



Acquisition of Different Kinds of Resultatives by Persian EFL Learners: Syntax-Semantics Interface



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ABSTRACT

Resultative constructions represent magnitude of variations at the interface of syntax and semantics and are subject to cross-linguistic variations. The current study investigates the acquisition of different types of resultative constructions by Persian EFL Learners. Due to lack of causative and non-causative property resultatives in Persian, L2ers may face difficulties in producing and perceiving different categories of such constructions. This study inspects (a) the acquisition of different categories of resultative constructions on the syntax-semantics interface, (b) the impact of proficiency on rendering various types of resultative constructions by EFL learners, (c) the most difficult and problematic categories of such constructions, and (d) the impact of L1 on production of resultatives by Persian EFL learners. To this end, using quantitative method and non-interventionist quasi-experimental design, 68 participants completed a translation task. Results indicated that L2ers produced path resultatives to a considerable extent while resorting to various substitute constructions in the case of property resultatives including prepositions like till and until to indicate the result phrase. The L2ers faced difficulties producing fake reflexive resultative constructions. Proficiency revealed a significant effect on the production of resultative constructions. The findings of the study reveal the challenges associated with the syntax-semantics interface in SLA and entails pedagogical implications for teachers and material developers in Iranian community.

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1. Introduction

Developing language capacity requires knowledge of syntax, lexicon and required cognitive mechanisms in perceiving and using language. To quote Towell (2003, p. 221), “the syntax will govern the structure of the grammar but the lexical items will govern how the structure is implemented”. Any change in the order of sentence elements can culminate in a subsequent change in meaning of the sentence; therefore, syntax and semantics interrelate. The interaction of grammar and meaning in the mind of speakers for producing and comprehending L2 is the best evidence of semantics and syntax interface. Therefore, in the acquisition process of any construction, L2ers need to pick up its pertinent syntax-semantics interface, otherwise L2 learners may wind up with producing non-native or erroneous structures.

According to Goldberg (2003), any highly frequent pairing of form and function is considered to be a construction. As cited by Goldberg and Jackendoff (2004), constructions are like idioms. They possess a special form associated with a specific meaning.

Resultative constructions denote a syntactic structure consisting of a verb and a resultative complement (Example 1). Resultative constructions bear a great deal of variations on the syntax-semantics interface. Furthermore, not all languages allow resultative constructions. Some languages such as English allow different types of resultative constructions, while some show a mixed pattern of them, just allowing certain types of such structures. Persian language appears to show a mixed pattern of resultatives which can in turn pose learnability problems for Persian EFL learners.

1- John hammered the metal flat

In Goldberg and Jackendoff's (2004) opinion, “there is also a great deal of idiosyncrasy

involved in the resultatives, especially the property resultatives. Many idiosyncratic instances and small subclasses of the construction must be learned and stored individually.” (p. 564).

The present study investigated the possibility of acquisition of the interface of semantics and syntax, constructions and their related constraints. To address these issues, resultatives appear to be a **good candidate** among others, as they vary widely inter and intra linguistically. Besides, there are lots of semantic and syntactic constraints on formation of its various types.

Given the above, the following questions were addressed in the current study:

1. To what extent can EFL learners acquire various categories of resultative constructions?
2. How does L1 affect acquisition of resultatives?
3. What category of resultative constructions appears to be the most difficult for L2ers?
4. Does proficiency affect the acquisition of different kinds of resultatives as well as fake-reflexive pronouns?

2. Literature Review

2-1. Distributional properties of resultative constructions

At the interface of syntax and semantics, resultative constructions denote a change in state or location of the postverbal NP as a result XP. The result XP is the hallmark of English resultative constructions and is provoked by the action of verb (see 2 to 5). The result XP is called resultative phrase or RP.

Semantically, those resultative phrases denoting a change in state of the postverbal NP lead to formation of *property resultatives* (e.g. 2 & 4) and those result XPs which denote a change in location of postverbal NP lead to the formation

of *path resultatives* (e.g. 3 & 5). Therefore, the postverbal NP is the host of change in resultatives. The result XP may be represented by an adjective (AP), a prepositional phrase (PP) or a noun phrase (NP).

