

Iranian EFL learners' knowledge of overt pronoun constraint in English

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Abstract

The present study aims to investigate Iranian L2 speaker's knowledge of the *overt pronoun constraint* (OPC) in English. It also aims to examine L2 learners' understanding of Universal Grammar (Chomsky 1981, 1986, 2000, 2001) and if it is common to all languages. Specifically, this study takes a new look at the L2 acquisition of knowledge of the overt pronoun constraint (Montalbetti 1984) by Persian learners of English. The current work examines whether Iranian learners of English can obtain native-like knowledge of OPC in their sentences. Forty female learners of English (intermediate and advanced) completed three tests, a Pet test and an English OPC test with a Persian OPC test at the *Kish English Language Institute* in Tehran, Iran. These comprised a multiple choice test for English language proficiency (PET test) to determine the level of each participant, and a multiple choice OPC test including English and Persian questions to measure the possible effect of null or overt pronoun structures in sentence construction, evaluating the participants' knowledge of OPC usage. Results from the experiment show that L2 speakers can successfully achieve knowledge of the OPC regardless of pronoun position in their target language in both levels. However, the advanced level candidates performed much better on the OPC construction in the English test than those in the intermediate. There was a significant dependency between the English language proficiency level and the understanding of OPC structures. We believe that language proficiency affects the use of OPC in learners of Persian, suggesting that OPC may not hold true in different situations. The findings of the current study may have suggestions for L2 learners and teachers.

Keywords: OPC, Pro-drop - Null-subject languages, Overt/Null pronouns, zero pronoun, EFL's learners knowledge, Persian.

Introduction

The overt pronoun constraints (OPC) are among the most commonly discussed types of language. The question is regarding whether Iranian EFL learners have knowledge of OPC in English or not, since in speaking the language they show understanding of the overt pronoun. The principles of OPC state that in a language with overt or covert (null) pronominal alternation,

an overt pronoun cannot receive a quantified antecedent. This characteristic is not found in English pronouns. This new trend has already had an important role in fields of linguistics, sociolinguistics, and discourse pragmatics in L2 learners. A number of researchers have observed that overt and null subjects do not have the same distributional properties within the same pro-drop language like Persian. That is, there are certain grammatical and discourse principles that determine the occurrence of overt versus null pronominal subjects in a specific context (Enç (1986); Erguvanlı-Taylan (1986); Pérez-Leroux, & Glass (1997; 1999); Thomas (1991).

Some researchers consider OPC as a Universal Grammar (UG) principle while others draw on non UG explanations. The overt pronoun constraints in languages with both overt and null pronouns (e.g. Persian), only null pronouns can be bound by a universal quantifier. This language has various forms of overt pronouns in sentences. We find misunderstanding about utilized OPC in most daily speaking, wh-movement in writing, and empty categories in different situations. Due to the nature of English, it is suggested that the knowledge of OPC learned by native speakers goes beyond the input that they receive as young children. In L2 acquisition, learners come across a similar task to that of L1 learners, namely the need to arrive at a system accounting for L2 input. This study examines the L2 learners to see whether they have knowledge of OPC without any formal teaching or background information about it. In the sentence, “*each student claims he... would get a good mark*”, the null pronoun can be either bound to the wh-movement ‘who’ without referring to a particular person in the main clause or particular individual in the main clause. It can be disjoint in reference from other NPs in the sentence. The overt pronoun ‘او/he’ can refer to ‘someone’ or another person not referred to in this sentence. As the other sentences "پژمان فکر می کند که.... مقصر است" which make Persian speakers think that چه کسی مقصر؟ to dropping subject Ø/او or pronoun during communication.

The view Lozano mentions is that in the sentence below the Quantified Determiner Phrase (QDP) each student can indeed bind the overt pronoun **he** as there is no overt/null alternation in English (i.e., *pro* is not allowed in English).

Each student_i says that he/ she/pro has little money.

