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Second Language Acquisition of Telicity by Persian Learners of English

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Abstract

This study investigates L2 acquisition of telicity, in particular, how the Persian EFL learners interpret a/telic sentences comparing with English native speakers. To the mentioned aim, 70 EFL learners of English assigned to four groups of elementary, low intermediate, high intermediate and advanced as well as 10 native speakers were asked to contribute to the present study. The participants were to judge whether some telic and atelic sentences were compatible with the given contexts or not. The results revealed that Iranian EFL learners were more successful with telic structures comparing with atelic ones.

Keywords: Telicity, Count and mass noun, Morpho-syntax

1. Introduction

Aristotle is generally credited with the initial observation that there are semantic properties which differentiate some verbs from others. In the Metaphysics, he observed that the meaning of some verbs suggests the idea of a "*telos",* a result or an endpoint, in a way that the meanings of other verbs do not (Dowty 1979). This is what has come to be known as the feature of telicity. Salabakova (2000) defines a clause as telic if the situation it describes has a natural (inherent) endpoint, which has to be reached, and after which the situation cannot conceivably continue. A clause is defined as atelic if the situation it describes has no such endpoint. Here are some examples of telic and atelic sentences

(1) Fatima washed the dishes. (Telic)

(2) Fatima washed dishes. (Atelic)

As can be construed from example (1), Fatima washed all of the dishes and no dirty dish is left. This interpretation is justified since the article "the" indicates that all of the dishes are done. In example (2), however, Fatima has not necessarily washed all of the dishes; hence, it is an example of unfinished action and therefore atelic.

In the literature, different scholars have different definitions for telicity with respect to clausal syntactic structure. Filip (2005) reviewed some articles on how telicity was defined with respect to clausal syntactic structure assumed to be generated in a functional projection above the VP. She pointed out that telicity is identified with AspP (Aspect Phrase) (e.g., Travis, 1991; McClure, 1995; Ramchand, 2002), with AgrO (Agreement of Object) in (e.g., Van Hout, 1996, 2000; Borer, 1994; Ritter & Rosen, 1998; Schmitt, 1996), with AspQ (Aspect of Quantity) in Borer (2004). The examples below from Filip (2005) further clarify the term telicity.

(3) Ivan ate soup for ten minutes.

(4) Ivan ate the soup in ten minutes.

(5) Ivan ate three pears in ten minutes.

Filip (2005), reporting Van Hout (2000), states that in English, count versus mass noun morpho-syntax of the direct object is taken to be correlated with the interpretation of the VP to be either telic or atelic, i.e. the presence of article in example (4) makes it telic while the absence, as in example (3), determines atelic interpretation of the VP. Borer (2004) also includes examples like those in (5) claiming that telicity is identified with the property of 'quantity', manifested in nominal and verbal expressions. In English, it is assigned indirectly to *AspQ*by the 'quantity' direct object. In (4), 'quantity' is assigned by the definite article "the", and in (5) by the cardinal quantifier "three" (Filip, 2005).

Not only Borer (2004) but also Slabakova (2000) mentioned cardinality of DPs as a distinction. In Slabakova's words, A "DP" is of specified cardinality if its denotation can be exhaustively counted or measured. A "DP" is of unspecified cardinality if its denotation cannot be exhaustively counted or measured. Take examples in (6) and (7) from Slabakova

(2000) for further clarification.

(6) an apple, three apples, the cake Specified cardinality

(7) apples, cake Unspecified Cardinality

This means that in English, the presence of a direct object that specifies some specific quantity is necessary to derive a telic interpretation (Borer, 2005; Tenny, 1994; Ritter & Rosen, 1998; Verkuyl, 1972, 1993).

Borer (2005) elaborated on a test to distinguish atelic and telic verb phrases which is done by considering compatibility of a sentence with the adverbial phrases "in an hour" and "for an hour". Gabriel (2008) reports that telic verb phrases are generally more compatible with "in an hour", while atelic verb phrases are generally more compatible with "for an hour". The contrast between the examples in (8) and (9) shows that a bare plural direct object such as "letters" is most compatible with an atelic reading while a direct object that indicates a specific quantity such as "the letter" or "two letters" is most compatible with a telic reading. The example in (10) shows that on standard accounts, the same interpretation is said to hold when the quantified direct object includes a mass noun such as *soup* (cf. Gabriel, 2008).

(8) Jack wrote letters for hours/*in an hour (atelic).

(9) Jack *wrote two letters/wrote* the letter in an hour/*for hours (telic).

(10) Jack ate the soup in an hour/ *for hours (telic).

Dowty (1979) explains that definite NPs are associated with telic interpretations of sentences while plural indefinite NPs or mass nouns are associated with with atelic interpretation.

Acquiring telicity marking is not a trivial task for Persian learners of English since there is no explicit classroom instruction on the abstract features of Det/Num morphology or on how to compute English predicate telicity. In the previous studies on the acquisition of telicity, researchers have examined whether learners realize that the morpho-syntactic form of the direct object is important with respect to the calculation of telicity. The primary focus has been on the contrast between Germanic languages, which encode telicity in the direct object noun phrase, versus Slavic languages that do not. There have not been any studies on Persian EFL learners.

Due to the fact that the difference between telic and atelic clauses is almost never taught explicitly in language classrooms (Slabakova, 2000) and there has not been any studies on acquisition of telicity by Iranian EFL learners, this study can be a starting point for Iranian applied linguists to have a more lucid understanding of the acquisition of telicity. Telicity markers (articles and plural "s") are among the most frequent errors among Iranian learners (Falhasiri, Tavakoli, Hasiri, & Mohammadzadeh, 2011). As so, this investigation can lead to a better understanding of telicity in Iran. The participants are chosen from all levels so that the acquisition in each level can be evaluated. Examining the acquisition of the abstract semantic knowledge in the aspectual domain would provide us with a better understanding of whether the acquisition of abstract semantic interpretation of telicity is possible, and if so, how L2

learners develop the knowledge in the course of L2 acquisition.

Moreover, the finding of this study can boost our understanding of different stages of telicity acquisition and whether they are acquired at the native level. Investigation into how interlanguage develops is needed for a comprehensive understanding of the mechanism of L2 acquisition (Carroll, 1999a. b; Gregg, 1996; Klein & Martohardjono, 1999).

To address the mentioned aimes the following research questions and hypotheses were formed.

1.1 Research Questions and Hypotheses

The present study is an attempt to answer the following questions and null hypotheses:

1. Do Persian speakers acquire knowledge of telicity in English at the native level?

The research questions above, led to the following hypotheses.

H1: There is no difference between Persian EFL learners and English native speakers in their knowledge of English telicity.