Syntactically, resultatives are mainly divided into two varieties namely, transitive or causative and intransitive or non-causative resultatives (Goldberg & Jackendoff, 2004; Randall & Carrier, 1992). In transitive resultatives (2 & 3), the resultative phrase (RP) follows the postverbal NP, which is the direct object of verb in these resultatives. In these resultatives, the subject is the agent or causer of verb action. In intransitive resultatives (4 & 5), the RP spontaneously follows the verb. Accordingly, no direct object prevails in intransitive resultatives and the only postverbal phrase is the RP. The agent or causer of verb action is a natural event and is implicit. Therefore, they are called non-causatives.

Transitive resultatives:

2. The man wiped the table clean.

Postverbal NP RP [RP=AP]

3. Tom rolled the ball down the hill.

Postverbal NP RP [RP=PP]

Intransitive resultatives:

4. The pond froze solid.

RP [RP=AP]

5. The ball rolled down the hill.

RP [RP=PP]

Albeit in intransitive resultatives there is no postverbal NP, similar to transitive resultatives, the host of change is the internal argument of verb (underlying object), which is moved to the place of subject. Therefore, the prerequisite for the formation of resultatives is the presence of the object, either an underlying or a surface one (Simpson, 1983).

Such intransitive resultatives (4 & 5) occur with unaccusative class of intransitive verbs. As a result of possessing an underlying object, this class of intransitive verbs meets the requirements

for formation of resultatives.

Regarding unaccusativity hypothesis, intransitive verbs entail two classes of verbs namely, unaccusatives and unergatives. Both classes of intransitive verbs take a sole argument of a surface subject. The sole argument of unaccusatives is a theme which is moved to place of subject, so unaccusative verbs meet the requirements of formation of resultatives, whereas the other class of intransitive verbs i.e. unergative verbs have a sole agentive argument and consequently do not meet the requirements of resultative formation.

According to Simpson (1983), there is a way of forming resultatives with unergative verbs and it is to utter a reflexive object, expressing the idea that someone by doing the action of verb to excess, caused himself become the RP. Look at the following example:

6. I danced myself tired. (Fake-reflexive resultative)

The above construction is called fake-reflexive resultatives. The fake-reflexive object in these resultatives is obligatory and cannot be omitted (7) or replaced by any other NPs (e.g. 8).

7.*I danced tired.

8.*I danced Mary tired.

Resultatives should be distinguished from other superficially look-alike constructions, i.e. “depictive constructions” like sentence 9.

9. John ate the meat raw. (DP=AP, denoting the state of NP at the time of verb action)

In resultatives, the resultative phrase (an AP or PP) is determined by verbal argumentation and describes a resultant state of the object, as a result of verb action. Therefore, sentence 2 means “the man caused the table become clean by cleaning it” while in depictive constructions, the depictive predicate or depictive phrase (e.g. raw) is a clear adjunct and describes the current state of the object at the time of initiation of verb action. So, the depictive sentence mentioned above

(sentence 9) means: “John ate the meat, and at the time he ate the meat, it was raw” (Goldberg & Jackendoff, 2004; Muller, 2002; Lee, 1995; Zhang, 2001).

With regard to massive lexical variation of Wechsler (2005), not all types of adjectives can appear with all kinds of verbs to form resultatives (Boas, 2003; Goldberg & Jackendoff, 2004; Levin 2013; Randall & Carrier, 1992; Wechsler, 2005). According to Boas (2003) not every class of verbs allows predication of different kinds of RPs. Some bear strong preference for AP result while some show preference for PP result. Some verbs like *dye* and *paint* allow both NP and AP as their resultative phrase.

2-2. Resultatives in Persian

Persian allows formation of both causative and non-causative path resultatives:

- Persian path causative resultatives:
[agent + NP + RP + verb]
- (10) a. U toop ra be balaye tappe qaltand. NP RP [RP=PP]
b. He ball (OM) to top of hill roll-3rdperson past.
c. He rolled the ball up the hill.
- Persian path non-causative resultatives:
[NP+ RP+ verb]
- (11) a. Toop ta paeene tappe qaltid. NP RP [RP=PP]
b. ball till bottom of hill roll-3rdperson-past.
c. The ball rolled down the hill.