However, there is a possible alternation here between an overt pronoun and *pro*. Contrastive Focus Constraint (CFC) situations in Spanish require an overt pronoun, as suggested by Pérez-Leroux, & Glass (1997). In contrast to the sentence above it also distorts an interpretation where the overt pronoun **he/she** is related with one of the discourse referents (Mr López or Ms García), and not with the QDP (each student). Furthermore, due to one of the referential antecedents (based on whether we want to focus on Mr López or Ms García) a null pronoun *pro* would cause ambiguity since it can be specified for either [\pm masculine] simultaneously and for that reason neither of the discourse referents can be contrastively focused. Noticed that OPC and CFC constructions are operative in L1 but not in L1 English. These cross-linguistic differences allowed us to test the role of UG and L1 transfer in non-native L2 acquisition.

For over twenty five years, there has been an ongoing debate in researchers about whether L2 learners' mental grammars derive from UG or not. The analysis of generative grammar (Chomsky, 1981, 1995; & White, 2003) have had an enormous influence on the development of second language acquisition (SLA) theories. As Chomsky notes, human newborns are innately endowed with Universal Grammar (UG), or a universal knowledge of elements of human language. The strongest case for the operation of principles of UG is to investigate whether adult L2 speakers can ultimately reach native like competence pertaining to the OPC and reflexive

binding in order to advance our understanding of the OPC is a part of UG. The current study would shed some light on the availability of UG in language proficiency by learners of Persian.

Significance and Purpose of the Study

This research attempts to identify those situations in which Persian learners can use the overt pronoun without prior knowledge in order to assist with the resolution of ambiguity in speech and the sentences in which this occurs. We will observe that there is more mismatch between L1 and L2 learners in speech and complex knowledge of OPC sentences and determine whether skillful readers can understand overt pronoun constraint structures more easily than elementary ones. The main reason for conducting this research is to assess whether any gaps exist in the research of other writings on OPC in both Persian and English.

Moreover, understanding the link between null pronouns and overt pronouns will help EFL teachers, linguistic and sociolinguistic researchers see how OPC poses common problems, especially for non-native speakers. One can find OPC sentences in most daily Persian speech, primarily in formal situations. In contrast, the characteristics of OPC are not found in English pronouns, and the difference is usually not explicitly taught in foreign language classrooms. Overall, we will see if Persian language learners have awareness of OPC at work in language or not, and if these learners have any recognizable trouble with bound variable reading.

Literature Review

OPC in language

The study of the structural behaviour of overt pronoun constraint was first carried out by Mario Montalbetti (1984). His principle of OPC states that in pro-drop languages like Persian, with overt or null pronominal alternation, an overt pronoun cannot receive a quantified antecedent. In

addition Rizzi (1986) purported a list of characteristics that cluster with the null subject setting of the Null Subject Parameters (NSP). An overt pronominal subject cannot link back to that variable but instead must be clarified as free, whereas null subjects in such sentences are ambiguous, allowing both bound and free readings, 'Nobody believes that he is intelligent', The Logical Form (LF) illustration shows mismatch in sentence by Montalbetti (1984, p. 97). It is important to show that the OPC applies only to sentences containing quantifiers (no one) or wh-words (who) and not to those including referential subjects such as (she/he/John /the octopus).

It is also important to note that the OPC applies only in cases where there is the possibility of an alternation between overt or null pronouns. For instance, 'Many students want Mary to marry them' the object of a preposition must be overt in sentence, pro would lead to ungrammaticality.

Finally, the OPC applies only to sentences containing both a formal variable and the possibility for an alternation between an overt and a null pronoun. This affected the notion of the Null Subject Parameter since it noticed that whether language had optional subjects was not simply a matter of surface form but carried semantic consequences at (LF) as well.