2. Review of literature

Gabriel (2008) reports that in the previous studies on the acquisition of telicity, researchers have examined whether learners consider the morpho-syntactic form of the direct object as important with respect to the calculation of telicity. She further explains that the primary focus has been on the contrast between Germanic languages, which encode telicity in the direct object noun phrase, versus Slavic languages that do not; the two types of languages representing two different parametric options with respect to telicity (Borer, 2005; Slabakova, 2001). Gabriel (2008) states that in work with first language learners, Van Hout (1998) claimed that it is easier to acquire telicity in the Slavic languages where telicity is encoded via an overt aspectual marker as opposed to the Germanic languages where the morphosyntax of the direct object is important. Slabakova (2001) did a study on L2 learners and found that Slavic learners of English have difficulty recognizing the direct object as an indicator of telicity while more advanced levels perform at the level of native speakers. Gabriel (2008) took a different approach focusing on a language pair that is on the same side of the telicity parameter. In her study, she tested the proposal that the morpho-syntactic properties of English would serve as a bootstrap into the atelic-distinction. The results of the study provided modest support for this proposal and suggested that second language learners can acquire telicity but are sensitive to the form in which it is encoded. She also suggested that not only numerals and particles are explicit markers of telicity for second language learners but also is the goal prepositional phrase, for instance “she carried the bags to the car” in telic while “She carried the bags” is atelic.

Smollett (2005), apposing Gabriel, (2008) and Slabakova (2000), argued that the judgments of native speakers for verb phrases with determiners such as “ate the apple” are far too variable for determiners to be considered true delimiters in English (Gabriel, 2008). Smollett argued that deeming a sentence as having a telic or atelic interpretation depends to some

extent on world knowledge (see similar discussion in Hay, Kennedy & Levin, 1999). She pointed out that if we change the agent of the event from a human to a small insect such as an ant in (13), then the atelic reading is perfectly acceptable.

(13) The ant ate the apple in an hour/for hours.

For Smollett (2005), the only true markers of telicity in English are particles, resultative phrases and goal prepositional phrases (cf. Gabriel, 2008).

This study deals in part with how learners come to know the target language representation of telicity without having either instruction or negative evidence available to them. Since our study deals with the role of morphology in the acquisition of the semantics of telicity, in what follows, two studies review by McDonal (2009) would be briefly explained, Montrul and Slabakova (2002) and Gabriele (2007) which suggest that the acquisition of relevant morphology could be a trigger for the acquisition of the semantic property in the aspectual domain.

Montrul and Slabakova (2002) examined the acquisition of the morpho-syntactic properties and the semantics of viewpoint aspect i.e., telicity.

Firstly they addressed the issue whether English learners of Spanish can acquire the semantic distinction of Spanish Preterite and Imperfect and whether this acquisition was related to their morphology. To this aim, Two tasks were devised, a morphological task which examined whether participants could distinguish Preterite and Imperfect tense in a passage and a sentence conjunction judgment task to examine the semantics of the Preterite and Imperfect tenses. The individual results showed that advanced and intermediate learners who had above 80% of accuracy with the morphological test seemed to have acquired the semantics of the Preterite and Imperfect in Spanish. On the other hand, intermediate learners who had less than 80% of accuracy in the morphological test appeared not to be sensitive to the semantic contrast of Preterite and Imperfect. Based on these results, Montrul and Slabakova (2002) concluded that knowledge of morphology precedes knowledge of semantics in Preterite and Imperfect aspectual domain.

Gabriele (2007), examining Japanese learners of English, investigated the relationship between the semantics and the relevant morphology, particularly, how the learners understand aspectual properties of a sentence with bare nouns in Japanese, in other words the connection between morphosyntax and semantics in the aspectual domain. Participants examined pictures and listened to a story in Japanese. For each story, there were two versions of endings, a telic and an atelic, each of which was followed by a target sentence and the participants were to judge if the target sentence was compatible with the story on a scale of 1-5 (5 being the most compatible with the story). The results suggests that English learners of Japanese are learning the function of the silent null morpheme in Japanese and how to interpret the telicity of a sentence with a bare count noun-like in Japanese. These two studies reveal that the acquisition of the relevant morphology could be a trigger for the acquisition of the semantics of telicity (Both of these studies are cited from McDonald 2007).

3. Methodology

3.1 Participants

The population from which the participants were selected included the students of Iran Language Institute (Isfahan branch) who had enrolled in English classes in the winter semester in 2011. The ILI courses are composed of 18 levels which are made of six main levels i.e. basic, elementary, pre-intermediate, intermediate, upper intermediate, and advanced. There are three sub levels in each one of the main proficiency levels which make a total of 18 levels. Levels, 6, 12, 18 i.e. Elementary 3, Intermediate 3, and advanced 3 respectively were chosen for the placement test. The rationale behind choosing elementary 3 as the initial level for the prospective participants was a pilot study and the OPT (Oxford Placement Test) which was administered a month before the study. Participants were told that the results of the study are for educational purposes and were asked to write their names so that they would take the tasks seriously. The task was taken in the presence of the researcher and the class teacher. Participants were both male and female whose ages ranged from 15 to 25. Even though the students were studying in the levels titled elementary, intermediate, and advanced, to confirm the homogeneity of each member of a group and to determine the proficiency level, an OPT (Oxford Placement Test) had been administered before the study was carried out. Out of a 97 student population, 82 were chosen for the study and this number was later narrowed down to 64, by excluding the ones who completed the tasks carelessly or not completely. 4 students were also excluded because the researcher intended to have 20 participants for each group. The careless test takers were identified by insertion of a repeated item or the ones who had not answered the tasks completely.

Having administered the OPT, the researcher divided the participant into three proficiency groups: elementary (N=20) those who scored (18-29), lower intermediate (N=20) OPT scores of (30-39), upper intermediate (N=20) OPT range scores of (40-47) and advanced (N=10) within 55-60.The advanced learners were English language teachers who held Master's degree in TEFL. All of the students in each class took the tasks regardless of the OPT results; nevertheless, papers of heterogeneous ones were discarded and not included in the study.

Ten native English speakers living in London, aged between 21-30, working at Accura Partners LLP, and who held a Bachelor Degree were also asked to participate in this study. A total of 80 participants took part in this study.

3.2 Material

3.2.1 The English Compatibility Judgment Task for Telicity

In this task, the participants were asked to determine whether the sentence following a story like situation was compatible with it or not. The compatibility task included five types of simple past sentences in telic and atelic contexts in which the nouns were different with regards to definiteness and number. In each one of these five categories, namely; a/telic situations with defined count nouns, with count bare singular nouns, with count bare plural nouns, with defined mass nouns and with mass bare noun. There were three examples, which make a total of 30 items. 11 fillers were also added to distract the participants' attention from

the content they were being evaluated on. For further clarification, an example of each category is provided below:

First, telic situations with defined count nouns for example "the dishes": As can be seen below, the students were provided with a telic story (the action is terminated) beneath which is a sentence including a defined plural noun which is compatible with the story in view of the fact that defined article nouns mark telic action. If the sentence following the story sounded logical, they were to mark (√), if not, they marked (*) and were asked to modify the sentence in a way that it would be compatible with the story.