In contrast, Persian does not allow formation of property resultatives due to the fact that Persian has no room for complex structure for the secondary result-denoting predicate (Folli, Harley, & Karimi, 2005).

See the following example for production of intended English resultative constructions of *The man hammered the metal flat*:

- (12) a. an mard felez-ra chakosh zad.

- b. The man metal-ra hammer-hit.
c. The man hammered the metal.

As indicated above, Persian has no room for result phrases. For the second prediction, Folli, et al. (2005) rendered the following example (13) and declared that such predications result in a depictive construction which is available in both languages. Therefore, the secondary depictive predicate is permissible in Persian but the secondary resultative predicate is not so.

- (13) a. English resultative constructions: The man hammered the metal flat.
b. Persian counterpart: *an mard felez-ra saf chakosh zad. (saf= depictive predicate)

Folli, et al. (2005) asserted the only way to denote result event in Persian is addition of resultative clause like:

- c. an mard felez-ra chakosh zad ta *pro* saf shod.
d. The man metal-ra hammer-hit till *pro* flat become.
e. The man hammered the metal till it became flat.

2-3. Previous studies

Few studies have been conducted on the acquisition of resultatives by second language learners. Nonetheless, there exists contrastive studies in other languages such as English and German (Boas, 2003), English and Chinese (Zhao and Yuan, 2009) and English and Japanese (Nakazawa, 2008). In a study conducted on the reduction patterns of verbs in Persian, Motavallian (2013) considered the resultative constructions forming anti-causatives through the verb reduction. These verbs can form static anti-causatives or resultative phrase (adjective + *be* verbs) (14a & b). Therefore, the resultative patterns lead to the reduction of the verb.

14. (a) Ali dar ra ba:z kard.
Ali door OM open do-3rdperson-past
Ali opened the door.

(b) *Dar ba:z ast.*

Door open be-3rdperson-present

The door is open.

Bautista-Maldonado, Perez-Nares, Rodriguez_Cordova, Herrera-Sanchez and Perez-Bariga (2016) investigated the acquisition of English resultatives by Spanish speakers. Results revealed that although Spanish speakers can perceive such constructions, they face problems in acquiring the constraints on the use of fake-reflexives in such structures.

Kim, Ko and Yang (2019) conducted a study on telicity and mode of merge in the acquisition of resultatives by L1-Korean learners. The purpose was to explore how syntactic and semantic asymmetries between L1 and L2 can influence the acquisition of English resultatives. The results showed that unlike English native speakers, Korean learners tended to use adjunct structures and interpreted them as atelic events. The study corroborated the role of L1 in projecting such structures. Additionally, the study confirmed the role of L1 semantics (i.e., telicity) in L2 acquisition.

In another study Kim and Sung (2019) offered a usage-based analysis of resultative construction. The learning process in usage-based model starts with frequent and salient items and ends with abstract complicated and less frequent ones. They investigated how Korean learners of English acquire this rather complex structure and whether L2 learners can improve the verb choice in using resultative structures along with their proficiency increase. The results indicated that L2 learners use a variety of less frequent verb types as their proficiency increases. Overall, the results let support to the usage-based theories of language acquisition.

To the best knowledge of the researchers, no acquisitional or contrastive studies have been carried out in Persian. Given the above, conducting the present research seems warranted.

3. Methodology

The research method employed in this study was quantitative and enjoyed a non-interventionist quasi-experimental design. To assess the resultative knowledge of Persian EFL learners, 68 BA and MA students of Yazd University, Iran majoring in English literature and TEFL respectively were selected. All the participants took Oxford Quick Placement test. Based on the obtained results, they were divided into two groups of intermediate and advanced learners (34 intermediates and 34 advanced learners). Then, the translation and acceptability judgment tasks were designed to measure production and perception of L2ers' resultative knowledge, respectively. Besides, five native speakers were asked to complete the acceptability judgment task as the control group.

