Level of Grammatical Proficiency and Acquisition of Functional Projections: The case of Iranian learners of English language

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Abstract

Unlike Lexical Projections, Functional Projections (Extended Projections) are more of an 'abstract' in nature. Therefore, Functional Projections seem to be acquired later than Lexical Projections by the L2 learners. The present study investigates Iranian L2 learners' acquisition of English Extended Projections taking into account their level of grammatical proficiency. Specifically, the aim is to identify the level of grammatical proficiency at which the acquisition of Extended Projections could occur in the process of learning English by the Iranian students. Two hundred and seventy Iranian female L2 learners of English participated in this study. Participants were administered three tests with a ten-day interval between each test. First, an Oxford Placement Test (OPT) was used to classify the participants' level of grammatical proficiency. Second, a Grammaticality Judgment Task (GJT) was administered in order to assess the learners' ability to recognize grammatical problems in Extended Projections. Finally, a picture description task (PDT) was administered to examine the learners' ability to produce grammatical Extended Projections. The results indicated that the learners are able to recognize and produce English Extended Projections even at lower levels of grammatical proficiency. The results also showed that the learner's recognition and production of English Extended Projection improves with their increased level of grammatical proficiency.

Keywords: Functional Projections, Grammaticality Judgment Task, L2 learner, Picture Description Task, second language acquisition

Introduction

An essential part of learning a second language (L2) is learning how to put the words together to make phrases and how to fit those phrases together to make grammatical sentences. This combination of properties of words and phrases is known as syntax. If a sentence is built according to the properties determined by syntax, it is grammatical. Otherwise, it would be considered ungrammatical (Hawkins, 2001). What is responsible for generating grammatical structures in a particular language is a set of instructions known as "grammar". The Grammar of a language specifies the pronunciation of a sentence , its syntax and the meaning given to that sentence (Hawkins, 2001). Roux (1996) considers understanding the grammar of a language as an important part of learning a language. However, Roux believes that it is impossible to understand how the grammar of a language is acquired without understanding the knowledge of that grammar and its representation in the mind of an L2 learner. In order to understand this mental

grammar of an L2 learner, it is necessary to collect observations about second language syntactic structures.

A sentence in any language, contains phrases as its fundamental syntactic structures. These phrases could be lexical or functional phrases usually known as Lexical and Functional categories. White (2003) differentiates between Lexical categories (Lexical Projections) and Functional categories (Functional Projections/Extended Projections). Lexical categories include, head categories such as Nouns, Verbs, Adjectives, Adverbs and Prepositions, and the functional categories include head categories such as Determiners, Inflections, Complementisers, Negations, etc. Considering Corver's (2013) definition, lexical category constitutes the lowest structural domain of an Extended Projection and the sequence of Functional Projections is built on top of the Lexical Projection and constitutes the higher domain of an Extended Projection (Corver, 2013).

One of the main topics of interest among researchers in second language acquisition (SLA) is investigating L2 learners' acquisition and development of Functional Projections or Extended Projections (EPs) (Corver, 2013; Hawkins, et al. 2006; O'Gradi, 2006; Rizzi, 2016; White, 2008). Compared with lexical categories, which are acquired earlier, functional categories are acquired in later stages both in first and second language acquisition. The reason for this delay might be that function words (functional morphemes) are more abstract in nature. However, they are considered important elements in a sentence since they are needed to glue the content words together. Therefore, it seems that Functional categories do have a crucial role in developing grammatical constituents in a language.

According to Rizzi (2016) "much of the complexity of syntactic structures resides in the functional layers" (p. 143). Considering Rizzi's definition, the complex and non-realistic nature of Functional categories, may explain why second language learners seem to experience more difficulties learning and using them to make grammatical structures. As a result, it is essential that language instructors and language learners be aware of the critical role of Functional Projections (Extended Projections) in learning a new language so that they can apply better techniques and more useful materials to acquire these constituents more practically.