David had a plate of salad and a plate of spaghetti with a glass of soda. After he finished, he washed them all and put them in the cupboard. There aren't any dirty dishes left.

(1) David washed the dishes after dinner. √ *

Second, count bare singular nouns like "T shirt" with telic situation:

Sheldon's wife had decided on 3 T-shirts. Last Sunday, Sheldon went to the department store and bought 2 of them for $ 20. On Monday, he bought the other one.

(2) Sheldon bought T-shirt for his wife. √ *

Third, count bare plural nouns like "episodes" with telic situation:

The program had 12 episodes. Sheri watched all of them on the weekend. There aren't any episodes left.

(3) Sheri watched episodes of the program. √ *

Forth, defined mass nouns "the money" with telic situation:

My mother sent me $2000. She had put it in three envelopes. I donated all of it to the charity.

(4) I donated the money. √ *

Fifth, mass bare noun "fruit" with telic situation:

Ali's mom put an apple, an orange and a banana in his lunch box. He ate them all during the break.

(5) Ali ate fruit. √ *

In each category there were 3 different examples and as a result fifteen telic contexts.

Atelic situations, as in telic ones, include five categories:

First: count bare plural nouns for example "dishes" with atelic situation:

My uncle had two plates of pasta with a glass of soda. After he was done eating, he washed one of the plates and the glass, but before doing the other plate; he left to answer the phone.

(6) He washed dishes after dinner. √ *

Second, count bare singular nouns like "car"

The mechanic had 10 cars to fix before 6 p.m. yesterday. He fixed 9 cars but he left early and couldn't fix the other one.

(7) The mechanic fixed car. √ *

Third, defined count nouns like "the CDs"

Sara ordered three CD's. Last Sunday, they delivered two of them but the other one was lost.

(8) Sara received the CD's. √ *

Forth, mass bare nouns like "homework"

For homework, Angelica had to do exercises 2, 4, 6 and 8. She did two of the exercises but then she fell asleep and couldn't finish her homework.

(9) Angelica did homework. √ *

Fifth, defined mass nouns for example "the fruit"

Dan's mom put a tangerine, a peach and a banana in his lunch box. He ate the banana and the apple but he couldn't eat the orange. He took it back home.

(10) Dan ate the fruit in his box. √ *

There were three questions in each category mentioned above which makes fifteen examples of atelic situations altogether. Eleven fillers were also added to distract the participants' attention, sentences 2, 10, 12, 14, 20, 23, 27, 30, 34 and 38. Sentence 1 is repeated in number 35 to identify the participants who filled out the task carelessly. As can be seen from the examples above, the participants were asked to mark (√) if they felt that the sentence following the story was compatible with it and mark (*) if they felt it was not compatible. In case they considered it incompatible, they were asked to modify the sentence to make it compatible.

3.3 Procedure

The data were collected over two months at the ILI, girls and boys adult department, during winter semester 2011. The English telicity task took almost 40 minutes which included 5 minutes of explanation and reading out the examples and 35 minutes for the actual task which left an average of almost 42 seconds for each item. The researcher read each one of the items and paused for students to answer and proceeded to the end of the tasks. An average of 15 seconds was needed to read out each of the items of the compatibility task. Then students had at least 20 seconds time to mark the sentence as acceptable or not. The researcher tried to take less time on fillers so that students could have more time on items in which they needed to modify a part of the sentence to make it acceptable. The participants were told that they were not allowed to look back through the pamphlet of the questions to change their answers or to make sure if they got it correctly. In each page of the pamphlet there was one question. The questions were typed on a sheet of paper and then cut into pieces so that each page included only one item to avoid test effect.

4. Results

All of the tasks were graded by the researcher and an assistant. Each item was either grated as correct that is 1 and incorrect i.e. 0.

To address the research questions, SPSS (Statistical Package for Social Sciences) Version 16.0 was used to perform all the statistical analyses in this study.

A number of statistical analyses were conducted; firstly, the mean score of each level in each task was calculated. Then, the ANOVA was run on each dependent variable to see whether there were any statistically significant differences across the groups. Lastly, the Pos hoc scheffe was carried out to locate the between groups differences.

4.1 The English Compatibility Judgment Task for Telicity

The research question addresses the acquisition of telicity by Persian learners of English. English compatibility judgment task was devised for the purpose of measuring acquisition of telicity. Telic and atelic situations were composed of thirty different sentences, fifteen each, assessing five categories (A/Telic situations with defined count nouns, count bare singular nouns, count bare plural nouns, defined mass nouns and mass bare noun). The mean responses of telic and atelic context of all proficiency groups are presented in figure 1.

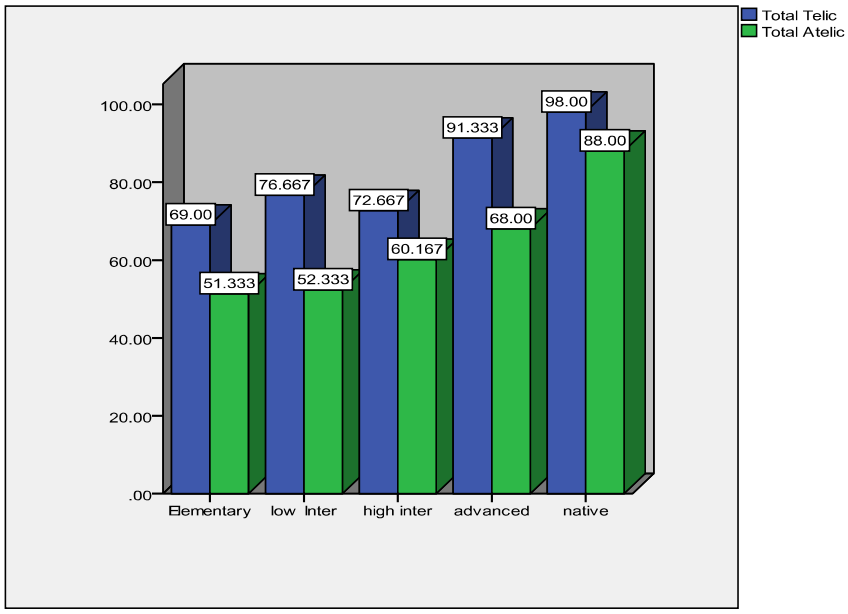

Figure 1. Total mean scores of telic and atelic situations

As can be seen in figure 1, the participants in all groups performed better on telic structures comparing with the atelic ones. The performances on atelic structures witnessed a gradual increase from elementary to advanced participants. Telic structures also witnessed a steady increase and all groups' performances on telic sentences were better than that of the atelic one's. Likewise, native speakers performed better on telic structures than atelic ones with a total difference of ten percent. The results on telic situations for elementary group show the mean score of 69 percent and for the advanced group, 91.33 percent. Atelic results however,

show a different picture, it starts with the mean score of 51.33 for the elementary group and 88 percent for the advanced ones.