Some theories about pro-drop language

The term "pro-drop" originate from Noam_Chomsky's "Lectures on Government and Binding" from 1981 as a bunch of properties of which "null_subject" was one. The phenomenon of pro as a predicate rather than a subject in sentences with the copula, was considered by Torrego (1984). According to this parameter, languages like Italian, Spanish and Persian may be classified as pro-drop languages, while English and French may not. The exploration of the properties related to the pro-drop was also crucial in identifying the notion of parameter. Basically, the differences between English and Italian became very important as proposed by Rizzi (1982). Proponents of

the term "pro-drop" take an outlook that pronouns which in other languages would have those referents can be omitted, or be phonologically null.

Therefore, a one-way correlation was argued between inflectional-agreement (AGR) and empty pronouns on the one hand and between no agreement and overt pronouns on the other. It proved value noting that in the classical version, languages which not only lack agreement morphology but also allow extensive dropping of pronouns such as Japanese, Chinese and Vietnamese are not included. "The principle proposed is fairly general, but does not take account of such languages as Japanese in which pronouns can be missing much more freely." Chomsky (1981, p.284).

In the other word Chomsky identified that pro-drop languages especially share a number of features that differentiate them from non-pro-drop languages. Other primer studies (Jespersen, 1924; Perlmutter, 1971; and Taraldsen 1978) had noted that many pro drop languages have 'rich' inflectional systems. Chomsky points out that the recovery of the absent subject was critical, these 'richer' language systems had particular qualities related to agreement (AGR) and inflection (INFL) that permitted this recoverability. Such a sentence can enclose a phonetically empty, but structurally present, subject.

‘We / ___ bought some souvenirs.’

Furthermore, pro-drop languages were thought to typically exhibit a cluster of related morphological and syntactic properties. But Rizzi (1986) noticed that there are factors where pro appears when recognition through 'rich agreement' is not possible. Even Liceras and Díaz (1999) mentioned that learners do not move directly from a 'non-pro-drop' stage to a 'pro-drop' stage. Grimshaw, & Samek-Lodovici (1995) pointed out, subjects that face what was previously

believed to be ‘free’ inversion are not free at all; these subjects are actually focused in the discourse. Bouchard (1983) posited a Principle of Lexicalization (PL) and introduced this parameter regarding where nominal are assigned Case. Bouchard investigated that nominal are lexical if and only if they contain person, number, gender, and Case at Phonetic Form (PF).

All in all, pro-drop has been also used in other frameworks in generative-grammar, such as in lexical-functional-grammar (LFG). However, Bresnan (1982, p.384) holds the view that Pro-drop is a common linguistic phenomenon in which, under certain conditions, a structural NP may be unexpressed, giving rise to a pronominal interpretation.

Empty category

In language, empty categories are defined as syntactically noticeable but phonetically null elements. A large amount of research has focused on the recognition of the exact status of empty elements. Within the framework of Government and Binding (GB) Chomsky (1981, 1982).

Taraldsen (1978) claimed that null subjects are all empty Noun Phrases (NPs) bound in Sentence (S') by subject-verb agreement, as in ‘eat at ten o'clock’ with the missing subject permitted because of the ‘rich’ verbal inflectional system.

Jaeggli (1980) and Suñer (1982) agreed with Taraldsen on the importance of a rich inflectional system too, but they concluded that the null element was not an empty NP but rather an empty element PRO posited by Government and Binding Theory (GB) Chomsky (1981) for control constructions where a non-finite verb had a null subject.

Inferences of L1 and L2 learners on OPC

In null subject languages such as Persian, it may never be decoded as a co-referential with a variable antecedent since pro is available in almost all subject positions. Judy &

Feizmohammadpour (2012) demonstrate that the OPC obtains in Persian as well. For example, "That man thinks that he/pro is the best". Shows that no variation was seen with respect to the clarification of the null embedded clause subject. The bound interpretation was categorically preferred in Persian. More accurately, these languages allow both overt and null subjects.

