirms the results obtained in descriptive statistics, showing a higher degree of interlingual effect compared to intralingual effect. The results of Cramer's V indicate a medium effect size for this relationship.

Table 4.11.

Effect Size Tests

		Value	Approx. Sig.
Nominal by Nominal	Phi	.423	.038
	Cramer's V	.423	.038
N of Valid Cases		100	

Finally, a Chi-square test was performed for the analysis of the omission error types across the sources.

Table 4.12.

Descriptive Statistics of Addition Error Types across Source

			Source		Total
			Intralingual	Interlingual	
Omission	Omission of of	Count	21	37	58
		% within Source	53.8%	60.7%	58.0%
	Omission of to	Count	18	24	42
		% within Source	46.2%	39.3%	42.0%
Total		Count	39	61	100
		% within Source	100.0%	100.0%	100.0%

Table 4.13.

Chi-square Test Results for Addition Error Types across Source

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.453[a]	1	.025
Continuity Correction[b]	.216	1	.026
Likelihood Ratio	.452	1	.025
Linear-by-Linear Association	.448	1	.025
N of Valid Cases	100		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 16.38.

b. Computed only for a 2x2 table

The results of Chi-square test show that the omission error types are significantly related to the interlingual and intralingual sources ($\chi2 = 0.45$, $p = 0.02$). This result confirms the results obtained in descriptive statistics, showing a higher degree of interlingual effect compared to intralingual effect. The results of Cramer's V indicate a medium effect size for this relationship.

Table 4.14.

Effect Size Tests

		Value	Approx. Sig.
Nominal by Nominal	Phi	.567	.025
	Cramer's V	.567	.025
N of Valid Cases		100	

This study adopts Clark's (1973) classification of spatial prepositions: location ('in', 'on', and 'at'), directional ('out of', 'into', 'to', and 'up'), path ('round', 'along', 'through', 'across', and 'past'), and relational ('in front of', 'above', 'opposite', 'next to', and 'near'). All these prepositions were statistically analyzed and it was found that elementary learners used more 'in' and 'out of' compared to other prepositions. This can be explained by the fact that the preposition 'in' is easier to be acquired and is a highly used article in Persian. Therefore, it can be considered as an example of positive transfer.

The results of the analyses are also in line with Clark's (1973) argument that the use of negative direction prepositions such as 'from' and 'out of' should be lower than the positive direction counterparts such as 'into'. The results of this study confirms this assumption since the positive term of 'into' is used more by the intermediate and advanced learners compared to the negative term of 'out of'. However, the intermediate learners used the negative term more which can be attributed to the negative interference since the 'above' and 'on' prepositions are more difficult to use and the 'out of' preposition is substituted. Moreover, the prepositions 'on' and 'between' are used equally by the intermediate and advanced participants since these are frequent in English and are easier for those learners who have had more exposure to the target language like intermediate and advanced learners compared to elementary learners. The figure shows that the other prepositions of 'round', 'along', 'to', 'through', 'across', 'in front of', 'past', 'above', 'opposite', 'next to', 'near', and 'up' are used mostly by the advanced participants since these are difficult prepositions that required higher levels of proficiency.

Given the fact that all of the prepositions were of the spatial types, one might possibly have expected the ratings for these prepositions to be lower for the beginning and intermediate students in comparison with the advanced students, given their difficulty under all views for lower levels of proficiency. One possible reason for this better acceptability of the advanced participants may relate to the Contrastive Analysis Hypothesis (CAH). This hypothesis argues that the acceptability of the structures must be accounted for by the interactions of psychological factors (such as transfer).

The relative acceptability of structures would thus depend in part on how straightforward it is to imagine the list of first language properties, in this case prepositions, which would correspond to each of the target language equivalents in a given context. Foreign language learners don't have empty capacities in their prior linguistic experience, so prepositional transfer is not an unfamiliar option to utilize. In the tests used in this study, sentences included spatial prepositions, some of which corresponded to the prepositions in the native language of the students and some others did not. Therefore, it might be concluded that because the advanced learners have a higher level of proficiency compared with the beginners and the intermediate learners, they do not compare their native language with the target language as much frequently as their lower level peers do; thus, there exists lesser difficulty for them in figuring out the prepositions.