The 20-item translation task was designed to measure the productive ability of L2ers across various types of resultative constructions. Resultatives are divided semantically into two categories of property and path resultatives, and on the other hand syntactically, divided into two categories of transitive vs. intransitive resultatives or causative vs. non-causative resultatives. These taxonomies of resultatives are convened at the interface of syntax-semantics and therefore resultatives were classified into four categories, namely *causative* and *non-causative property resultatives* as well as *causative* and *non-causative path resultatives*.

Additionally, a special type of resultatives with unergative verbs was ascribed to *fake-reflexive resultatives*. The distribution of items is depicted in Table 1.

Table 1: Distribution of Different Categories of Resultatives in Translation Task

Cate gorie s	Causa tive prope rty result atives	Non- causa tive prope rty result atives	Causa tive path result atives	Non- causa tive path result atives	Fake- reflex ive result atives
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Number of items per category	4	4	4	4	4
Intended RP	AP	AP	PP	PP	AP & PP

Each item in different categories rendered difficult lexical items in the learners' L1 to draw a veil over respondents' lexical engagement in vocabulary selection and urge them to think more about producing the intended construction (see Table 2). Additionally, all the sentences were in past tense to prohibit any reflection on tense of verbs in translating sentences.

After selecting samples of resultatives in each category, a content specialist of Persian language checked and confirmed naturalness of Persian resultative counterparts. Randomization as the last step in organization of translation task was taken and afterwards, the ultimate ready-to-use version was prepared. Some resultatives items along with their Persian counterparts are demonstrated in Table 2.

Table 2: English Resultatives and Their Persian Counterparts

Resultatives ilk	English resultatives	Persian counterparts
Causative property	The man wiped the table clean.	مرد میز را دستمال کشید تا تمیز شد. دستمال کشیدن=wipe
Non-Caus. Property	The saucepan boiled dry.	ماهیتابه آنقدر جوشید تا بیاب شد. ماهی تابه =boil جوشیدن= saucepan
Causative path	John knocked the vase onto the floor.	جان گلدان را به زمین کوبید. کوبیدن= knock گلدان=vase
Non-caus. Path	Water rushed under the bridge.	آب از زیر پل عبور میکرد. عبور کردن=rush
Fake-reflexive	Sheila shouted herself hoarse.	شیلای آنقدر فریاد زد تا صدایش گرفت. فریاد زدن= shout صدای گرفته=hoarse

The scrutiny of participants' translations

showed the magnitude of varied produced constructions in each category of resultatives, namely resultative constructions, substitute constructions, and unacceptable constructions. By substitute constructions, we mean the highly frequent pairs of form and function that were supplied instead of resultative constructions by most Persian EFL learners. Prevalent substitute constructions in this study were divided into nine contexts of *clause of result* (so that), *clause of reason* (as/because), *other preposition* (till/until), *causative verb* (make, cause, render), *coordinate conjunction* (and), *infinitive*, *phrasal verb*, *other resultatives and other acceptable constructions* (e.g. gerund).

4. Results

In what follows, both descriptive and inferential results are presented. The descriptive results, as indicated in Table 3 below, showed that both intermediate and advanced learners could produce path causative and non-causative resultatives to a large extent. In case of property resultatives, both groups of L2ers produced property causative resultatives to some extent (23.16) while just advanced learners could produce property non-causative resultatives (17.64).

The learners' performance in path resultatives showed that both groups of learners could produce causative and non-causative path resultatives to a considerable extent. The overall mean performance across both contexts was 63.60.

Table 3: Distributions of Acceptable Production of Various Categories of Resultatives

Proficiency	Property causative	Path causative	Path non-causative	Fake reflexive	Mean	
					Mean	Std. Deviation
Intermediate	11.76	63.97	2.94	58.08	.00	
	34	34	34	34	34	
	14.08	23.98	10.23	20.15	.00	

	Mean	34.55	63.23	17.64	69.11	2.94
Advanced	N	34	34	34	34	34
	Std. Deviation	35.89	24.02	33.44	20.46	13.43
	Mean	23.16	63.60	10.29	63.60	1.47
Total	N	68	68	68	68	68
	Std. Deviation	29.39	23.82	25.63	20.90	9.54