In this respect, the present study aims to investigate the level of grammatical proficiency Iranian learners of English can acquire the four English Extended Projections including Determiner Phrases (DPs), Infelectional Phrases (IPs), Negative Phrases (NegPs) and Complementiser Phrases (CPs). Regarding the complexity of Extended Projections and the difficulty of their acquisition, it is assumed that learners may not have access to these categories in lower levels of grammatical proficiency. Therefore, after classifying the participants into three groups of Low, Mid and High according to their proficiency scores, this study utilises Grammaticality Judgment Task (GJT) and Picture Description Task (PDT) in order to assess the degree of acquisition of the above Extended Projections in each of the three groups. Analysing each of the groups, the study attempted to answer the following research question:

Q: At which level of grammatical proficiency are Extended Projections acquired by Iranian learners of English?

Empirical Background

Acquisition of Functional Projections has received a lot of attention by researchers of Second Language Acquisition (SLA) through decades. Ionin, Zubizarreta, and Maldonado (2008) conducted a study on acquiring English articles by Spanish learners of English. The results showed that they are able to use articles accurately even from the beginning. This lack of fluctuation was explained by the fact that English and Spanish are similar regarding their article systems, both marking definiteness.

In a study on the acquisition of the 3rd person singular –s morpheme by Spanish L2 learners of English, Jara (2015) reported that students made errors in the production of 3rdperson singular morpheme -s when using the present tense: they omitted the –s morpheme of the 3rd person singular in the vast majority of the verbs they used. Yoshimura & Nakayama (2009) investigated the L1 influence on the syntactic or morphophonological domain by examining how Japanese college EFL learners (15 in Low Group and 15 in High Group) proceeded to acquire inflectional morphology (3rd person singular –s, plural –s and past tense –ed) in English. The results demonstrated that: (a) The the production of agreement –s improved as Japanese EFL learners' English proficiency increased. However, their rates of omission in nominal plural –s and past tense –ed did not decrease significantly. In addition, the language learners' omission rate of the 3rd person singular –s and the plural –s significantly differed from the omission rate of the tense –ed. This revealed that the tense inflection was the easiest to acquire. In sum, examining the compositions written by 30 Japanese EFL learners of the lower and higher proficiency groups revealed that L1 effects affected L2 learners' production of inflection morphology.

Jabbari and Pourhashemi (2011) investigated whether UG is accessible in the acquisition of English as a foreign language observing IPs and functional category of Neg in the three tasks done by ninety Iranian subjects. The results of the study showed a significant difference between the subjects at three levels of proficiency. With regard to constructing non-grammatical negative structures, the finding showed a significant difference among the three levels in a way that elementary subjects had the highest rate of non-grammatical negative construction and advance group produced the lowest. On the other hand, advanced subjects had a better performance than the other two groups in producing grammatical sentences and had the least transfer from their mother tongue.

In a part of his study Hopp (2017) investigated the effect of L1 word order and proficiency on comprehension processing of which-questions. The study was done among 60 German-English adult learners at different stages of proficiency. According to the results, the accuracy data provided clear differences according to proficiency. The upper-intermediate L2 adults showed to be more accurate that the intermediate ones and the advanced group had high accuracy over-all. According to Hopp, the results were compatible with Full access/ Full Transfer Hypothesis proposed by Schwartz and Sprouse (1996), which identifies the L1 grammar as the initial state of adult L2 acquisition with subsequent restructuring of the Interlanguage grammar as exposure rises and proficiency improves.

Aryanik and Lotfi (2015) also conducted a study on exploring the differences between the Farsi as the first language and English as the second language regarding the acquisition of CPs using seventy (70) Persian learners of English. According to the findings, students had access to the CPs in all the three levels of elementary, intermediate, and advanced. The participants had already begun to specify their representations for English C and CP at the initial stages of EFL acquisition. Later, they improved the use of CPs based on the positive evidence they received as they went through different levels of proficiency, thus, there was a rise in the correct use of CPs from the elementary to intermediate and consequently to advanced level.

