

## A Syntax-based Approach to the Production of English Verbs' Argument Structure by Iranian EFL Learners

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**Abstract.** Learning English verbs and their syntactic features can act as the core of sentences cross-linguistically. EFL learners face difficulties in the production of English verbs' argument structures. This research tried to investigate and diagnose the problems Iranian EFL learners encounter in producing English verb argument structures syntactically. Seventy-five students whose major was English participated in this survey. First, the researcher administered an Oxford Placement Test to get three different levels of proficiency, including elementary, lower intermediate, and upper-intermediate. Then a Translation Test was conducted after the proficiency test to estimate the participants' production of English verb argument structures. Descriptive statistics, together with One-way ANOVA, were applied to analyze the data. The

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results demonstrated that learners with different proficiency levels produced English verbs' argument structure differently, and also they faced serious difficulties problems in producing di-transitive verbs. Explicit teaching of English verbs' argument structures with their syntactic features, in different contexts, and more exposure to language input can help EFL learners improve their knowledge of argument structures.

**Keywords:** English verbs' argument structures, syntactic features, production, level of proficiency, EFL learners

## 1. Introduction

In linguistics, an argument is any expression or syntactic element in a sentence that serves to complete the meaning of a predicate. The predicate, which is a content verb, requires specific arguments. That is, the arguments are necessary to complete the meaning of the verb. The subject and the object phrases are the two most frequently used arguments of verbal predicates. Verbal predicates which demand just a subject argument are intransitive (e.g., sleep, work, relax), those that demand an object argument is transitive (e.g., like, fry, help), and the last category that demands two object arguments are di-transitive (e.g., give, lend), (Tesniere, 1959). "Arguments can be classified in two different ways: regarding syntactic roles concerning the verb such as Subject and Object and concerning semantic roles concerning the verb such as Agent (an item that initiate an action) and Patient (an item that goes through an action)" (Allen, 2015, p.271). A verb's argument structure is the lexical information about the arguments of a predicate, including their semantic and syntactic features.

Viau and Bunger (2016) stated: "The study of the acquisition of argument structure has long figured prominently in debates about learning and abstractness" (p. 3). Jackendoff (2002, p.137) states that the difficulty of argument structure is essential to the grammar theory. Realizing argument structure means the realizing predication; thus, to understand how events and states are interpreted by linguistic terms, verb is the most usual type of lexical item which helps predication. Therefore, an investigation of how argument structure is understood in a given language is finally considered as to how verbs behave in that language when

they express events and states by using patterning clauses. Understanding of arguments is considered as the shift between mental representations of concepts and the manifestations that appear from them in morpho-syntactic structures. Thus, the semantics of argument understanding is essential, and argument structure could be realized as a part of grammar in which there is an undeniable connection between syntax and semantics. Therefore, to analyze the argument structure, it is appropriate to draw a theoretical difference between a syntactic argument and a semantic argument.

Harley, in 2006 proposed an approach that assists addresses and readers first the views of non-relational and second associated meanings or concepts. The first can be explained as concepts that do not rely on other concepts to be interpreted, such as the concept of ‘boy’ and the concept of ‘apple,’ the second can only be suitably interpreted by concurrent mental activation of accompanying concepts. Such a concept, driven from Jackendoff’s (2002) presentation of argument structure, is the concept expressed in English by the verb ‘devour.’ To interpret the meaning of this verb, the concepts of a ‘devourer’ and a ‘devouree’ must also be present as taking part in concepts. Due to this characteristic, associated concepts like the meaning encoded by the verb ‘devour’ are mentioned as predicators. When states and events are interpreted, the concepts that take part in the predication are discussed as the predicator’s arguments.

Nevertheless, it could be mentioned that argument structure is more than the determination of participating arguments. The argument realization in a language such as English also seems to suggest certain associated limitations in the selection of syntactic structures, which will be suitable needs established by the argument structure. Concerning a verb such as ‘devour,’ this can be exemplified in the prompt semantic acceptability of the sentence “the boy devoured the apple.” In this sentence, ‘boy’ and ‘apple’ are NPs semantically compatible with the concepts of “devourer” and “devouree,” excellent compatibility that would not be easily achieved had the sentence been “the apple devoured the boy.” In the second sentence, it seems to be a breaking of a required distribution of arguments that can be formally figured as X DEVOUR

Y, where X must be ‘devourer,’ and Y ‘devouree.’ If we choose the more general labels agent and theme instead of the highly specific labels “devourer” and “devouree,” it is simple to understand that the argument structure of ‘devour’ can be stated as X(agent) VERB Y theme. Moreover, it is simple to understand that this generalization catches an important grammatical similarity between the meaning of devouring and that of the greater number of other English verbs, the meanings usually are related to ‘sweep,’ ‘fix,’ and ‘carry’ being but a few samples.