The mean scores of all EFL learners' performance on all telic and atelic categories are presented in Table 1, below:

Table 1. Descriptive statistics for telic and atelic situations

	N	Minimum	Maximum	Mean	Std. Deviation
Total Telic	70	46.67	100.00	75.4286	13.78664
Total Atelic	70	26.67	100.00	56.5238	12.88417
Valid N (listwise)	70				

An ANOVA was run to see if the differences in performances of the different levels are significant, the results of which are presented in Table 2.

Table 2. The results of the ANOVA for telic and atelic situations

		Sum of Squares	df	Mean Square	F	Sig.
Telic	Between Groups	7997.222	4	1999.306	15.092	.000
	Within Groups	9935.556	75	132.474		
	Total	17932.778	79			
Atelic	Between Groups	11141.528	4	2785.382	21.013	.000
	Within Groups	9941.667	75	132.556		
	Total	21083.194	79			

According to Table 2, the performances were significantly different, (F = 15.092, p < .001) for telic and (F = 21.013, p < .001) for atelic. To find the exact areas of differences, a post hoc was run, the result of which is presented in Table 3 for telic and Table 4 for atelic situations.

Referring to Table 3, one can see the exact location of differences between the different groups in telic contexts. The scheffe result indicated that for telic items, there is a significant difference between native and advanced group with the other three groups i.e. elementary, low and high intermediate in telic context. There is not a significant difference between native and advanced students, though. It shows that only advanced participants have acquired the telic markers to the native levels.

Table 3. Scheffe post hoc results for telic situations

(I) Level	(J) Level	Mean Difference (I-J)	Std. Error	Sig.
Elementary	low Inter	-7.66667	3.63970	.359
	high inter	-3.66667	3.63970	.907
	advanced	-22.33333*	4.45770	.000
	native	-29.00000*	4.45770	.000
Low Inter	elementary	7.66667	3.63970	.359
	high inter	4.00000	3.63970	.876
	advanced	-14.66667*	4.45770	.037
	native	-21.33333*	4.45770	.000
High inter	elementary	3.66667	3.63970	.907
	low Inter	-4.00000	3.63970	.876
	advanced	-18.66667*	4.45770	.003
	native	-25.33333*	4.45770	.000
Advanced	elementary	22.33333*	4.45770	.000
	low Inter	14.66667*	4.45770	.037
	high inter	18.66667*	4.45770	.003
	native	-6.66667	5.14731	.794
Native	elementary	29.00000*	4.45770	.000
	low Inter	21.33333*	4.45770	.000
	high inter	25.33333*	4.45770	.000
	advanced	6.66667	5.14731	.794
*. The mean difference is significant at the 0.05 level.				

Table 4 presents the result of the scheffe for atelic situations.

Table 4. Scheffe post hoc results for atelic situations

(I) Level	(J) Level	Mean Difference (I-J)	Std. Error	Sig.
Elementary	low Inter	-1.00000	3.64082	.999
	high inter	-8.83333	3.64082	.219
	advanced	-16.66667*	4.45907	.011
	native	-36.66667*	4.45907	.000
Low inter	elementary	1.00000	3.64082	.999
	high inter	-7.83333	3.64082	.337
	advanced	-15.66667*	4.45907	.021
	native	-35.66667*	4.45907	.000
High inter	elementary	8.83333	3.64082	.219
	low Inter	7.83333	3.64082	.337
	advanced	-7.83333	4.45907	.547
	native	-27.83333*	4.45907	.000
Advanced	elementary	16.66667*	4.45907	.011
	low Inter	15.66667*	4.45907	.021
	high inter	7.83333	4.45907	.547
	native	-20.00000*	5.14889	.008
Native	elementary	36.66667*	4.45907	.000
	low Inter	35.66667*	4.45907	.000
	high inter	27.83333*	4.45907	.000
	advanced	20.00000*	5.14889	.008

The results for atelic situations indicate that native speakers' results were significantly different comparing with all of the groups, advanced included, and advanced levels performed significantly different from only two groups; elementary and low intermediate. Accordingly, it can be construed that Persian learners of English acquire telic structure better

than atelic ones. More precisely, learners can learn telic structures to the native level but not the atelic ones.

4.1.1 Results of the Ungrammatical Categories in Compatibility Judgment Task of English Telicity

For further clarification, an ANOVA was run between the categories which were ungrammatical and the participants were to mark them as erroneous and modify the sentences to make them sound correct. Table 5 presents the results:

Table 5. ANOVA result for ungrammatical categories in compatibility judgment task of English telicity

		Sum of Squares	df	Mean Square	F	Sig.
Telic count bare singular	Between Groups	76611.111	4	19152.778	23.919	.000
	Within Groups	60055.556	75	800.741		
	Total	136666.667	79			
Atelic count bare singular	Between Groups	43597.222	4	10899.306	9.816	.000
	Within Groups	83277.778	75	1110.370		
	Total	126875.000	79			
Atelic defined mass	Between Groups	32875.383	4	8218.846	9.582	.000
	Within Groups	64333.556	75	857.781		
	Total	97208.939	79			
atelic defined count plural	Between Groups	8277.778	4	2069.444	5.521	.001
	Within Groups	28111.111	75	374.815		
	Total	36388.889	79			

As shown in Table 5, the results for all four categories are significant and are as follow: telic count bare singular ($F = 23.919$, $p < .001$), atelic count bare singular ($F = 9.816$, $p < .001$),

atelic defined mass ($F = 9.582$, $p < .001$) atelic defined count plural ($F=5.521$, $p < .001$).

To locate the differences, post hoc was run in Table 6.

Table 6. Pos hoc results of telic count bare singular nouns in compatibility judgment task

(I) Level	(J) Level	Mean Difference (I-J)	Std. Error	Sig.
Elementary	low Inter	-3.33333	8.94841	.998
	high inter	1.66667	8.94841	1.000
	advanced	-66.66667*	10.95952	.000
	native	-76.66667*	10.95952	.000
Low Inter	elementary	3.33333	8.94841	.998
	high inter	5.00000	8.94841	.989
	advanced	-63.33333*	10.95952	.000
	native	-73.33333*	10.95952	.000
High inter	elementary	-1.66667	8.94841	1.000
	low Inter	-5.00000	8.94841	.989
	advanced	-68.33333*	10.95952	.000
	native	-78.33333*	10.95952	.000
Advanced	elementary	66.66667*	10.95952	.000
	low Inter	63.33333*	10.95952	.000
	high inter	68.33333*	10.95952	.000
	native	-10.00000	12.65497	.960
Native	elementary	76.66667*	10.95952	.000
	low Inter	73.33333*	10.95952	.000
	high inter	78.33333*	10.95952	.000
	advanced	10.00000	12.65497	.960

As Table 6 shows, regarding telic context with count bare singular the advanced participants performed significantly better than elementary, low intermediate and high intermediate,

showing that Persian EFL learners do not acquire the incompatibility of the use of count bare singular noun with telic context until the advanced levels because the advanced participants' performance was not significantly different from that of the native speakers.