Schulz (2006, 2011) investigated the acquisition of English complex questions by German and Japanese English learners. The results of the study showed that the errors observed in the acquisition of English complex questions (including wh-embedded clauses) stem from interlanguage stage. Schulz concluded that the discovered errors in the mentioned field were due to lack of knowledge, which could be eliminated by gaining more and more proficiency in English.

In a study done by Khorvash & Lotfi (2019), the relationship between grammatical proficiency and learners' access to Extended Projections was investigated through a correlational study. The study was conducted among Iranian learners of English. The results of the study showed that there was a positive, significant correlation between grammatical proficiency and having access to Extended Projections.

Methodology

Participants

The current research is a descriptive study with the aim of assessing the acquisition of Extended Projections (DPs, IPs, NegPs, and CPs) among Iranian learners of English. The study was conducted among Iranian female English language learners in several language institutes in Tehran. The study also included undergraduate students majoring in English translation, English literature and English language teaching at two branches of Islamic Azad University in Tehran province. Two-hundred and seventy (270) female language learners participated in this study. Gender was controlled in this research by using only female students. Because the focus of the study was evaluating L2 learners' acquisition of Extended Projections, which are acquired in later stages, the participants had the experience of at least two years of studying English or were at pre-intermediate levels and above in their language schools.

Materials and instruments

The instrument used in this study comprised of three tests, which were administered with a ten-day interval between each. First, an Oxford Placement Test (OPT) was administered to obtain the grammatical proficiency level of the participants. After a ten-day interval, a Grammaticality Judgment Task (GJT) was conducted to evaluate the participants' ability to recognise four Extended Projections (DPs, IPs, NegPs and CPs). Lastly, a Picture Description Task (PDT) was administered to measure the ability of participants in producing the four Extended Projections.

Oxford Placement Test (OPT) Administration

In order to obtain a proficiency score for each participant, an OPT (Allan, 2004) was administered. Because learners' grammatical proficiency was the focus of the study, only the grammar test papers of the OPT was utilised. Complete and detailed instructions and examples were given to the students at the beginning of the test both in English and in Persian to ensure that all the students taking the test understand what they were supposed to do. Considering the test instruction, about 50 minutes were allocated to do the test. According to OPT marking kit, one point was given to correct response and no point to incorrect ones. The points then were added up in order to obtain a complete score out of 100 for each participant. The participants then were given a code and their grammatical proficiency scores were calculated and ranked form the highest to the lowest. The OPT scores of the participants were then categorised into three groups of low, mid and high.

Grammaticality Judgment Task (GJT) Administration

A researcher-formulated GJT was administered ten days after the OPT to assess the learners' ability to recognize grammatical problems in Extended Projections. Sentences included in GJT were selected from the sample sentences provided in 'Second Language Syntax: A

generative introduction' by Roger Hawkins (2001). The validity of the task was reviewed and approved by experts before administration. To ensure the reliability of the instrument, the test was administered to a group of thirty language learners in different language schools in Tehran province. Kuder-Richardson-21 (KR-21) test was utilised to measure the reliability of the instrument.

Therefore, the participants were presented a set of forty-seven grammatical and ungrammatical sentences including fillers. The sentences contained Extended Projections (IPs, DPs, CPs, and NegPs) and the participants were asked to indicate whether they consider them grammatical English sentences or not. This was followed by a request to correct those sentences they had judged to be incorrect. The participants were provided with detailed explanation of what to do both in English and in Persian. Based on the pilot study, the amount of time given to the participants to complete the test was about twenty–five minutes. Points were given to (1) correctly identify the sentences as either grammatical or ungrammatical sentences and (2) correct the ungrammatical sentences.

Picture Description Task (PDT) Administration

For eliciting narrative discourse samples from the participants, a PDT was administered ten days after GJT. The test comprised three pictures taken from "father and son (vater und sohn)" comics by Plauen (2014). The participants were supposed to write down at least ten sentences describing the event portrayed in each picture in English. Considering the pilot study done before, about fifteen minutes were allocated to complete the task.