Traditional grammar categorizes verbs regarding the number of arguments they choose. Besides, conventional syntax specifies arguments with the function that they have in the sentence, such as an object, subject, and an indirect object. Based on the old grammar, there are transitive verbs with two arguments (subject and object), intransitive verbs with one argument (subject), and di-transitive verbs with three arguments (subject, direct object, indirect object).

EFL learners have to determine which verbs can emerge in which argument structures. Learning argument structure, such as transitive, intransitive, di-transitive complements, can cause difficulties for EFL learners. Thus, this study investigated the difficulty hierarchy among Iranian EFL learners’ production of English verb argument structures, the potential problems they face during the production of English argument structures syntactically, and their knowledge of English have on these constructions with different proficiency levels. Based on the previous studies concerning argument structures, no more studies have been done among EFL learners. Thus, the present study tried to find out how EFL learners produce English verbs’ argument structures across various levels of proficiency.

## **2. Review of Literature**

### **Theoretical and empirical background of the study**

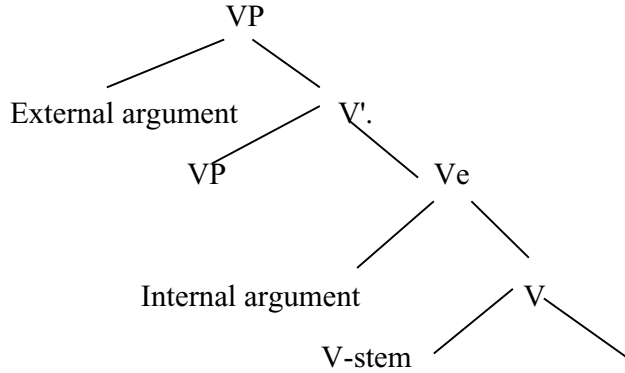
Pinker (1989), Rapport and Levin (1988), and Zubizarreta (1987) propose various theories on argument structure. These theories have presumed that understanding an argument is decided by the lexical-semantic characteristics of verbs, and the meaning of a verb is compositional. Some

parts of meaning, being recurrent in many verbs, specify their grammatical behavior. These writers have claimed that agentive activity verbs, such as cry, run, write, dance, sew, and paint, contain in their lexical meaning the behavior of acting the agent argument, being all shown by a lexical-semantic structure like [X ACT < MANNER >]. The researchers discuss that manner verbs may be intransitive; since manner roots change a monadic predicate, even when they show an “obvious argument” in object position. In such cases, it is claimed that the object would be an argument of the root < MANNER >, not that of the verb per se, because it does not need to be expressed. This study followed Grimshaw’s (1990) theory since it expresses an original and extremely predictive theory of argument structure that can explain a lot of syntactic phenomena. “The argument structure is a lexical representation of grammatical information about a predicate” (Grimshaw, 1990, p. 1) and is a level of representation that maps lexical conceptual/semantic structure onto D-structure. Under this theory, argument structure shows significant associations among arguments, and the thematic and aspectual properties of the predicate determine the prominence. Regarding thematic prominence, Grimshaw (p. 8) presumed the thematic hierarchy, as shown below, specifies which argument will be the external argument, and therefore the grammatical subject:

Thematic Hierarchy (Agent (Experiencer (Goal/Source/Location (Theme))))