However, where optional, the interpretation of the subject pronoun may rely on such things as the type of matrix clause antecedent. The use and interpretation of overt versus null pronouns in pro-drop languages like Persian has been considered within various fields of linguistics, theoretical syntax, sociolinguistics, and discourse pragmatics Lubbers Quesada, & Blackwell (2010). Principle of OPC states that in a language with overt/null pronominal alternation, an overt pronoun cannot receive a quantified antecedent.

Pérez-Leroux, & Glass (1999); White (2003a) believed that the OPC constitutes a poverty-of-the-stimulus property. It is a fact that the interpretive constraints that fall out from it are not achievable from the input alone and are not taught in the classroom, nor can they be accounted for via domain-general learning strategies.

Generative linguistic research has continued from the belief that humans have innate access to Universal Grammar, Chomsky (1965, 1975, 1986) for their acquisition of their first languages, access to UG for second language acquisition has been more controversial, and differing positions have been taken as to the extent to which learners have access to and use UG as they learn a second language. However, this difference between principles and parameters has led researchers to propose that adult L2 learners have access to UG principles but do not set the parameters of the L2.

Methodology

The purpose of the present study was to investigate the possible effectiveness of overt pronoun constraint structures and language proficiency on Iranian EFL learners' knowledge. This chapter clarifies the details of the participants of the study, the instruments for data collection, design, and procedures used to answer the research questions.

Participants

The subjects in this study were 40 female EFL students divided in two levels, containing 18 participants at intermediate level with 22 at advanced level of English language proficiency. All of the individuals were native speakers of Persian studying in Kish Language Institute, Tehran, Iran. They ranged from 19 to 45 years of age. The subjects were administered three tests.

Instruments

In the present study, the following instruments were utilized:

- 1-Preliminary English language proficiency test (PET)
- 2-English overt pronoun constraint test
- 3-Persian overt pronoun constraint test

Data Collection Procedure

The data used in this study is the result of the three tests that were administered. That is, the Preliminary English Test (PET), the English (OPC) test, and the Persian (OPC) test. First of all, the PET test was administered to 55 participants to determine their level of proficiency in English language. Based on the results of PET test, 40 students whose scores were one standard deviation (9.39) plus and minus the mean (54.66) (scores between 45 and 64) were selected. The selected students were divided into two groups: Intermediate and Advanced. It consisted of 85 grammar, vocabulary and reading comprehension questions. Throughout this study, the

researcher had to make sure that the participants had no prior knowledge of the overt pronoun constraint.

The participants were given written instructions, a single question with two or three alternative answers following each sentence. Participants were read each item carefully and asked to choose the answer that fitted their initial, intuitive understanding of the sentences' meaning. Participants were also asked not to go back to the previous questions they had answered. Students were not required to provide any information which could help identify the exact answer, even no feedback was given for correct/incorrect responses. Results from the test were purely to determine the level of students' ability relative to the difficulty of the test by collecting the immediate responses given. At the same time, this research sought to examine the possible effect that overt pronoun constraint structures may have on the ability to comprehend sentences. To achieve this, the two groups took the same OPC test including English and Persian.

We scored the English OPC and Persian OPC answers separately to estimate the possible ability of EFL learners' comprehension. After the papers were scored, statistical procedures were employed to present the results of the T-test which appear in section 6.

Data Analysis

In order to answer the research question of the current study and to test the hypotheses of whether Persian-speaking learners of English have any knowledge of OPC, a T-test was used to compare the knowledge of advanced and intermediate students' in English and Persian. The advanced students proved to be considerably greater in awareness than the intermediate students on the use of English pronouns. No significant difference was noted in test-results on Persian pronouns in either group. In addition we found out that having a high level of language proficiency does affect awareness of overt pronoun constraint structures. In the case of having a

positive effect in the English OPC test, the result enabled the researcher to reject the null hypothesis.

Results and Discussions

Based on the research-question of this study, aimed at finding out whether Persian speaking learners of English have any knowledge of OPC, an independent sample *t*-test was conducted. Before discussing the results of *t*-test, with the normality of the data which was tested via one-sample Kolmogorov-Smirnov test; Table 1 details the data on OPC test among two groups.