Results

Results of Oxford Placement Test (OPT)

The participants' scores on the grammatical section of OPT was used to rank the learners' grammatical proficiency. The mean score of the participants was 61.60 out of 100. The lowest score was 16 and the highest score was 94. Table 4.1 shows the participants' overall OPT score distribution.

OPT Scores Distribution	
Number of the participants	270
Mean	61.60
Median	64.00
Mode	64
Std. Deviation	14.198
Variance	201.594
Minimum	16
Maximum	94

Table 4.1. Participants' OPT Scores Distribution

The participants were divided into three groups based on their OPT scores. This study used the scores of 56 as the cut off score for the Low Group, the scores between 60-68 for the Medium group, and 72 and above for the High Group (Table 4.2). Organizing the scores in to the three groups in this study was compatible with OPT proficiency level chart (Allan, 2004).

Table 4.2. Classifying Grammatical Proficiency Group Based on OPT Scores

Prof. Group	OPT Score	NO. of Participants	
Low Group	16-56	87	
Mid Group	60-68	79	
High Group	72-94	67	

Results of Grammaticality Judgment Task (GJT)

The GJT was administered with a ten-day interval from the OPT. The aim of GJT was to examine the learners' ability to recognise forty-seven grammatical and ungrammatical sentences containing Extended Projections (DPs, IPs, NegPs and CPs). Based on the standard coding system, points were given to the correct identification of the sentences as grammatical or ungrammatical sentences (Tasseva-Kurktchieva, 2015). After scoring GJT for each participant, the proportion of the participants with correct recognition of grammatical and ungrammatical Extended Projections (DPs, IPs, NegPs and CPs) was calculated. The performance of the participant in each of the grammar proficiency groups for these Extended Projections was compared using Chi-Square test and P-Value was reported.

Results of DPs

The participants were asked to identify twelve sentences as grammatical and ungrammatical. As shown in Table 4.3, those participants who correctly recognised seven or more of the sentences in the Low Group, were 22%, in the Mid Group were 33%, and in High Group were 54%.

Number of		v Groups				
correct	Low Group)	Mid Grou	Mid Group		р
Recognition	Frequency	Proportion	Frequency	Proportion	Frequency	Proportion
0	6	0.07	-	0	-	
1	2	0.02	2	0.03	-	0.00
2	8	0.09	2	0.03	2	0.03
3	12	0.14	5	0.06	3	0.04
4	12	0.14	8	0.10	4	0.06
5	13	0.15	15	0.20	10	0.15
6	14	0.16	21	0.27	12	0.18
7	14	0.16	14	0.18	16	0.24
8	6	0.06	9	0.11	16	0.24
9	-	0.00	3	0.04	4	0.06
10	-	0.00	-	0.00	-	0.00
11	-	0.00	-	0.00	-	0.00
12	-	0.00	-	0.00	-	0.00
Total	87	1.00	79	1.00	67	1.00

Table 4.3. Results of DPs Recognition in GJT in Three Proficiency Groups

P-

Value<0.01

According to the results, although the participants' ability to recognise DPs correctly is observed in all the three groups there is a significant difference between the low and Mid Group

and mid and High Group (p < 0.01). More progress in correct recognition of DPs is significantly achieved as the grammatical proficiency improves.

Results of IPs

The participants were asked to judge nine sentences as grammatically correct and incorrect. The frequency and proportion of the participants with correct recognitions of grammatical and ungrammatical IPs in three proficiency groups are shown in Table 4.4.