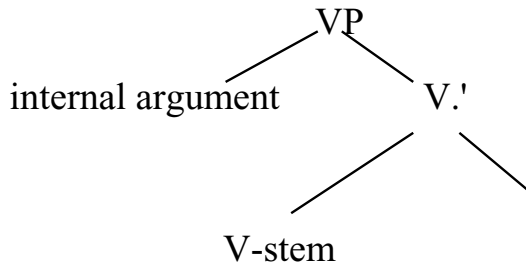
Based on Grimshaw’ theory, an external theta role is assigned by transitive and intransitive verbs. The clause subject is most often interpreted as an element to which the external theta role is linked. Transitive verbs possess at least one internal argument, usually interpreted as the object of the clause. Presuming the VP internal hypothesis (Koopman and Sportiche, 1991) which produces the external argument VP-internally at the deep syntactic level, and Larson’s (1988) clausal structure in which verb phrases are formed of shells or layers to place the number of arguments, a mono-transitive structure will emerge shown diagrammatically at the underlying level of the syntax: An intransitive verb phrase will be consisted of only the upper shell to accommodate the external argument, but will not have the lower shell given that in-

transitive verbs do not subcategorize for an internal argument.



**Figure 1.**

Un-accusative verbs subcategorize for an internal argument, which may be understood as the surface subject. They do not allocate an external theta role. Within the structural framework, the deep structure of an Un-accusative verb parallels that of the intransitive verb except for the argument which emerges in the specifier VP is an internal, not an external argument, as displayed in the following figure :



**Figure 2.**

Learning the argument structure of English verbs is a difficult task for foreign language learners of English (Hejazian Yazdi & Rezai, 2015). Montrul (2000), using a cross-linguistic language, including Turkish, Spanish, and English, attempted to find out transitivity alternations in the

L2 acquisition. This study tried to find the effect of universal grammar (UG) and L1 on the acquisition of L2 transitivity alternations (causative/inchoative). The obtained data demonstrated that although L1 and UG had an impact on L2 acquisition, the effect of each of them was different on the L2 acquisition.

Moore (1993) found out the acquisition of the causative alternations by second language learners of English in three experiments. He focused on overgeneralization as the leading cause of the wrong causativization. He found a significant difference between causativizable and non-causativizable verbs in all three experiments. Proficiency, L1 influence, and verb type proved to be significant.

Joo (2003) did a research regarding the acquisition of the argument structure of English locative verbs. He aimed to investigate the acquisition of broad-range and narrow-range constraints in English locative by Korean speakers, and whether the first language influenced the second language acquisition of locative alternations or not. For this purpose two groups of participants participated in this study, the first group consisted of 17 English native speakers who were US college students and the second group was 59 Korean English learners, this group was college students in Seoul, Korea, whose TOEFL scores ranged from 590 to 650. Both groups took a forced-choice picture description task and a forced-choice sentence selection task. The results showed that EFL learners had acquired the broad-range range constraint, the 'holism effect' of English locative constructions. Although, the role of L1 is vague, second EFL speakers had little knowledge of particular language properties; they also had problems with English locative verb classes that have the same properties as equivalent verbs in Korean.

Can (2009) attempted to investigate the ergatives acquisition by Turkish EFL learners by comparing the (partial) results of the research conducted in 2000 with the results of its replication carried out in 2007. In both researches, all the variables were alike. The researcher randomly selected 50 EFL learners among first-year students of the ELT Department of Faculty of Education at Uludag University, Turkey, in 2000 and 2007. He administered a cloze test to them to determine their proficiency levels. Likewise, a grammaticality judgment test with var-

ious subclasses of intransitive was conducted. The obtained results of this study demonstrated that paired ergative verbs were the most challenging subclass of intransitive in both researches, whereas the learners' levels of proficiency have improved in the seven years.

In another study, Atay (2010) tried to understand the teaching impacts on Turkish EFL learners' acquisition of causative /inchoative structures. The participants were 101 freshmen Turkish EFL learners. The results demonstrated that there was a significant difference between the students receiving direct teaching and those receiving no teaching on causative/inchoative alternations. Also, the research revealed that more direct teaching is necessary for grammatical characteristics of English argument structures.

Luk (2012) conducted a cross-linguistic research and concentrated on causality for transitive and intransitive constructions between Japanese and English. In Japanese, intransitive verbs have two arguments, such as agent and patient, but English intransitive verbs take one argument, acting as the agent of the sentence. The primary goal of this study was such a difference in causality. Two pieces of research were carried out in the present study; in the first research, 20 English native speakers and 20 Japanese native speakers were asked to rate how logical those structures were based on their knowledge. In the other research, the researcher asked 42 native English speakers and 46 native Japanese speakers to read the parallel sentence pairs and reply to causality each of them one by one. E-prime software calculated the time of each answer. The results displayed that the rate of non-agent-implying intransitive verbs was much lower than that of agent-implying intransitive verbs. Moreover, the time for an agent-implying verb pairs was slower than that of non-agent implying verb pairs.