The fake-reflexive resultatives was the most problematic category for L2ers. Neither groups could produce this type of resultatives. The intermediate learners (N=34) produced path causative resultatives more than the other resultative categories (M=63.97), while about a quarter of respondents (M=25.77) produced this category wrongly. Comparatively, advanced learners produced path non-causative resultative more than the other resultative categories (M=69.11)

A mixed between-within subjects ANOVA was conducted to measure the possible differences among the structures and the impact of proficiency on production of various acceptable resultatives. Levene's test of equality indicated the normality assumptions were met for causative and non-causative path resultatives ($p>0.05$) and violated for the other categories of resultatives ($p<0.05$). Results indicated that the context (acceptable resultatives) was of prime significance [Wilk's Lambda=0.073, $F=2.01$, $p=0.000$] in producing different ilks of resultative constructions by Persian EFL learners. The

partial eta squared was 0.927 indicating a large effect size.

There was also a significant interaction effect between proficiency and acceptable resultatives context [Wilk's Lambda=0.858, $F=2.59$, $p=0.045$] with a large effect size (eta square=0.142). The results of the one-way repeated measures ANOVA revealed that there was a significant asymmetry between property causative and the rest of structures, but no difference between causative and non-causative path resultatives for both intermediate and advanced learners ($p=1.00$). Additionally, there was a non-significance difference between property non-causative and fake-reflexive context ($p>0.05$). The rest of the structures exhibited a significant difference from each other ($p<0.05$).

A substantial main effect of proficiency ($p=0.002$) was observed for acceptable resultatives with a medium effect size (eta squared= 0.13). Therefore, the advanced and intermediate learners differed from each other in rendering various resultative constructions.

To find out what substitute constructions are used by L2 learners, the above five resultative structures introduced in Table 3 were further scrutinized. The substitute structures used for property causative resultatives are depicted in Table 4 below.

Table 4: Different response types in property causative resultative constructions

	Correct resultative	Other resultatives	Clause of result	Clause of reason	Other prepositions	Causative verbs	Coordinate conjunctions	Infinitives	Parasal verbs	Other correct responses	Unacceptable resultatives
Intermediate	11.76	0.73	4.41	3.68	43.38	3.68	0.73	9.56	0.73	4.41	16.91
Advanced	34.56	0.00	7.35	0.73	20.59	4.41	3.68	8.08	2.20	2.20	16.18
Total	23.16	0.37	5.88	2.20	31.98	4.04	2.20	8.82	1.47	3.31	16.54

Advanced learners produced property causative resultatives (M=34.55) to an acceptable level while intermediate learners' accuracy was about one-third of the advanced learners. The

most prevalent substitute construction employed by both groups was *other prepositions* such as *till* and *until* (M=31.98) for producing property causative resultatives. The infinitive structures

were further used by both groups to some extent (M=8.82).

Table 5 illustrates different types of responses in property non-causative resultative structures. The advanced learners outperformed intermediate ones to a significant extent (Mean difference=14.71). Similar to the property

causative structures, both groups mainly resorted to the production of other prepositions (*till/until*) in substitute constructions (M=34.93). Additionally, about 14% of the respondents used *and* as a coordinate conjunction in such constructions.

Table 5: Different response types in property non-causative resultative constructions

	Correct resultative	Other resultatives	Clause of result	Clause of reason	Other prepositions	Causative verbs	Coordinate conjunctions	Infinitives	Phrasal verbs	Other correct responses	unacceptable
Intermediate	2.94	0.73	5.14	1.47	47.06	0.00	13.97	8.09	0.73	0.00	19.85
Advanced	17.65	1.47	8.09	0.73	22.79	0.73	13.97	1.47	2.94	2.94	27.20
Total	10.29	1.10	6.62	1.10	34.93	0.37	13.97	4.78	1.84	1.47	23.53

Table 6 below displays the variety of substitute responses offered by both groups of learners in path causative resultative constructions. In producing path causatives, the

L2 learners had an acceptable performance (M=63.60). The only substitute structure employed by both intermediate and advanced learners was *phrasal verbs* (M=9.56 & 22.79).