Overall, the findings show that the prepositions in the target language of the Persian-speaking learner's instantiate a potential learnability problem, because:

- the preposition constructions are superficially very similar to the native language of the learners but display distinct morphological and syntactic behavior;
- Differences between the prepositions and phrasal verbs and following them in the native and the target languages of the learners are typically not subject to explicit instruction.

Summary of the findings

The findings of the present study are consistent with the results of different studies already have done on using English prepositions by EFL learners,

Considering the first hypotheses, it means that there is no difference between different proficiency level language learners' use of spatial prepositions, the collected data supports the results of the previous studies. Most of the Iranian EFL learners even those who were considered as the advanced ones showed the improper use of prepositions. . We understood that most learners face problem in using the English spatial prepositions, consequently, the first null hypothesis of the present study is rejected.

Considering the second hypothesis, acquiring spatial prepositions by Iranian learners is not affected by their native language (Persian), the obtained data showed that Iranian EFL learners most of the time are confused with selecting the appropriate prepositions and in the researcher's point of view this is mostly due to the lack of knowledge in L2. Insights gained in this study indicate that most Iranian learners resort to their L1 knowledge when they are not proficient in L2. Iranian learners cannot efficiently master using English prepositions and they frequently draw on their knowledge from Persian to find the appropriate prepositions. The study found that the errors made by the participants were mainly due to effect of their native language. Therefore, the second null hypothesis is also rejected.

Considering the third hypothesis, there is no difference between English spatial prepositions in terms of their acquisition by Iranian learners, all these prepositions were statistically analyzed and it was found that elementary learners used more 'in' and 'out of' compared to other prepositions. This can be explained by the fact that the preposition 'in' is easier to be acquired and is a highly used article in Persian. Therefore, it can be considered as an example of positive transfer. So, the third null hypothesis is rejected. To sum up, all the three proposed null hypotheses were rejected. Therefore, it is concluded that

1- There is difference between different proficiency level language learners' use of spatial prepositions.
2- Acquiring spatial prepositions by Iranian EFL learners is affected by their native language (Persian).
3- Some English spatial prepositions are more difficult for Iranian EFL learners.

Implications and recommendations

When the teacher becomes aware about the amount of the learners' knowledge regarding to English prepositions, s/he can improves teaching and learning processes. The present article provides the syllabus designers with the difficulties that Iranian EFL learners experience in the course of acquiring English prepositions and guides them in selecting appropriate materials. It also help English teachers to identify the preposition errors made in the classroom and how to provide the students with the efficient feedback.

According to the findings of the present study, the researcher suggests that in order to develop the learner's proficiency and promote their ability in using prepositions of space, the teachers and syllabus designers' focus on the similarities between English and Persian to facilitate learning spatial prepositions for Iranian EFL learners.

English teachers should reveal the differences between Persian prepositions and English prepositions because the differences between the two languages bring about many problems for Iranian EFL learners of English.

Considering her experience as a teacher in English language institute, the researcher believe that providing as much input as possible for the learners especially reading texts in English language and also listening tasks are useful ways to improve the EFL learners knowledge of prepositions including spatial prepositions. Also it needs to be proved in future studies.

Suggestions for further research

The present study is limited from different aspects and further research is needed.

First, it was a small scale study which involving only 100 students from Mehr Aein institution, a private institution in Kurdistan Province, Iran. To obtain more reliable results, a comprehensive study involving a large sample is suggested.

Considering the importance of prepositions, more research should be done on the other types of prepositions further studies should address other types of prepositions, for example temporal (time) prepositions. Some studies are also required to investigate different methods in teaching prepositions to find which one can be helpful in EF

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