Rezai and Ariamanesh (2012) investigated the learning of English un-accusative and un-ergative structures. The participants were Fifty-five MA students in English literature and 23 MA students whose major was English teaching at University of Yazd. The researcher gave a placement test to all participants. Then, based on the obtained data, the researcher classified subjects into three proficiency levels, including lower intermediate, upper-intermediate, and advanced. Then, the researchers



administered three tests, including production test, slide-show pictures, and a grammatical judgment test. The obtained data demonstrated that the subjects had difficulties related to middle variants with un-accusative verbs and also the intransitive (inchoative Paired Ergative verbs). Furthermore, in the acquisition of un-ergative and inchoative, the role of L1 (Persian) was detected more clearly when the participants encountered problems due to negative transfer from L1. Concerning un-accusatives, the problems show association with the lack of participants' L2 intuitive knowledge.

Abbasi Bagherianpoor, Hosseini, and Rohani (2015) explored Iranian students' the role of causativization in the over-passivization of un-accusative verbs. The subjects were 139 students majoring in English Translation and Literature. The participants took An Oxford placement test and then were divided into three different proficiency levels including; lower intermediate, upper-intermediate, and advanced. In the first phase, the researcher gave the participants a short constructed response task, and the researcher checked their rate of causativization of un-accusatives. In the second phase, to comprehend correct un-accusative, causativization errors, and also over-passivization, the researcher gave a grammatical judgment task to all groups. The obtained data demonstrated that EFL learners had difficulties with causativization as well as non-alternating un-accusatives. Language proficiency had an essential role in the learners' performance at both production and comprehension levels. Additionally, an important correlation between the participants' performances in the causativization and passivization errors with non-alternating verbs was determined. The obtained data showed that EFL learners face serious difficulties in the verbs acquisition, practice in different contexts, and explicit teaching of the verbs structures, and also more exposure to language input can make the situation better.

Alotaibi and Alajmi (2015) tried to find out if 50 advanced Kuwaiti EFL learners have acquired the English passive alternation or not. The researcher gave a Grammaticality Judgment Task (GJT) to the participants to check whether they could differentiate between non-alternating and alternating verbs. The verbs in the study were selected based on their frequency in the Corpus of Contemporary American English (COCA).

The obtained data showed that positive transfer from L1 had a crucial role in the learners' correct answers on the test, regarding the passivize verbs. Besides, the learners' unfamiliarity with some of the verbs in the GJT may have led to wrong answers. However, the participants encountered problems with the verbs which do not passivize. These problems could be regarded as over-generalizing the passivization rule or confusing the non-causative with passive construction. Their total score recommends that the participants have not learned the English passive alternation (total mean=45

Hejazian Yazdi and Rezai (2015) investigated learnability of the argument structures of English transitivity constructions by EFL learners. The researcher gave the Oxford Quick Placement Test to 130 BA and MA students of Yazd University, then the researcher selected 99 students and classified them into three proficiency levels, such as elementary, intermediate, and advanced groups. The researcher employed a Completion Task to test the subjects' production of transitivity constructions. The obtained data revealed that the learners had the best performance in producing transitive structures. Furthermore, she discovered the role of L1 in the learning of those verbs, being optionally transitive in English, but mono-transitive in Persian, most of the EFL learners, tended to use transitive structures.

Dehghan and Rezvani (2016) tried to examine the degree to which similarities and differences between English and Persian influence the use of un-accusative and un-ergative verbs by Persian-speaking learners of English. The researcher identified seven verb categories as the foundation for comparison based on different types of verbs in Persian and English. A forced-choice elicitation test, consisting of 48 items, was used based on these seven verb categories. One hundred sixteen English students with different levels took a proficiency test. The results were more compatible with a transfer at the morphological rather than the argument structure level. Alternating un-accusatives with similar equivalent structures for transitive/intransitive pairs in Persian and non-alternating un-accusatives carrying diverse structures for transitive/intransitive pairs in Persian seem to be the most problematic verb categories for participants. Also the level of proficiency impact was sig-

nificant to recognize correct structures.