Table 6: Different response types in path causative resultative constructions

	Correct resultative	Other resultatives	Clause of result	Clause of reason	Other prepositions	Causative verbs	Coordinate conjunctions	Infinitives	Phrasal verbs	Other correct responses	unacceptable
Intermediate	63.97	0.00	0.73	0.00	0.00	0.00	0.00	0.00	9.56	0.00	25.73
Advanced	63.23	0.00	0.00	0.00	0.00	0.73	0.00	0.00	22.79	0.00	13.23
Total	63.60	0.00	0.37	0.00	0.00	0.37	0.00	0.00	16.18	0.00	19.48

The results of the substitute structures in path non-causative resultative constructions are depicted in Table 7. Similar to path causative structures, both groups could produce such intransitive structures to an acceptable extent

(M=63.60). Unlike the path causative structure where the learners opted for *phrasal verbs* as the main substitute structure, both groups of learners resorted to *coordinate conjunction (and)* as the only noticeable substitute structure (M=17.28).

Table 7: Different response types in path non-causative resultative constructions

	Correct resultative	Other resultatives	Clause of result	Clause of reason	Other prepositions	Causative verbs	Coordinate conjunctions	Infinitives	Phrasal verbs	Other correct responses	unacceptable
Intermediate	58.09	0.73	0.00	0.00	0.00	0.00	19.12	0.00	0.00	0.73	21.32
Advanced	69.12	0.73	0.00	0.00	0.00	0.00	15.44	0.00	0.73	0.00	13.97
Total	63.60	0.73	0.00	0.00	0.00	0.00	17.28	0.00	0.37	0.37	17.65

Results indicated that neither group was able to produce fake-reflexive resultatives (M=1.47%). The predominant substitute construction in this context was use of other prepositions such as *till* and *until* for both groups

(M=38.97). The intermediate learners used *other prepositions* twice as much as the advanced group. The other noticeable substitute structure in this context was the use of *result clauses* (M=17.28).

Table 8: Different response types in fake-reflexive resultative constructions

	Correct resultative	Other resultatives	Clause of result	Clause of reason	Other prepositions	Causative verbs	Coordinate conjunctions	Infinitives	Phrasal verbs	Other correct responses	unacceptable
Intermediate	0.00	3.68	19.12	3.68	52.94	0.73	0.73	4.41	0.00	0.00	14.70
Advanced	2.94	11.76	15.44	1.47	25.00	0.00	2.94	4.41	0.73	8.82	26.47
Total	1.47	7.72	17.28	2.57	38.97	0.37	1.84	4.41	0.37	4.41	20.59

In case of substitute and unacceptable constructions, the obtained results revealed that both groups of intermediate and advanced learners produced wrong constructions well-nigh to the same extent across different resultative categories and among substitute constructions, the most prevalent produced ones by Persian EFL Learners was the use of *other prepositions*, coordinate conjunctions, phrasal verbs and clause of result. Virtually, *clauses of reason* and *causative verbs* were the least frequently produced substitute constructions by Persian EFL Learners.

5. Discussion

The research questions of the study are addressed in turn in this section. Regarding the first research question on the extent of acquisition of resultatives by Persian L2ers, the results indicated that Persian L2ers could just produce *path causative resultatives* as well as *path non-causative resultatives* to a considerable extent (above 60%). As Babai's (2011) analysis of Persian motion verbs illustrated, Persian motion verbs form resultative constructions and connote change of location meanings. Therefore, the successful production of path resultatives by L2ers can be attributed to the cross-linguistic

resemblance and L1 transfer (Fazilatfar & Sedghi, 2018).

Apart from these two contexts, the L2 learners produced *property causative resultatives* to some extent although the advanced learners (M=34.55) outperformed intermediates (M=11.76) in this context. As causative structures (e.g. *he made the wall red.*) are explicitly taught and causative property resultatives (e.g. *he painted the wall red.*) are similar to these constructions, it is assumed that L2ers were able to produce this type of resultatives as a result of this similarity. Such results highlight the significance of explicit instructions as well as issues like Schmidt's (2010) noticing hypothesis, which claims that input does not become intake for language learning unless it is noticed, that is, consciously registered. When there is no explicit instruction and L2ers do not notice intended structures, acquisition may not pursue.