Table 1

One-Sample Kolmogorov-Smirnov Test of Normality

Language	Level	<i>N</i>	Mean	Kolmogorov-Smirnov <i>Z</i>	Asymp. Sig. (2-tailed)
English OPC test	Advanced	22	18.18	0.725	0.669
	Intermediate	18	9.17	0.630	0.822
Persian OPC test	Advanced	22	20.45	0.713	0.776
	Intermediate	18	19.61	0.837	0.168

As can be seen from the table above, in the English OPC test the pronoun measures for advanced (Sig. = .66, Sig. > .05), and intermediate (Sig. = .82, Sig. > .05) have normal distribution. Also in the Persian OPC test, the pronoun measures for advanced (Sig. = .77, Sig. > .05), and intermediate (Sig. = .16, Sig. > .05) are normally distributed.

Descriptive statistics are represented on two groups which illustrated below. Table 2 demonstrates that the mean and standard deviation of the advanced students ($\bar{x} = 18.18$, $SD = 1.79$) are considerably greater than the intermediate students ($\bar{x} = 9.17$, $SD = 2.17$) on the test of

English OPC. However, Table 6.3 highlights that advanced students ($\bar{x} = 20.45$, $SD = 1.68$) and the intermediate students ($\bar{x} = 19.61$, $SD = 1.78$) do not differ greatly on the Persian OPC test.

Table 2

Descriptive Statistics for Two Levels' English OPC Scores

Level	N	Mean	SD	Std. Error Mean
Advanced	22	18.18	1.790	.382
Intermediate	18	9.17	2.176	.513

Table 3

Descriptive Statistics for Two Levels' Persian OPC Scores

Level	N	Mean	SD	Std. Error Mean
Advanced	22	20.45	1.683	.359
Intermediate	18	19.61	1.787	.421

The result of independent *t*-test that was used to compare the advanced and intermediate students' scores on the English and Persian OPC test. Data from the Table 4 can be compared a significant difference ($t(38) = 14.38$, $p = .000$, $p < .05$) in the English OPC scores for the advanced ($\bar{x} = 18.18$) and intermediate ($\bar{x} = 9.17$) students, in which the *t*-observed is above the *t*-critical of 2.00. With the data in Table 6.5 which shows *t* value and significance level ($t(38) = 1.53$, $p = .13$, $p > .05$) are indicative of no significant difference in the Persian OPC scores for the advanced ($\bar{x} = 20.45$) and intermediate ($\bar{x} = 19.61$) students. In contrast, the *t*-observed is lower than the *t*-critical of 2.00.

Table 4

Independent Samples Test for Two Levels' English OPC Scores

Levene's Test for Variances			T-test for Means			
Factor	<i>F</i>	<i>Sig.</i>	<i>T</i>	<i>Df</i>	Sig. (2-tailed)	Mean Diff.
Equal variances assumed	1.419	.241	14.384	38	.000	9.015
Equal variances not assumed			14.102	32.874	.000	9.015

Table 5

Independent Samples Test for Two Levels' Persian OPC Scores

Levene's Test for Variances			T-test for Means			
Factor	<i>F</i>	<i>Sig.</i>	<i>T</i>	<i>Df</i>	Sig. (2-tailed)	Mean Diff.
Equal variances assumed	.017	.897	1.534	38	.133	.843
Equal variances not assumed			1.525	35.492	.136	.843

Accordingly, the null hypothesis of this study that states, ‘Persian speaking learners of English don’t have any knowledge of OPC’ is retained, and therefore we can declare that Persian speaking learners of English don’t have any knowledge of OPC in English.

A Box Plot was made to graphically show the results. Figure 1 reports that the advanced students have acted noticeably better than the intermediate students in view of knowledge of English pronouns. In contrast, Figure 2 displays that the advanced and intermediate students performed almost the same concerning the knowledge of Persian pronouns. In addition, strong

evidence of OPC was found that having a high level of language proficiency does affect awareness of overt pronoun constraint structures in English.