Zibin and Altakhanieh (2016) researched acquiring the English causative alternation, several 80 advanced Jordanian EFL learners, whose major was English Language and Literature at Jordan University, took part in the study. The subjects took an English grammaticality judgment task to specify whether they could differentiate between alternating and non-alternating causative/inchoative verbs. The obtained data demonstrated that the learners encountered some problems with verbs that did not alternate and were ungrammatical on the Grammaticality Judgment Task. These problems could be associated with the differences between Jordanian Arabic and English regarding the semantically-based constraints that control the causative-inchoative alternation in JA and English. The subjects transferred the argument structure of verbs in Jordanian Arabic into English without realizing that both languages are different concerning the verbs which are permitted to alternate and those that are not.

Kim, Hwang, and Rah (2017) tried to find out the degree to which EFL learners depend on path-breaking verbs in the production and comprehension of English argument structure constructions. Eighty-two EFL learners in Korea in grades 7 and 10 participated in this study. They arranged English sentences by putting out four verbs with four constructions into the same groups based on overall sentence form and meaning. The data revealed important verb-oriented arranging in grade 7, and more construction-biased arranging in grade 10 when the sentence had a path-breaking verb. After a 4-week extensive reading program, twenty-nine EFL students from Korea and from grades 4 to 7 wrote an English book report in a written production task. The obtained results demonstrated that the more important apply of path-breaking verbs in the ditransitive and resultative constructions than in the caused-motion construction.

By reviewing various researches conducted on argument structure showed that most of these researches have concentrated on one feature of the topic, ignoring the other aspects which were closely related to it. Thus, the current research, in contrast, concentrated on different English verbs' argument structures to investigate how EFL learners

produced them syntactically to fill this gap. Moreover, the researchers examined the effect of the proficiency level on learning these structures.

### **Purpose of the study**

The first goal of this survey was to find out a hierarchical order of difficulty in the production of English verb argument structures among Iranian EFL learners syntactically. The next purpose was to explore the difficulties Iranian EFL learners encounter in producing English verb argument structures. Finally, the present study looked for the amount of the knowledge Iranian EFL learners, their proficiency, have on the argument structures at different levels of proficiency. Based on the mentioned goals, this study tried to find the answer of the following questions:

1- Can a hierarchical order of difficulty be established in producing English verbs' argument structures with different syntactic dichotomies among our Iranian participating subjects?

2- Which one of these syntactic categories, intransitive, transitive, or di-transitive would result in more learning difficulties for our Iranian EFL learners?

3-Does the participants' level of proficiency have any effect on producing English argument structures syntactically?

## **3. Methodology**

### **Participants**

Seventy-five undergraduate BA students, including 63 females and 12 males whose major was English translation and literature at the Jihad University of Ahvaz, participated in this study. Their age range varied between 18 and 25. The participants took an Oxford Quick Placement Test (Allan, 2001), and based on the obtained data; they were divided into three proficiency levels: 30 elementary, 30 lower intermediate, and 15 upper intermediates. All the items in the Oxford Quick Placement test, used by the researcher in the current study, were derived from the standardized tests such as the Cambridge University Examinations Syndicate and the British Council in which lexicon and level of language

difficulty have precisely been controlled. The categorization of the participants was based on Allen's categorization.

**Table 1:** Classification of participants based on the Oxford Quick Placement test

Alte level	Paper and pen test score		Council of Europe level
	Part 1 score out of 40	Part 1 score out of 60	
0 Beginner	0-15	0-17	A1
1 Elementary	16-23	18-29	A2
2 Lower intermediate	24-30	30-39	B1
3 Upper-intermediate	31-40	40-47	B2
4 Advanced		48-54	C1
5 Very advanced		54-60	C2

## Instruments

Participants took a standard Oxford Quick Placement Test (Allan, 2001), then regarding the obtained data, they were divided into three levels of proficiency. The test comprised of two connected sections with 60 multiple-choice items, which assessed the participants' grammar and vocabulary information. A researcher used a translation test to examine how Iranian EFL learners produce English argument structures syntactically. This test formed of 48 items, including 16 transitive verbs, 16 intransitive verbs, and 16 di-transitive verbs, the researcher scored 1 for each correct answer; she assigned 0 for each wrong answer. The researcher selected the verbs in the test according to their frequency in the Corpus of Contemporary American English (COCA).