In case of *fake-reflexive resultatives*, L2ers did not bear any productive and perceptive ability. In fact, they produced and perceived this category similar to unaccusative intransitive resultatives and solely produced RPs without any mediation of reflexive objects in resultative context with unergative verbs.

The second research question was on the role

of L1 transfer in the acquisition of resultative structures. The obtained results indicate the unsuccessful acquisition of fake-reflexive pronouns and suggest inability of L2ers in acquiring L2 specific properties not sufficiently encountered in L2 input. It can be concluded that L2 specific properties besides L2 specific structure require explicit instruction and should be noticed and learned individually.

The poor performance of L2ers in fake-reflexive resultatives can be discussed in terms of the following points:

- There exists not enough rich and authentic input in the available developed materials and as a result there is no explicit instruction on such constructions.
- Fake-reflexive resultatives and pronouns are unlicensed in Persian. In accordance with Contrastive Analysis Hypothesis (Lado, 1957), L2ers face the greatest difficulty towards structures that are completely different from L1.
- Producing these categories of resultatives in conformity with intransitive resultatives with unaccusative verbs indicates that L2ers' interlanguage grammar is not sensitive to unergative-unaccusative distinction. Therefore, L2ers display inadequate intuitions toward syntactic configuration of these two subclasses of intransitive verbs.
- The frequency of English resultative constructions in L1 (Snyder, 2002) and by L2 learners (Whong-Barr, 2005) is limited. Hence, the low frequency and structural variety can lead to the insufficient use of such constructions.

In this study, Persian L2ers resorted to various kinds of substitute constructions to produce resultative meanings across the five

contexts of resultatives. Among the substitute constructions in translation task were clause of result (*so/such that*), clause of reason (*as/because*), other prepositions (*till/until*), causative verbs (*make, render*), coordinate conjunction (*and*), infinitives, phrasal verbs, and other acceptable constructions like gerunds. A wide range of substitute constructions used by L2ers lends support to the influential role of L1. As illustrated before, Persian language allows path resultatives, but disallows some other types like AP property resultatives or fake-reflexive resultatives.

Safari (2013) indicated that Persian language lacks resultatives and the best way of translating resultative constructions is the use of “*and*” as a coordinate conjunction. Folli, et al. (2005) illustrated that Persian language cannot allow formation of resultative constructions as it has no room for the secondary result-denoting predicate. They asserted that resultatives reading is only possible by addition of a resultative clause like “...*till become Adj.*”. Besides what Safari (2013) and Folli, et al. (2005) assumed to be substituted instead of resultative constructions in Persian, the participants in the current study produced six other substitute constructions to indicate resultative meanings.

A closer look at substitute constructions produced by Persian learners indicates convincing evidence towards cross-linguistic presence of resultative meanings. According to Goldberg and Jackendoff (2004) and Rappaport Hovav and Levin (2001), lexical causatives like *make* and *render* completely signify resultative meaning and form. On the other hand, Gorlach (2004) declared that resultative meaning is attributed to be a part of the semantics of phrasal verbs. However, this resultative meaning is inclined to be a part of the semantic properties of the particle. Particularly, phrasal verbs containing the adverbs *up* and *down*

highly connote resultative meaning. Production of lexical causatives and phrasal verbs instead of resultative constructions can provide confirmatory evidence that L2ers are aware of resultative meaning but not resultative forms. Likewise, Davari and Naghzguykohan (2014) state that resultative meanings but not resultative forms exist in Persian language. Therefore, such an awareness stems from cross-linguistic presence of resultative meaning.

Given the above, it can be concluded that L2ers highly prefer to convey resultative semantics in L1 form and are unable to produce the native semantics-syntax interface. The drastic inability of L2ers in production of the pertinent semantics-syntax interface in resultatives suggests that L2ers face problems in acquiring the semantics-syntax interface.

This finding gives credence to construction grammar as some constructional experts like Goldberg and Jackendoff (2004) believe these constructions should be acquired individually like idioms as “there is also a great deal of idiosyncrasy involved in the resultatives, especially the property resultatives. Many idiosyncratic instances and small subclasses of the construction must be learned and stored individually.” (p. 564). Regarding constructional perspective, it can be concluded that these constructions, i.e. the idiosyncratic semantics-syntax interface and their properties cannot be acquired by a general principle through inference.