Figure 1

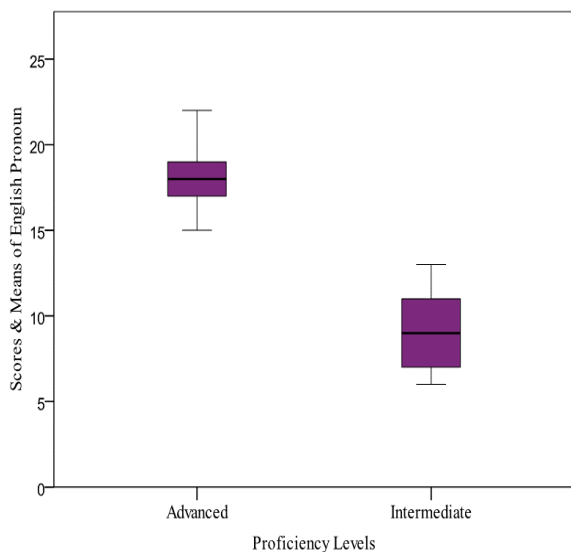


Figure 2

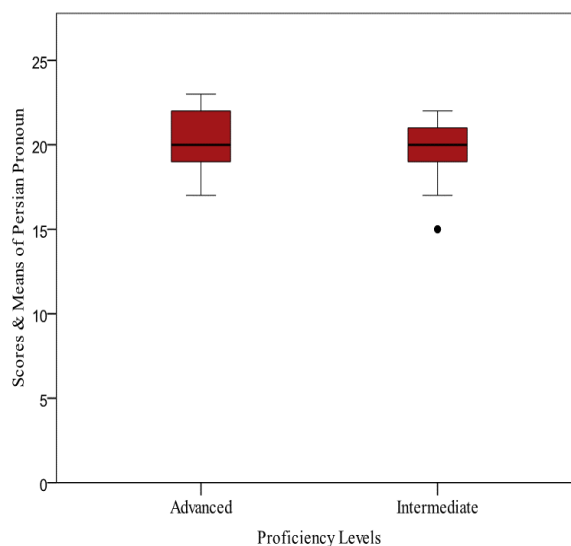


Figure 2 Two levels' scores & means of English pronoun

Figure 3 Two levels' scores & means of Persian pronoun

The research question in the current study focused on the ability to use overt pronouns in English and Persian by EFL learners. The results indicated that the performance of the advanced group in both Persian grammar and English structure on the OPC test was significantly better than the intermediate group. What is surprising is that both groups responded much better in the Persian test.

Many studies have been conducted on null pronoun structures, but there are very few studies on the knowledge of overt pronoun constraint in EFL learners. As pointed out in chapter 2, the overt pronoun constraint has not been taught in the classroom and is not derivable from input alone, nor can it be accounted for via domain-general learning strategies. Researchers such as

Kanno (1997, 1998) and Pérez-Leroux, & Glass (1999); White (2003a); Mardsen (1998), have backed-up this point.

Since both English and Persian speakers discriminate between the grammatical and ungrammatical OPC constructions, as they prefer a null pronoun with a bound variable interpretation but reject an overt pronoun a pronoun with the same interpretation, it can be claimed that they behave similarly in this regard, although the OPC is not operative in English.

In accordance with the result of the present study Corder (1967); Chomsky (1981); et al argued that on the basis of Chomsky's competence and performance distinction that learner errors provide a window into the learner's linguistic knowledge. The opposite view is that Plato pondered how the child found the truths of life without being given any information, Chomsky identified that Plato is essentially correct in asserting that by 'preexistence' we understand certain aspects of our knowledge are innate, part of our genetic or biological endowment.

As mentioned elsewhere in this chapter, both groups performed better without any information given to them prior to the test. This is contrary to existing research Angluin (1978); Berwick (1985); Manzini, & Wexler (1987), which favored the view that L2 learners should obtain knowledge of both null subjects and overt pronouns where possible, and that certain discourse factors constrain their use.