## Procedure

To gather the necessary data, the following phrases were used. First, 75 students of Jahad University took the Oxford Quick Placement Test, then concerning the obtained data, they were classified into three proficiency levels: elementary, lower intermediate, and upper-intermediate.

Second, a translation test was administered to assess the English argument structures. In this test, the preferred verbs were presented to the participants at the end of each sentence. Then they were asked to use the verbs in the parentheses as the main verb for their English translations. All of the sentences are extracted from monolingual dictionaries or authentic books in linguistics and the related fields in English. The results showed acceptable reliabilities for the tests. The Cronbach alpha indexes of reliability for the Oxford Placement Test, and the translation test were .081, and .091, respectively. The students' translation was checked by two professors, who taught translation courses at the Jahad University of Ahva, to test the validity of the translation test.

### **Data analysis**

Descriptive statistics were used to compare the mean of both syntactic categories and also, One-way ANOVA, Scheffe test was applied via SPSS software (version 18) to check whether there was a significant difference between the three groups or not.

## **4. Results**

The researcher analyzed the data by using the SPSS software (version 18).

**RQ1:** Can a hierarchical order of difficulty be established in producing English verbs' argument structures with different syntactic dichotomies among our Iranian participating subjects?

To answer the first research question and find out whether there is a hierarchical order of difficulty in producing English verbs' argument structures among our participating subjects using syntactic dichotomies, the translation test was administered, and the results were examined. That is, the frequency of the correct and wrong answers to each syntactic group was measured independently for the participants to establish the hierarchy order of syntactic categories. The difficulty order for the three syntactic types established and displayed in Table 1.

Tables 1 represents the order of difficulty among argument structures of syntactic types of all the learners in the translation test.

Table 1: The order of difficulty of syntactic types in the translation test

Verb Types	Right	Correct Mean	Wrong Mean	Wrong	Total
Di-transitive	1081	67.56	119	7.43	1200
Intransitive	1149	71.81	49	3.06	1198
Transitive	1198	74.87	2	0.12	1200

Table 1 displays that di-transitive verbs with 1081 correct answers were the most challenging argument structure, and transitive verbs with 1198 correct answers were the least challenging argument structure in the production test.

### **RQ2: Results of the hierarchy of English verbs argument structures**

The obtained data in Table 1, regarding the second question, “Which one of these syntactic categories, intransitive, transitive, or di-transitive would result in more learning difficulties for our Iranian EFL learners?” demonstrates that di-transitive were the most problematic verbs in the translation test.

### **RQ3: Results of participants’ performance in the translation test and their proficiency**

The third question of this study asked, “Does the participants’ level of proficiency have any effect on producing English argument structures syntactically”? The mean and standard deviation of the learners in the production test was estimated to answer this question. The researcher utilized one-way ANOVA Scheffe statistics to determine whether there were any significant differences between the three proficiency levels or not.

Table 2 compares the mean scores of the three groups of participants for different verb types in the production test. Table 2 shows that di-transitives are the most challenging for all three groups based on the frequency of the correct answers. Transitives and intransitive, cause less problems. The upper-intermediate learners outperformed the other two groups.

**Table 2:** Descriptive statistics of the argument structures at different proficiency levels in the translation test

Argument Structures	Proficiency	N	Mean	SD
Transitive	Elementary	30	15.96	.18
	Lower-intermediate	30	15.96	.182
	Upper-intermediate	15	16.00	.00
Intransitive	Elementary	30	15.16	.74
	Lower-intermediate	30	15.23	.67
	Upper-intermediate	15	15.80	.41
Ditransitive	Elementary	30	13.43	1.85
	Lower-intermediate	30	14.80	1.27
	Upper-intermediate	15	15.60	.63
Grand Mean			15.43	

A mixed between-within groups ANOVA was carried out to find the effect of proficiency on the Iranian EFL learners' difficulty order of transitive, intransitive, and ditransitive verbs in the production test. Table 3 shows the obtained data of the differences between and within-subjects.

**Table 3:** Results of the One-way ANOVA in translation test

Argument Structures	Sum of Square	df	Mean Square	F	Sig.
Transitive	Between groups	2	0.007	0.248	0.781
	Within groups	72	0.27		
	Total	74			
Intransitive	Between groups	2	2.193	4.945	0.010
	Within groups	72	0.444		
	Total	74			
Ditransitive	Between groups	2	27.210	12.909	0.000
	Within groups	72	2.108		
	Total	74			

Table 3 displays that the p-value for ditransitive is less than 0.05; thus, it can be inferred that there is a significant difference between the three



groups, but there are no differences between groups for transitive and intransitive verbs.