Table 7 presents cross group differences regarding performance on compatibility judgment task of atelic context with count bare singular.

Table 7. Pos hoc results of atelic count bare singular nouns in compatibility judgment task

(I) Level	(J) Level	Mean Difference (I-J)	Std. Error	Sig.
	low inter	-11.66667	10.53741	.873
	high inter	.00000	10.53741	1.000
	advanced	-56.66667*	12.90564	.002
	Native	-56.66667*	12.90564	.002
low Inter	Elementary	11.66667	10.53741	.873
	high inter	11.66667	10.53741	.873
	advanced	-45.00000*	12.90564	.022
	Native	-45.00000*	12.90564	.022
high inter	Elementary	.00000	10.53741	1.000
	low Inter	-11.66667	10.53741	.873
	advanced	-56.66667*	12.90564	.002
	Native	-56.66667*	12.90564	.002
Advanced	Elementary	56.66667*	12.90564	.002
	low Inter	45.00000*	12.90564	.022
	high inter	56.66667*	12.90564	.002
	Native	.00000	14.90215	1.000
Native	Elementary	56.66667*	12.90564	.002
	low Inter	45.00000*	12.90564	.022
	high inter	56.66667*	12.90564	.002
	advanced	.00000	14.90215	1.000

Post hoc results reveal the same result as those of telic context with bare singular count nouns i.e., advanced participants performed significantly better than elementary, low intermediate, and high intermediate participants. Advanced participants' performance, on the other hand, was not significantly different from that of the native speakers, proving that advanced learners acquired this category to native level.

Table 8 demonstrates the differences among all groups with regard to performances on atelic contexts with defined mass.

Table 8. Pos hoc results of atelic defined mass nouns in compatibility judgment task

(I) Level	(J) Level	Mean Difference (I-J)	Std. Error	Sig.
Elementary	low Inter	-26.66700	9.26165	.093
	high inter	-36.66700*	9.26165	.006
	advanced	-36.66700*	11.34315	.042
	Native	-66.66700*	11.34315	.000
Low Inter	elementary	26.66700	9.26165	.093
	high inter	-10.00000	9.26165	.883
	advanced	-10.00000	11.34315	.941
	Native	-40.00000*	11.34315	.020
High inter	elementary	36.66700*	9.26165	.006
	low Inter	10.00000	9.26165	.883
	advanced	.00000	11.34315	1.000
	Native	-30.00000	11.34315	.148
Advanced	elementary	36.66700*	11.34315	.042
	low Inter	10.00000	11.34315	.941
	high inter	.00000	11.34315	1.000
	Native	-30.00000	13.09794	.273
Native	elementary	66.66700*	11.34315	.000
	low Inter	40.00000*	11.34315	.020
	high inter	30.00000	11.34315	.148
	advanced	30.00000	13.09794	.273

As Table 8 shows, regarding atelic context with defined mass nouns, the native speakers' performance was significantly better than only elementary and low intermediate, not high intermediate and advanced participants, supporting that Persian EFL learners acquire this usage from high intermediate level.

Table 9. Pos hoc results of atelic defined count plural in compatibility judgment task

(I) Level	(J) Level	Mean Difference (I-J)	Std. Error	Sig.
Elementary	low Inter	-16.66667	6.12221	.128
	high inter	-18.33333	6.12221	.072
	advanced	-28.33333*	7.49815	.010
	Native	-28.33333*	7.49815	.010
Low Inter	Elementary	16.66667	6.12221	.128
	high inter	-1.66667	6.12221	.999
	advanced	-11.66667	7.49815	.660
	Native	-11.66667	7.49815	.660
High inter	Elementary	18.33333	6.12221	.072
	low Inter	1.66667	6.12221	.999
	advanced	-10.00000	7.49815	.776
	Native	-10.00000	7.49815	.776
Advanced	Elementary	28.33333*	7.49815	.010
	low Inter	11.66667	7.49815	.660
	high inter	10.00000	7.49815	.776
	Native	.00000	8.65812	1.000
Native	Elementary	28.33333*	7.49815	.010
	low Inter	11.66667	7.49815	.660
	high inter	10.00000	7.49815	.776
	advanced	.00000	8.65812	1.000

Post hoc results in Table 9 presents data on atelic context with defined count plural. As shown, the native speakers' performance was significantly better than all but elementary group, supporting that Persian EFL learners acquire that defined count plural is not compatible with

a telic context from low intermediate level.

4.1.2 Results of Grammatical Categories of Compatibility Judgment Task of English telicity

As mentioned, there were ten categories for telic and atelic situations. Having analyzed the mean scores of all graph, we found that two categories were revealing that the lower levels outperformed the advanced ones, which are, atelic with mass noun and telic count bare plural. Running post hoc, no significant difference was observed between the groups in both categories. Figure 2, below provides more information on how the means were different cross groups.

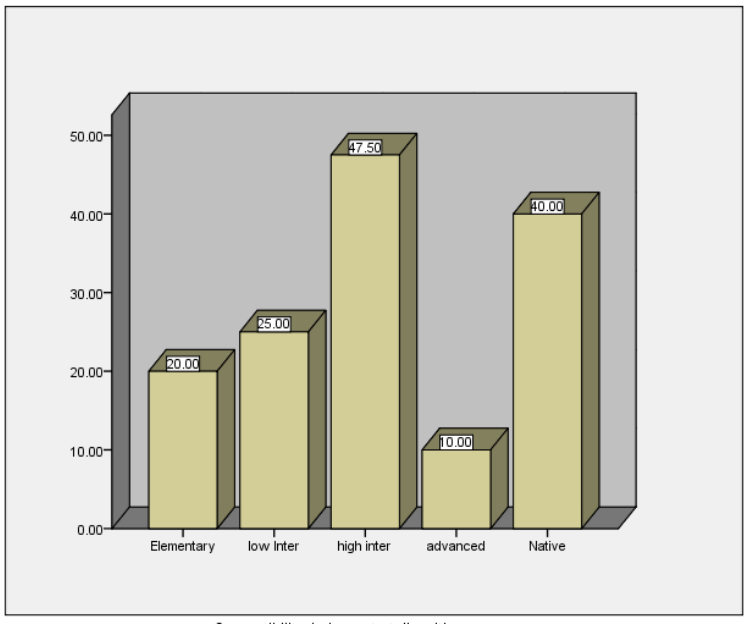

Figure 2. Mean scores of atelic with mass nouns

As can be seen in Figure 2, advanced students did not accept the bare mass nouns compatible with the atelic situations. The tentative reasons will be discussed in the discussion section in Chapter Five.