Number of Proficiency Groups								
correct	Low Group		Mid Group)	High Grou)		
Recognition	Frequency	Proportion	Frequency	Proportion	Frequency	Proportion		
0	-	0.00	-	0.00	-	$0.0\bar{0}$		
1	-	0.00	-	0.00	-	0.00		
2	-	0.00	-	0.00	-	0.00		
3	1	0.01	-	0.00	-	0.00		
4	8	0.09	1	0.01	-	0.00		
5	13	0.15	4	0.05	1	0.01		
6	22	0.26	12	0.15	3	0.04		
7	28	0.33	24	0.30	18	0.27		
8	8	0.09	28	0.36	33	0.49		
9	7	0.08	10	0.13	12	0.18		
Total	87	1.00	79	1.00	67	1.00		

Table 4.4. Results of IPs Recognition in GJT in Three Proficiency Groups

P-

Value<0.01

The results show that, 50% of the participants in the Low Group, 79% in the Mid Group and 94% in the High Group could correctly recognize seven or more of the IPs. The findings in this part also show that the participants' recognition of English IPs correctly from the lower levels of grammatical proficiency however, their ability has increased significantly with increase in grammatical proficiency (p < 0.01).

Results of NegPs

Seven sentences should have been identified as correct or incorrect by the participants. Table 4.5, shows the frequency and proportion of the participants who could correctly recognize grammatical and ungrammatical NegPs.

The results show that 47% of the participants in the Low Group, 62% in the Mid Group and 86% in the High Group could correctly recognise five or more of grammatical and ungrammatical NegPs. As is shown in this table, the High Group has a significantly better performance compared with the Mid Group who themselves are remarkably better than the Low Group (p < 0.01). It should be noted that although the participants' performance is significantly different among the three groups, correct recognition of NegPs can be observed even in the participants with low level of grammatical proficiency (i.e. Low Group).

	Table	4.5. Results of NegPs Recognition in GJT in Three Proficiency Groups
Number	of	Proficiency Groups

correct	Low Group		Mid Group)	High Grou	р
Recognition	Frequency	Proportion	Frequency	Proportion	Frequency	Proportion
0		0.00	-	0.00	-	0.00
1	-	0.00	-	0.00	-	0.00
2	5	0.06	2	0.03	-	0.00
3	18	0.21	8	0.10	1	0.01
4	23	0.26	20	0.25	8	0.12
5	25	0.29	31	0.39	19	0.28
6	15	0.17	15	0.19	22	0.33
7	1	0.01	3	0.04	17	0.25
Total	87	1.00	79	1.00	67	1.00

P-

Value<0.01

Results of CPs:

Table 4.6 shows the proportion of the participants who could correctly recognize grammatical and ungrammatical CPs. The participants were supposed to recognize nine phrases as grammatical and ungrammatical. The results reveal that 14% of the participants in the Low Group, 32% in the Mid Group and 71% in the High Group could correctly recognize seven or more of the CPs. According to the findings, there is a significant difference between the three groups concerning their ability to recognize correct CPs (p < 0.01).

Although it seems that CPs are accessible from the low levels of grammatical proficiency, they are more readily available to High Group in comparison to the mid and Low Groups. It's also worth noting that while CPs are available to all three groups just like the other Functional Projections, but due to the complexity of CPs they are acquired at the higher-level grammatical proficiency than other Functional Projections.

Table 4.6. Results of CPs Recognition in GJT in Three Proficiency Groups

Number of	Proficiency	Proficiency Groups					
correct	Low Group	Low Group		Mid Group		0	
Recognition	Frequency	Proportion	Frequency	Proportion	Frequency	Proportion	

0	2	0.02	-	0.00	-	0.00
1	1	0.01	-	0.00	-	0.00
2	2	0.02	-	0.00	-	0.00
3	8	0.09	3	0.04	3	0.04
4	25	0.29	7	0.09	1	0.01
5	26	0.30	20	0.25	8	0.12
6	10	0.11	24	0.30	7	0.10
7	8	0.09	15	0.19	14	0.21
8	3	0.03	7	0.09	23	0.34
9	2	0.02	4	0.04	11	0.16
Total	87	1.00	79	1.00	67	1.00

P-Value<0.01

Results of Picture Description Task (PDT)

Since the number of EPs produced by the participants varied greatly, it was decided to use the proportion of correct productions instead of the number of correct productions (see tables 4.7-4.10). The first column in each table shows the proportion of the correct productions of EPs by the participants, divided into three levels of 0.0-0.5, 0.6-0.7, and 0.8-1.00. The frequency and proportion of the participants in each of these proficiency groups, which fall in the shown levels is shown in these tables. A chi-square test was used to assess the difference among the three proficiency groups and their level of correct production of EPs.