## 5. Discussion

Pursuing the objectives of this study examine the problems that Iranian EFL learners face in producing English verbs' argument structures, three research questions were formulated.

The first research question dealt with the hierarchical order of difficulty in producing English verbs' argument structures, the second was associated with the problem which participants face in applying these structures using syntactic dichotomies, and the third question was associated with the impact of proficiency levels in the participants' production.

The analysis of the obtained data from participants in Table 1 showed that the answer to the first question was "yes." di-transitive with 1081 correct answers was the most challenging structure syntactically, along with intransitive carrying 1149, and transitive with 1198 correct answers. Regarding the second research question exploring which of the three English verb kinds (intransitive, transitive, or di-transitive) presenting more challenge for Iranian EFL learners, the results of the current study in Table 1, indicated that the di-transitive kind was the most challenging argument structure to produce by the learners.

The third research question associated with the possible significant impact of EFL learners' proficiency level in producing English argument structures, the obtained data in Table 2, revealed that the upper intermediate outperformed the other two groups.

Overall, the findings of the order of difficulty of the produced syntactic types prove that there was a hierarchical order of difficulty in producing the English verbs' argument structures first with di-transitive, next intransitive, last with transitive verbs. The previous studies have not compared the three kinds of argument structures, including transitive, intransitive, and di-transitive types. The outcome of this research is somehow compatible with Atay (2010) and Zibin and Altakhanieh's (2016) study, which indicated that participants faced problems in learn-

ing causative verbs. Since the causative type of verbs is related to transitivity, the results of the current research and the other two are congruent. The obtained data of the present study is in line with Hejazian Yazdi and Rezai (2015), who stated that EFL learners in producing transitive structures had the highest performance. Whereas, the finding of the study is against Can (2009) and Rezai and Ariamanesh (2012), who claimed that intransitive were the most challenging verbs because it is probably those researches just concentrated on two sorts of argument structures: transitive and intransitive and the production of the transitive verbs.

Another finding of the study that concluded to be crucial, has essential implications, was the participants' proficiency level. The data presented in Table 2 demonstrated that when the proficiency level increases or decreases the number of right and wrong answers changed. That is, the proficiency level or amount of language input had a role in the learners' performance. Regarding proficiency, the conclusion of this research is compatible with Bagherianpoor, Hosseini, and Rohani's (2015) study. They concluded that the language proficiency level was an essential fact in the participants' performance in both production and comprehension levels. In contrast, Can's study (2009) demonstrated that proficiency level harmed the L2 learners' behavior dealing with English ergative (inchoative and middle) structures.

## 6. Conclusions

The outcomes of this study indicated that there was an order of difficulty in the production test syntactically. Di-transitives were the most difficult syntactic categories in production. The results concerning proficiency revealed that proficiency was an important fact in English verbs' argument structures production. Further, in the case of syntactic categories, the upper-intermediate learners fared far better than the elementary and even lower intermediate participants. The results also indicated that the upper-intermediate learners, with more exposure to L2 input, outperformed on the production test than the other two groups. Finally, the findings of this study supported the fact that proficiency had an effect

on producing English verbs' argument structures by our Iranian EFL learners.

The employment of the translation test administered in this study demonstrated that the proficiency of the participants acted as a significant variable in the production test. This fact implies that more exposure to the target language input and more information in the English verb's argument structures conclude in more pleasing performance in using the language under investigation. Exposing to enough input of English verb classes in different syntactic structures orient learners more to the syntax/semantics interface levels.

Our findings reveal that even the learners who have higher proficiency level encounter difficulties with English verbs' argument structures. The finding of this research will probably be considered both in the directions used for the teaching English verbs' argument structures and in the selection of texts for teaching English grammar. Moreover, it seems that such structures have paid no sufficient attention in the educational program. Regarding these results, the suggestion is that EFL teachers need to pay more attention to the argument structures at the lower levels of English language instruction in class. Similarly, teachers should know the syntax knowledge to fully realize the certain errors which their students made and give them the necessary feedback for more orientation and practice.