The mean scores of all groups performance on telic context with bare plural nouns is presented in Figure 3.

Figure 3 also shows that advanced participants deemed bare plurals as unacceptable with telic situations. They required the use of defined article “the” in order for the sentences to sound acceptable which is a proof on the fact that they consider “the” as a determiner of telicity.

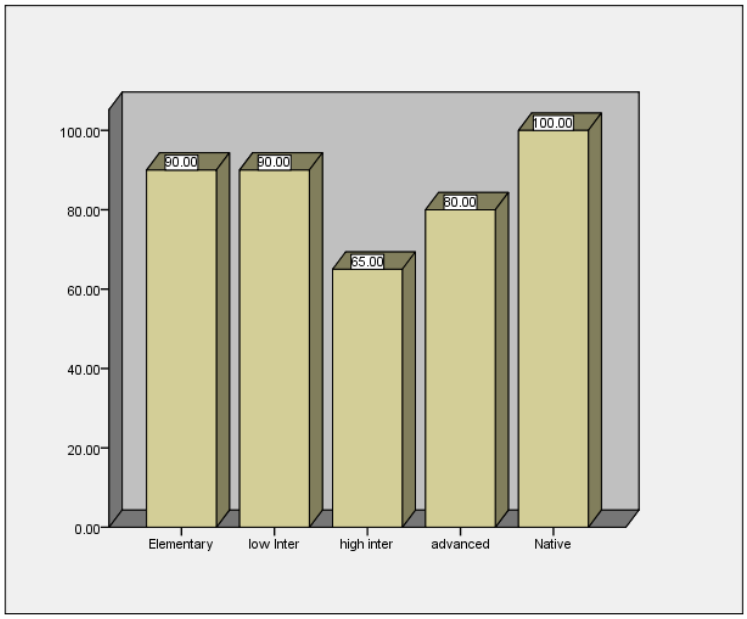

Figure 3. Mean scores of telic with bare plurals

Figure 4 summarizes the mean responses of participants of all levels on all of the five categories of telic. As can be seen, except for the categories mentioned above, almost all the other categories show a gradual improvement from elementary to advanced participants.

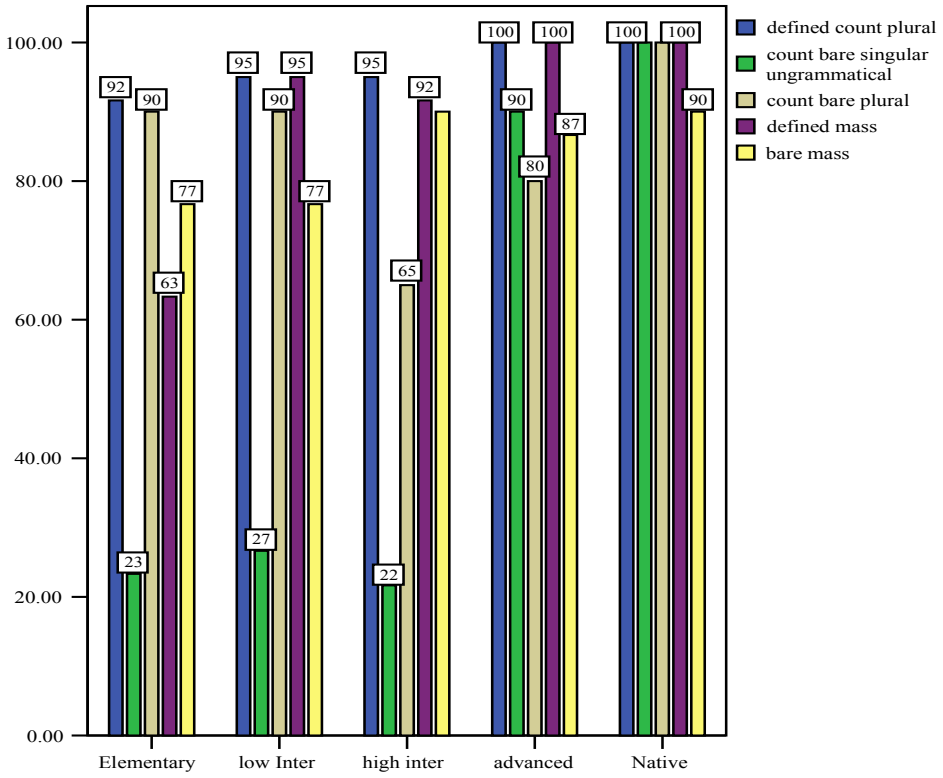

Figure 4. Mean scores of all telic contexts of all levels

Figure 5, summarizes the mean responses of participants of all levels on all of the five categories of atelic situations.