Results of DPs

Table 4.7 shows the proportion of the participants who produced correct DPs in each of the three proficiency groups.

The results in this table show that 62% of the participants in the Low Group, 86% in the Mid Group and 94% in the High Group could produce eighty percent or more of correct DPs. The Chi-square test results reveal a significant difference in production of DPs among the three groups (p < 0.01).

Scores	Proficiency Groups						
Proportion	Low Group		Mid Group		High Group		
of Correct	Frequency	Proportion	Frequency	Proportion	Frequency	Proportion	
0 -0.5	4	0.04	1	0.01	1	0.01	
0.6-0.7	29	0.33	10	0.11	3	0.04	
0.8-1.00	54	0.62	68	0.86	63	0.94	
Total	87	1.00	79	1.00	67	1.00	

Table 4.7. Results of DPs Production PDT in Three Proficiency Groups

P-Value< 0.01

Results of IPs

Table 4.8 shows the production of the participants who produced correct IPs in each of the three proficiency groups. The results indicate that 34% of the participants in the Low Group, 73% in the Mid Group and 79% in the High Group could produce eighty percent or more of correct English DPs (Table 4.8). The results of the Chi-square test show a significant difference among the three groups (p < 0.01).

Scores	Proficiency Groups							
Proportion	Low Group		Mid Group		High Group			
of Correct	Frequency	Proportion	Frequency	Proportion	Frequency	Proportion		
0 -0.5	25	0.28	9	0.11	4	0.05		
0.6-0.7	32	0.36	12	0.15	10	0.14		
0.8-1.00	30	0.34	58	0.73	53	0.79		
Total	87	1.00	79	1.00	67	1.00		

Table 4.8. Results of IPs Production PDT in Three Proficiency Groups

P-Value< 0.01

Results of NegPs

Analysis of the NegPs production in three proficiency groups is shown in table 4.9. The results reveal that 35% of the participants in the Low Group, 40% in the Mid Group and 41% in the High Group could produce eighty percent or more of English NegPs (Table 4.9).

The results of Chi-square test show that the proportion of correct production of NegPs among the three proficiency groups are not statistically significant from one another. It seems that grammar proficiency has no role on the correct production of NegPs. However, the obtained results could be due to low production of negative structures by the participants.

Scores	Proficiency Group						
Proportion	Low Grou	р	Mid Grou	р	High Group		
of Correct	Frequency	Proportion	Frequency	Proportion	Frequency	Proportion	
None	40	0.45	35	0.44	37	0.55	
0 -0.5	15	0.17	9	0.11	5	0.07	
0.6-0.7	1	0.01	3	0.03	1	0.01	
0.8-1.00	31	0.35	32	0.40	28	0.41	
Total	87	1.00	79	1.00	67	1.00	

Table 4.9. Results of NegPs Production PDT in Three Proficiency Groups

Results of CPs:

Regarding the production of CPs, 43% of the participants in the Low Group, 65% in the Mid Group and 73% in the High Group produced eighty percent or more of English CPs (See table 4.10).

Scores **Proficiency Groups** Low Group Proportion Mid Group **High Group** of Correct Frequency Proportion Frequency Frequency Proportion Proportion 0.22 None 34 0.39 18 9 0.13 0 - 0.512 0.13 5 0.06 11 0.16 0.6-0.7 0.03 4 0.05 0.02 3 2 0.8-1.00 38 0.43 52 0.65 **49** 0.73 Total 87 1.00 79 1.00 67 1.00

Table 4.10. Results of CPs Production PDT in Three Proficiency Groups

P-Value< 0.01

The results of Chi- square test reveal a significant difference among the three proficiency groups in production of CPs. (p < 0.01). Thus, as the level of grammatical proficiency improves, so does the ability to produce CPs.