Nonetheless some researchers Berwick (1985); Phinney (1987) suggested "Subset Principle" which means non-pro-drop languages are subsets of pro-drop languages. Learners of Persian are in a more difficult situation, being in a superset relationship to English, will require negative evidence that their pro-drop sentences are not grammatical in English. While some researchers

proposed that both English and Persian use overt lexical subjects, but only English uses expletive subjects and only Persian uses null referential subjects.

The finding of the present study extends those of previous studies in that it supports the observation that OPC could be innate to assist learning. Furthermore, numerous studies have proven that Universal Grammar (UG) principles are also available for adult L2 learners whether directly or indirectly, and that overt pronouns bear a positive impact on comprehension in speaking. (White 1985; Liceras, 1986; Flynn, 1987; Tsimpli & Roussou, 1991; Lebeaux, 1988; Chomsky, 1991).

The use and interpretation of overt versus null pronouns in pro-drop languages like Persian has been addressed within various fields of linguistics and sociolinguistics. Kratzer (1998) found that a useful way for disambiguation is a lexicon pronoun. This is supported by the findings of the present study.

Considering the lack of explicit teaching of the OPC and similar structures, the most plausible explanation is to propose that the findings of this study favor an approach to EFL where learners' knowledge is constrained by Universal Grammar. As Schwartz and Sprouse (2000) argue, any theory of grammar needs to account for the 'poverty of the stimulus phenomenon' since they are theory-independent. Despite the changes in generative theory, it can be claimed that innate principles of UG can be called upon to account for the learner's knowledge of OPC phenomena with regard to pronominal subject distributions.

Eventually, it can be claimed that there are certainly some universal knowledge and intuitions regarding the grammatical aspects of L2 in the learners' minds. However, they have to be

stimulated by some amount of exposure to the target language in order to emerge. Regarding the advantages of overt pronouns in L2 learners, it seems in free variation but not null, allowed in English as proposed by Lozano (2002). Additionally Montalbetti (1984) added the OPC in pro drop languages, where overt or null pronouns exist, allows both bound and free reading in L2 learners.

Conclusion

Returning to answer the research question posed at the beginning of this study, it is now to be seen whether EFL learner's show knowledge of overt pronoun constraint and language proficiency. Based on the obtained results, the mean differences showed that there is a significant difference between the groups with high level of English language proficiency (Advanced) and low level of English language proficiency (Intermediate). This means that the intermediate students ($\bar{x} = 9.17$, $SD = 2.17$) had the lowest mean and hardly comprehended the test of English overt pronouns, whereas the advanced students ($\bar{x} = 18.18$, $SD = 1.79$) showed the best comprehension in the English pronoun test. The most interesting result was that the advanced students achieved noticeably better results than the intermediate students in view of their knowledge of English pronouns. In addition, the correlation coefficient of knowledge and ability to learn about overt pronouns showed that there are statistically significant differences between these two variables.

Conversely, the two groups of intermediate and advanced learners had equal performance results on the Persian pronoun test, which means that they did not differ greatly in the test on Persian pronouns. The findings of the study show that there are significant differences among the effect of different language proficiency levels on learners' knowledge of grammatical rules in

English overt pronoun sentences. Consequently, we can declare that Persian speaking learners of English don't have any knowledge of OPC in English.

The current study, like other studies, has some implications for different individuals including EFL teachers, linguistic researchers, and educated students. The present study may also have implications for the use of OPC during spoken communication, and may encourage awareness of how overt pronoun constraint operates in relation to its subject within a sentence. This would greatly assist EFL learners in their general comprehension. Future research can seek to answer several issues that are still in need of investigation. Firstly, the results of people from other geographical locations, such as rural areas of Iran. Secondly, while this study used multiple-choice questions to test learners' knowledge on OPC structures, another way of testing might be to record the oral speech of participants to determine evidence of OPC in speech.

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