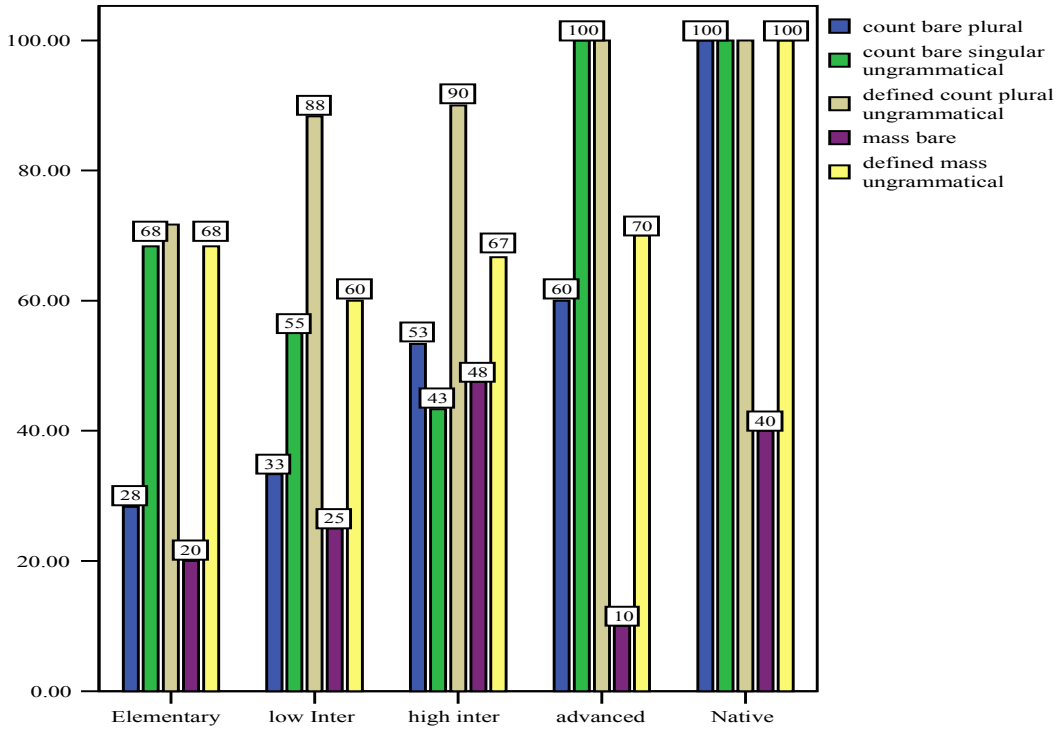

Figure 5. Mean scores of all atelic contexts of all levels

In order to check if the differences shown in Figure 5 were significant, an ANOVA was conducted. Table 10 presents the results of this analysis. Since the ungrammatical categories were discussed, in this part we only deal with the other categories. As shown, the performance of the participants on telic contexts with defined mass nouns was statistically significant ($F = 13.666$, $p < .001$).

Table 10. ANOVA results for all telic categories

		Sum of Squares	df	Mean Square	F	Sig.
Defined count plural	Between Groups	708.333	4	177.083	1.102	.362
	Within Groups	12055.556	75	160.741		
	Total	12763.889	79			
Count bare singular ungrammatical	Between Groups	76611.111	4	19152.778	23.919	.000
	Within Groups	60055.556	75	800.741		
	Total	136666.667	79			
Count bare plural	Between Groups	11375.000	4	2843.750	3.011	.023
	Within Groups	70833.333	75	944.444		
	Total	82208.333	79			
Mass bare	Between Groups	3208.333	4	802.083	1.200	.318
	Within Groups	50111.111	75	668.148		
	Total	53319.444	79			
Defined mass	Between Groups	16277.778	4	4069.444	13.666	.000
	Within Groups	22333.333	75	297.778		
	Total	38611.111	79			

In order to find the levels which performed differently in the significant category shown in Table 10, post hoc was run (see Tables 11).

As can be seen in Table 11, there is significant difference between elementary and other levels, namely, low intermediate, high intermediate, advanced and native speakers, indicating that only elementary learners have difficulties with this category.

Table 11. Post hoc results for telic defined mass

(I) Level	(J) Level	Mean Difference (I-J)	Std. Error	Sig.
Elementary	low Inter	-31.66667*	5.45690	.000
	high inter	-28.33333*	5.45690	.000
	Advanced	-36.66667*	6.68331	.000
	Native	-36.66667*	6.68331	.000
Low Inter	Elementary	31.66667*	5.45690	.000
	high inter	3.33333	5.45690	.984
	Advanced	-5.00000	6.68331	.967
	Native	-5.00000	6.68331	.967
High inter	Elementary	28.33333*	5.45690	.000
	low Inter	-3.33333	5.45690	.984
	advanced	-8.33333	6.68331	.816
	Native	-8.33333	6.68331	.816
Advanced	Elementary	36.66667*	6.68331	.000
	low Inter	5.00000	6.68331	.967
	high inter	8.33333	6.68331	.816
	Native	.00000	7.71722	1.000
Native	Elementary	36.66667*	6.68331	.000
	low Inter	5.00000	6.68331	.967
	high inter	8.33333	6.68331	.816
	advanced	.00000	7.71722	1.000

As an ANOVA was run among all telic categories, it was also performed for all of the five categories of atelic contexts. As can be seen in Table 12, the only significant category which was not discussed in the ungrammatical category section is atelic context with count bare plural ($F = 8.153$, $p < .001$).

Table 12. ANOVA results for all atelic categories

		Sum of Squares	df	Mean Square	F	Sig.
Count bare plural	Between Groups	41041.667	4	10260.417	8.153	.000
	Within Groups	94388.889	75	1258.519		
	Total	135430.556	79			
Count bare singular ungrammatical	Between Groups	35888.889	4	8972.222	8.689	.000
	Within Groups	77444.444	75	1032.593		
	Total	113333.333	79			
Defined mass ungrammatical	Between Groups	11277.778	4	2819.444	3.880	.006
	Within Groups	54500.000	75	726.667		
	Total	65777.778	79			
Mass bare	Between Groups	13593.750	4	3398.438	2.687	.038
	Within Groups	94875.000	75	1265.000		
	Total	108468.750	79			
Defined count plural ungrammatical	Between Groups	8277.778	4	2069.444	5.521	.001
	Within Groups	28111.111	75	374.815		
	Total	36388.889	79			

To see how each group performed on atelic context with count bare plural comparing with others, post hoc was run (see Table 13). The only group which had a similar performance to native speakers was advanced.

According to the above analysis, hypothesis 1 is confirmed in telic defined count plural (all proficiency levels), telic count bare plural (all proficiency levels), telic mass bare (all proficiency levels), atelic mass bare (all proficiency levels), telic defined mass (except elementary), atelic defined count plural (except elementary), atelic defined mass (high intermediate and advanced), telic count bare singular (advanced), atelic count bare plural (advanced), atelic count bare singular (advanced).

Table 13. Post hoc results for atelic count bare plural

(I) Level	(J) Level	Mean Difference (I-J)	Std. Error	Sig.
Elementary	low Inter	-5.00000	11.21837	.995
	high inter	-25.00000	11.21837	.301
	advanced	-31.66667	13.73964	.267
	native	-71.66667*	13.73964	.000
Low Inter	Elementary	5.00000	11.21837	.995
	high inter	-20.00000	11.21837	.532
	advanced	-26.66667	13.73964	.445
	native	-66.66667*	13.73964	.000
High inter	Elementary	25.00000	11.21837	.301
	low Inter	20.00000	11.21837	.532
	advanced	-6.66667	13.73964	.993
	native	-46.66667*	13.73964	.028
Advanced	Elementary	31.66667	13.73964	.267
	low Inter	26.66667	13.73964	.445
	high inter	6.66667	13.73964	.993
	native	-40.00000	15.86517	.186
Native	Elementary	71.66667*	13.73964	.000
	low Inter	66.66667*	13.73964	.000
	high inter	46.66667*	13.73964	.028
	advanced	40.00000	15.86517	.186

5. Discussion

The research question was whether Iranian learners of English can acquire telicity at the native level. The results revealed that there was not a significant difference between native speakers and advanced learners in telic contexts while in atelic situations there was. For both contexts, it can be claimed that acquisition had occurred because there was a significant

difference between the elementary and advanced learners; nevertheless, in telic contexts, there was not a significant difference between native speakers and advanced learners, indicating that the learners had acquired only telic, not atelic category to the level of native speakers.