Discussion

According to the results of GJT and PDT analysis in this study, the participants' ability to recognise and produce all four Extended Projections (DP, IP, NegP and CP) can be observed at all three levels of proficiency groups. The findings revealed that, despite the complexity of Extended Projections and the difficulty of their acquisition even the Low Group in the study had access to all four Functional Projections to some extent. This finding is supported by the 'Full Access/Full Transfer' hypothesis proposed by Shwarts and Sprous (1994, 1996). According to this hypothesis, L2 learners are fully accessed to all lexical and Functional categories relevant for constructing the mental grammar for a language from the initial state. Since the learners in the Low Group have not exposed to enough L2 input comparing with the Mid and High Group, they may use their steady- state of their mother tongue to the extend it could accommodate L2 input. Considering this view, it seems that L1 transfer and to be more specific transferring of similar Persian parameters could play a positive role in acquiring Functional Projections. This is in line with the study done by Ionin, Zubizarreta, and Maldonado (2008).

The results also point to a significant difference among the three proficiency groups' performance in correct recognition and production of English EPs. In that, the performance of the Low Group was significantly weaker than the Mid Group and, the performance of the Mid Group was significantly weaker than the High Group. The significant difference among the three proficiency groups may imply that, not all Persian parameters are similar to the English parameters with regard to the acquisition of EPs. According to Hawkins (2001), the absence of similar features and parameters in L1 may cause difficulties for learners to acquire L2 structures. Additionally, transferring of L1 properties including parameterised features could be considered as a barrier for L2 learners to interpret positive evidence they receive from target-language input (Hawkins, 2001). Considering the results of the study, it could be concluded that lack of similarity between EPs in Persian and EPs in English and the interference of differed EP features and parameters in Persian may lead to weak performance of the Low Group comparing with the mid and High Groups.

The results also reveal that, the learners' abilities in correct recognition and correct production of English EPs improved significantly as their grammatical proficiency level increased with the exception of production of NegPs. In other words, the participants in the Mid Group performed significantly better than the ones in the Low Group and those in the High Group significantly outperformed the ones in the Mid Group. According to Full Access/Full Transfer hypothesis 'learners restructure their initial state grammar on the basis of the L2 input they hear or read' (Hawkins, 2001). The significant improvement in correct recognition and production of all four EPs from the Low to the Mid and the High Group, could be in line with the assumption that the learners redesign their initial grammar or even acquire new parameter settings and feature values encountering positive L2 input. The results are compatible with the previous studies concluding that there was a rise in the correct use of Extended Projections from the lower levels of proficiency to higher levels among L2 learners (Araynik & Lotfi, 2015; Hopp, 2017; Ionin, et al. 2008; Jabbari & Pourhashemi, 2011; Khorvash & Lotfi, 2019)

It should be noted that the PDT analyses indicate that, the ability to <u>produce</u> NegPs did not improve significantly with the level of grammatical proficiency. This may indicate that learners might not have enough access to NegPs in any of the three proficiency groups. Thus, this