On the whole, among the substitute constructions, the most frequently produced constructions by Persian EFL Learners instead of producing various types of resultatives included the other prepositions such as *till* and *until*, clause of result (*so that*), and the coordinate conjunctions (*and*). Virtually, the clause of reason and causative verbs were the least frequently produced substitute constructions by Persian EFL learners. This upshot suggests L2ers

high preference for using resultative clause rather than single lexicon like verbs of *make* or *render* and conjunctions including *as* or *because* to connote resultative meaning.

The high means of production of other prepositions (*till/until*) instead of AP property resultatives by L2ers give credence to what Follie, et al. (2005) predicted about lack of any slot for secondary predication of RPs in this ilk of resultatives and production of resultative clause of “till become AP” to denote resultative meaning in Persian.

Interestingly, in *path causative resultatives*, the sole produced substitute construction was the use of *phrasal verbs*, which was produced more by the advanced learners. Such a result can be in conjunction with Gorlach (2004) and Babai (2011) who argue that the resultative meaning of phrasal verbs and compound motion verbs can signify English locative resultatives. Similarly, in *path non-causative resultatives*, L2ers solely resorted to one substitute construction, i.e. *coordinate conjunction*. The evidence that L2ers did not resort to the other types of substitute constructions in the production of path causative resultatives can also be indicative of their better internalization or acquisition of causative path resultatives due to the cross-linguistic parallels of path resultatives (Wechsler, 2005) as well as explicit instruction of causatives.

Regarding the third research question on the difficulty levels of various kinds of resultatives for the L2ers, the following descending hierarchies (Table 9) are rendered for the production of resultatives and naturalness of different kinds of resultatives in the perception task.

Table 9: Difficulty Hierarchy of Producing Resultatives in TranslationTask

Difficulty level	Advanced L2ers	Intermediate L2ers
The most difficult	Fake-reflexive resultatives	Fake-reflexive resultatives

The least difficult	Property non-causative res.	Property non-causative res.
	Property causative res.	Property causative res.
	Path causative res.	Path non-causative res.
	Path non-causative res.	Path causative res.

As to the impact of proficiency (Fourth research question), proficiency displayed a significant role with superiority of advanced L2ers over intermediate L2ers in translation task. The superiority of more proficient L2ers in the production of various types of resultatives may be due to the fact that advanced L2ers are exposed to more structures and input, and as a result their interlanguage is more sensitive to the abstract path of different syntactic configurations of English verbs.

The results related to the last research question on the role of proficiency indicated that proficiency was significant in the production of different kinds of resultatives with the superiority of the advanced learners. The results can be attributed to the fact that the advanced learners have more exposure towards such structures receiving more input; therefore, their interlanguage is more sensitive toward the abstract path of the syntactic computations of English verbal structure. Accordingly, linguistic proficiency plays a significant part in the production of different types of resultative constructions.

6. Concluding remarks

L2ers face a number of challenges in acquisition of resultative structures such as cross-

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linguistic differences of resultatives, unlicensed semantics-syntax mapping in their L1, myriads of distributional constraints, absences of explicit instruction and rich input. The current study investigated the acquisition of different types of resultatives with respect to these challenges. The results indicated an unsuccessful acquisition of language-specific structures which are unlicensed in L2ers' mother tongue and are unlikely to be taught explicitly. Therefore; such features, which are not instantiated in L1, require explicit instruction. As well, L2 learners failed to produce appropriate semantics-syntax interface of resultative constructions and mostly conveyed resultative meanings through result phrases such as *so that* or *till/until pro become* resultant state. The findings of the study lend support to the usage-based accounts in L2 acquisition as the low frequency and structural variety of property causative resultative constructions create learnability challenges. The better performance of the advanced learners indicates that the acquisition of abstract complicated structures with low frequency requires adequate input. This can in turn support the usage-based model of acquisition.

The current study identified the areas of difficulties posing problems for L2ers in the process of SLA or translation. Such problems are recommended to be taken into consideration by teachers and material designers for fostering learning and teaching of resultatives. This in turn can have implications for theories of second language acquisition.

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