In atelic contexts with count bare plural nouns, the majority of learners of all levels (except for advanced) considered it as ungrammatical. Native speakers, however, considered it as acceptable, some of whom pointed out that an adverb of quantity such as "some" could make it more accurate, though. An explanation can be sought in learners L1 since bare singular is compatible with atelic and telic contexts, bare plural, however, is not considered as compatible with atelic usage. The most compatible noun for the learners could have been either the use of the noun with a quantifier such as some or bare singular, since the task only included bare plural without a quantifier and bare singular, they marked bare singular as compatible despite the fact that it is not correct in English and bare plural as incompatible while it is grammatically correct in English. In telic context they accepted defined plural count noun compatible with telic context very accurately because they accept it in Persian, too. Nevertheless, once again because of L1 influence, except for advanced learners, all the other groups marked bare singular noun as acceptable with telic context, which is incorrect in English. Gabriel (2007) tested the claim that the morpho-syntactic properties of English would serve as a bootstrap into the atelic-distinction. The results of her study showed partial support suggesting that second language learners can acquire telicity but are sensitive to the form in which it is encoded. The findings of the present study is in line with those of Gabriel (2007), what is different, however, is the fact that she did not consider the L1 influence in a/telic distinction. As the results of this study suggest the learners are resorting to their L1 to judge the sentences not the morph-syntactic properties of English.

Gabriel (2007) found that while verb phrases such as *wrote the letters* were interpreted as telic by the majority of native speakers and by the advanced learners of English, verb phrases such as *drank the juice* were generally treated as ambiguous, with both telic and atelic interpretations available for all participants. She stated that the issues related to the encoding of telicity are clearly complex and we need to refine our understanding of what can serve as a delimiter in the native grammar in order to clearly understand the developmental patterns of language learners. The results of this study, however, revealed that neither native speakers nor EFL learners had problems interpreting defined count and mass nouns with telic context. In fact, native speakers performed 100 percent accurately on these two categories. Gabriel (2007) argued that results for the sentences with bare mass nouns such as *juice* shows that both learners and native speakers performed accurately; giving equivalent scores to both telic and atelic contexts and that there was not a significant effect for context. Results for the bare plural count nouns such as *letters* revealed that there was a significant effect for context. All groups managed to generally give target-like responses on both contexts, as did the participants of this study. Results for the determiners with mass nouns such as *the juice* showed that there was not a significant effect for context. The learners follow the same patterns as native speakers and accept *John drank the juice* equally with both the telic and atelic contexts. An analysis of individual results showed that 14 out of 26 native speakers

accepted *John drank the juice* with the atelic context. An analysis of individual results showed that 9 out of 26 native speakers accepted *wrote the letters* on the atelic context. Therefore, there is a mass/count difference with respect to the judgments for native speakers. She claimed that it is harder to draw conclusions for the learners. It is unclear whether the Intermediate group encodes telicity because they treat the sentences with bare noun and plurals similarly to how they treat the sentences with determiners. The advanced group on the other hand generally follows the patterns of the native speakers. Like native speakers they treated the determiners + mass nouns differently from the determiners + count nouns, accepting the determiners + count nouns less on the atelic contexts. The results of the present study were different, since the native speakers rejected the use of both defined count plural and mass nouns with atelic context. Not only the native speakers, but also the advanced learners rejected this usage (Figure 4.5). The differences between the results on the present study with those of Gabriel (2007) might be due to the task where were devised.

6. Conclusions

Based on the results reported, several conclusions were drawn.

Firstly, results suggest that Persian learners of English recognize markers of telicity in telic context and in almost all proficiency levels, they perform accurately; however, with regards to atelic context, they cannot perform that accurately. Moreover, in atelic context, the difference between native speakers and advanced participants is significant, indicating the fact that the learners have not mastered them at the native speakers' level, whereas, in telic context the difference between these two groups is marginal, meaning that the learners have acquired them and are at the native speakers' level, a result the reason for which can be sought in learners L1.

7. Pedagogical Implications

It is hoped that the findings of the present study will encourage EFL teachers to pay closer and more consummate attention to the concepts of telicity and lexical aspect. Taking the differences of telicity markers in English and Persian, the teachers are expected to put more emphasis and try to teach them cross linguistically by taking the differences into account. Such an approach can be achieved through explicit teaching of the differences which exists between the two languages, because as the results showed, even the high intermediate levels had problems producing them correctly which is an indication of the fact that sheer exposure does not suffice in this regard.

Although teaching telicity markers might seem trivial and subtle to teachers, it seems that they should integrate it because the percentage of the participants using them correctly in some categories was even less than 50 percents in all groups.

8. Limitations of the Study

This study faced a number of limitations which will be discussed briefly in the following lines.

Firstly, we did not have access to a sufficient number of native speakers of English. Having

sought many native speakers cooperation, no more than 10 native speakers completed the tasks which are not enough for a comprehensive conclusion to be drawn. The researcher tried to give explicit instructions along with examples as how to complete the tasks so that the data could be reliable; however, the task was taken not in the presence of the researcher, so they might have undertaken a different procedure in fulfilling the tasks.

Secondly, to count for the problem of careless answering, the researcher conducted two measures. First, one of the questions in the tasks was exactly repeated after some items to detect the careless and unwilling participants. Another thing was to ask participant to correct the parts that they had marked as incorrect. The papers which had a problem in any of these two aspects were drop out of the study. Despite these measures, some errors might have crawled because the participants might have answered some of them carelessly.

The third issue is the matter of learning or test effect that might have occurred. Because of the number of questions and since each aspect was tested with three examples, the participants might have gotten cognizant of the issue tested and changed their answers after recognizing one of the items. To counter this problem, each question was in one page of a pamphlet and the participants were not allowed to change their answers once they moved to next page or to go through the previous pages. If the researcher had access to OHP, the results might have been more accurate.

Fourthly, the number of participants in advanced level was not enough, that is because of the fact that the advanced participants were chosen among a population who were graduate students of English and had scored 50 and above on OPT, as so, no more than 10 participants were qualified for this study.

Fifthly, we did not have access to corpus to devise the tasks which could have made the task more natural and authentic. Besides, since there have not been any studies on telicity in Persian, there were not any tasks or tests available.

9. Suggestions for Further Research

Having conducted this study in the area of telicity and aspect acquisition, the researcher discovered some potential avenues for further research:

1. The present study focused on number as a determiner of telicity, other determiners mentioned by fillip (2005) and Gabriel (2007) can be sought for further research.

2. Increasing the numbers of native speakers and choosing from educated and less educated people both in England and America or other English speaking countries can help the researchers draw a comprehensive conclusion. A corpus study can be of value if a large number of verbs from the same categories are examined.

3. Large scale study on atelic determiners is needed because of mixed results and the fact that even not all native speakers concede on its determiners.

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