lack of production might have occurred due to lack of competence. According to Krashen's (1977,1981) 'Monitor Model', if learners formally study the grammar rules, they will not be able to draw on that knowledge in spontaneous communication because it has not been acquired. Having the grammatical knowledge but avoid using some structures could be the matter of acquisition. Therefore, lack of competence may have caused learners avoid using NegP structures in PDT. On the other hand, the results of recognition task (GJT) show a significant difference among the three proficiency groups in correct recognition of NegPs. Therefore, lack of knowledge may not be the reason in low production of NegPs. Like what 'Full access' theories argue, 'L2 syntactic development is not necessarily linked to surface morphosyntactic realizations. L2 learners may know more than what they produce.' (Hawkins, 2001, p. 360). Many linguists differentiate between mental knowledge of a language and the real-time use of that knowledge to understand and produce utterances. Many distractions like random thoughts or back ground noise could lead to faulty output. However, such interferences are not related to underlying knowledge that one has about that language (Hakins, 2001). Considering this view, lack of NegP production could be due to some performance reasons and not learner's lack of knowledge. As Epstain, Flynn & Martohardjono (1996) suggest, it is plausible that a learner may know the target language but uses certain structures incorrectly or never uses them for performance reasons. One possible explanation for this observation is that generally speaking, production seems to be cognitively more demanding. Negative structures for instance may not naturally occur frequently in one's daily speech even in their mother tongue (Khorvash & Lotfi, 2019). Therefore, observing low number of NegPs in PDT, could be due to the design of the production task. The PDT designed for this study aimed at eliciting an extensive range of potentially natural, unmonitored performance of the learners. Thereby, using a more guided elicitation task or an argumentative one might be more appropriate to obtain enough samples of negative structures.

It is worth noting that the participants in this study were learning English as a foreign language in classroom environment and through mostly formal, explicit instructions. Therefore, in addition to transferring of similar parameters from L1, having access to EPs from lower levels of grammatical proficiency could be the result of formal instructions implying that learners have acquired English EPs through learning. This is compatible with the studies done by Long (1983) and Ellis (1985, 1990) suggesting that learners exposed to formal instruction of an L2 syntactic properties, develop knowledge of those properties more quickly than learners exposed to those samples of the L2 in naturalistic settings. Ellis (1990:133) reviewing and incorporating a number of studies, concludes that 'it seems reasonable to assume that formal instruction is of value in promoting rapid and higher levels of acquisition'.

In addition, unlike Krashen's 'zero option' (Brown, 2014) and his hypothesis on the absence of acquisition-learning overlap, it seems that learning could lead to acquisition. The importance of instruction in acquiring a second language is also found in works by Gass & selinker, 2001; McLaughlin, 1978 and Swain, 2005 who questioned the fuzzy distinction between (unconscious) acquisition and (conscious) learning.

The results are also supported by Form-Focused Instruction (FFI) approach proposed by Long (1991) and proved to be beneficial in acquiring grammar. Recent studies have reported the effectiveness of explicit and form-focused instruction on acquiring grammatical knowledge, automaticity and fluency of language learners (Hernández, 2011; Lingli and Wannaruk, 2010; Parviz and Gorjian, 2013; Spada et al. 2014).

Conclusion

The aim of the present study was to identify the level of grammatical proficiency at which Iranian learners of English could acquire English Extended Projections (EPs). The results show that the process of acquisition starts from the low levels of grammatical proficiency. Although the learners may be able to <u>recognize</u> and <u>produce</u> all four English EPs correctly from the beginning, they seem to acquire the parameters of English Functional categories as their proficiency improves and as a result have a better performance.

Since the participants of this study were learning English as a foreign language, it seems that the role of form-focused instruction could not be ignored in the acquisition of English Functional Projections. In order to best meet the needs of language learners in acquiring Functional categories, this study suggests language instructors to consider Form-Focused Instructions and activities as a feasible alternative to be integrated into teaching practice where the communicative way of teaching grammar cannot be practical enough.

There are still many questions about the nature of L2 syntactic knowledge of Functional Projections and the difficulties faced by L2 learners in acquiring them. In addition to absence of features and parameters of L2 Functional categories or L1 interference, some researchers like Spinner and Juffs (2008) consider other factors to be influential in having difficulties in acquiring syntactic properties. They claim that insufficient lexical learning, mapping difficulty, processing pressure, and parsing errors may cause functional paradigms to be inadequately learned. Such controversies would generate further empirical research into understanding of EP acquisition and it's learning process by L2 learners.

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