Besides, the syntactic properties of verbs must consciously be taught and learned. As Schmidt (1990) claims, by paying close attention to noticing and explicit attention to its form, language learners can acquire a grammatical form. Furthermore, Ellis (1990) suggested that teachers in teaching grammar should use Consciousness Raising (CR). In this approach, EFL learners should be aware of the English grammatical form explicitly than giving them repeated practice.

Juff (1998) claimed that class activities, textbooks, and interactions are the main sources to recognize the syntax/ semantics links of verbs and input exposure in L2. Learners should be exposed to enough verbs input in classes in different syntactic structures in order to learn the syntax/semantics interface. Lack of comprehensible input on this area prevents the learners from mastering grammar. Therefore, the teach-

ing team should select difficult verb classes and their relevant syntactic properties by experience, and teachers must focus upon in their teaching process.

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## Appendices

### Appendix 1: Translation test

#### Transitive verbs

- 1- Ali machine gerangheimati darad. (have)
- 2- Ma baraye khandan be eynak niaz darim. (need)
- 3- Mina reza-ro dust dare. (like)
- 4- Ma har-rooz television tamasha mikonim. (watch)
- 5- Man nemitonam shomare telefonesh-ro beyad biyaram. (remember)
- 6- Man hamisheh az yek shampoo estefadeh mikonam. (use)
- 7- Daneshamoozan bayad yad begiran ke chegooneh kareshan-ro saze mandehi konand. (organize)
- 8- Engelestan mosabeghe-ro bakht. (lose)
- 9- Pedaram balaye peleh bod, saghf-ro dasht tamir mikard. (repair)
- 10- Mehdi naghsh-e-ro ta kard. (fold)
- 11- An zan shooharash-ro kosht. (kill)
- 12- Man be pirezani komak kardam ta az khiyaban rad shaved. (help)
- 13- Sandali-ro harkat dadam. (move)
- 14- Livan-ro shekastam. (break)

- 15- Man addreseshoo balad nistam. (know)  
 16- Helicopter bazmandegane tasadoof ro-nejat dad. (rescue)

**Intransitive verbs:**

- 1- Oo Khoshhal benazar mirese. (seem)  
 2- Hava garm shod. (become)  
 3- Bacheh motelalegh be-injast. (belong)  
 4- Ali khob nemishnavad. (hear)  
 5- Maryam be-arami sohbat mikonad. (speak)  
 6- Mamooriat anjam shod. (accomplish)  
 7- Jalase saate daho-nim sobh shoroo mishavad. (begin)  
 8- Khorshid boshte abrha napadid shod. (disappear)  
 9- Ghatar dar saate panzdah miresad. (arrive)  
 10- Latifaha:ye ou hamishe mara: mikhanda:nad. (laugh)  
 11- Bachche bemodate yek sa-at gerye kard. (cry)  
 12- Nima be madrese miravad. (go)  
 13- Khanande mashhoor dar sene chelo-hasht salegi mord. (die)  
 14- Baad-az chand rooz madaram behbod yaft. (recover)  
 15- panjaho-haft maadanchi zendeh dafn shodand. (bury)  
 16- baad-az tofan khaneha viran shodand. (ruin)

**Ditransitive verbs:**

- 1- Oo barayam arezooye khoshbakhti kard. (wish)  
 2- Emsal pedaram behem ghole ye docharkhe dadeh. (promise)  
 3- Oo natavanest hichiziro-az pesarash darigh konad. (deny)  
 4- Man baraye shoma sandali khaham avard. (get)  
 5- Farda barayat keiki dorost khaham kard. (make)  
 6- Az doostam meghdari pool gereftam. (take)  
 7- Polis mashinash-ro barayash peyda kard. (find)  
 8- An mard be hamsarash kadoye tavalod dad. (give)  
 9- behet rastesh-ro migam. (tell)  
 10- Mishe baraye shoma albume jadidam-ro benavazam? (play)  
 11- Ali baraye dostash name:ee nevesh. (write)  
 12- Madaram barayam dastani khand. (read)  
 13- Oo baraye bachcheha khanee derakhti sakht. (build)

- 14- ezdevaj barayeman hazine ziyadi dasht. (cost)
- 15- Mishe baraye shoma mehdari shokolat bekharam? (buy)
- 16- Oo braryam aksi ziba keshid. (draw)