Original Article

The Effect of Functional-based Approach vs. Structural-based Approach on the Accuracy of Certain Grammatical Structures on Iranian EFL Learners

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Abstract

The present study aimed at examining the possible effects of the functional-based approach vs. structural-based approach on the accuracy of certain grammatical structures on Iranian EFL learners. In many textbooks taught in Iran, grammar is reflected as an important tool for the enhancement of language proficiency. Reading the table of contents of many textbooks, one can find out that functions have been written for each grammatical structure. Nevertheless, observing classes, one can see little to no emphasis on the functional use of the grammatical structure. To achieve the main goal of this study, 41 male and female learners with the age range of 15 to 30 were selected from among 60 learners as homogeneous lower-intermediate participants of the study by Oxford Placement Test (OPT). They received different interventions in the two experimental groups of functional ($N = 20$) and structural ($N = 21$) being divided non-randomly based on their OPT scores. The Functional group was taught grammar using the functional approach while the structural group experienced grammar instruction using the structural approach for four sessions. Analyzing the obtained data of role-play tests performed on both groups and at both pretest and posttest using paired samples *t*-test and ANCOVA uncovered that both structural and functional-based approaches can enhance the acquisition of grammatical accuracy.
Keywords: Accuracy, Functional-based Approach, Grammatical Structure, Structural-based Approach

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1. Introduction

The origin of the functional approach dates back to the 1920s when the works of Bronislaw Malinowski, a professor of anthropology at the University of London became distinct. Out of his works, two important concepts emerged: the context of the situation as indispensable for understanding language; and the reference to social and emotive functions in communication (Yalden, 1987). Similarly, the Prague school proposes a functional approach to language study, where language is considered as a tool that plays several essential functions or tasks in the communities which use it. The most prominent among these tasks is the communicative function which aims to serve the needs of a language community if they want to achieve mutual understanding. The Prague linguists did their best to take advantage of their functional views in language teaching.

Moreover, the functional approach to language teaching gained popularity in the 1970s by the time when the council of Europe's book entitled *The threshold level* by Van Ek and Trim (1974) was published. Based on this book, the basic tenets of the functional approach to language teaching and syllabus design are implemented for the first time in the history of language teaching (Germain, 1982). Since then, thousands of works have been carried out on the functional approach to language teaching and syllabus design (Olga & Marianna, 2012).

The emergence of the functional approach to language learning was a strong reaction to the cognitive view of language. In the former one, the focus was upon abstract, formal, and explicit learning of rules. However, in the functional approach to grammar, any description of language should be based on the functions of language. In this view, both linguistic and non-linguistic features of the language are important (Halliday, 1975)

By doing a short survey, the researcher has seen many teachers still follow the structural approach in teaching grammar. In many textbooks taught in Iran, grammar is reflected as an important tool for the enhancement of language proficiency. Learners learn the grammar either inductively or deductively, then they do some exercises, and finally, they do not get involved in doing some communicative activities. This is the trend that is followed in many public schools in Iran. The learners gain a good knowledge of grammar and can verbalize grammar rules quite well, but when it comes to speaking and writing, they tend to make a lot of mistakes, so their performance is low.

The overstressed structural grammar methodology that most EFL teachers and textbooks have been pursuing for years has had the consequence of disregarding other language skills that has great effects on the development of ELL students' language such as writing and practical speaking abilities (Huang, 2010). Unfortunately, this method has hindered ELL students from using language effectively. The need to explore supplementary teaching approaches to upgrade the quality of grammar instruction for learners is critical.

The main point of this study was to seek a proper instructional method in teaching English grammar to ELLs who aim to use grammar functionally. What was highlighted in this paper was to experiment with an approach that has the potential to foster the practical grammar use of ELLs and facilitate their language growth using it. The present study was designed to investigate whether students' achievements in learning grammar could be improved more through the functional or structural approach.

The present study focused on functional theories of grammar, which refer to those approaches to the study of language that see the functions of language and its elements to be the key to understanding linguistic processes and structures. Functional theories of language propose that since language is fundamentally a tool, it is reasonable to assume that its structures are best analyzed and understood concerning the functions they carry out.

This aim can be achieved by the functional approach to second/foreign language instruction. Therefore, the above-mentioned justifications are considered tangible reasons for conducting this investigation. The functional approach to second language/ foreign language instruction is assumed to develop the English language competence of the students. This assumption is based on several studies that have proved the effectiveness of the functional approach on second or foreign language instruction in developing the grammatical and communicative competence of the learners of a language.

This quantitative aimed to find out whether a functional or structural-based approach might encourage teaching grammar to EFL learners through implementing a better approach. In addition, it also sought to highlight the crucial need for educators to distinguish the type of grammar instruction that helps EFL students reach their finest potential. Therefore, from the theoretical perspective, the outcome of this study would help the course designers to apply this approach in designing grammatical materials that

effectively facilitate grammatical accuracy. It might be enlightening for the researchers to see which approach is more effective in teaching grammar.

1.2 Research Questions

Given the purpose of the present study, the researchers formulated the following research questions (RQ) to guide the direction of the research.

RQ$_1$: Does the functional-based approach to foreign language instruction have any effect on the accuracy of certain grammatical structures?

RQ$_2$: Does the structural-based approach to foreign language instruction have any effect on the accuracy of certain grammatical structures?

RQ$_3$: Is there any difference between the effects of functional-based and structural-based approaches on the accuracy of certain grammatical structures?

2. Literature Review

2.1 Functional-based Approach to Teaching Grammar

Functionalists consider language mainly in terms of its usage in the context of situations, emphasizing the meaning that has been conveyed in various situations. In functional research on second language learning, researchers lay more emphasis on how second language learners set about conveying meaning and obtaining their communicative objectives (Mitchell & Myles, 2004).

According to this view, language learning derives from learning how to start and continue the conversation and syntactic structures are formed out of conversations. Indeed, Givon (2005) in his functional-typological syntactic analysis postulated that syntax evolves from features of human discourse. "speakers and linguistic systems move from a discourse-based, pragmatic mode of communication to a syntactic mode" (p. 34). In the process of second language learning, learners require to be scaffolded with functional usage of the language.

In the Oxford Dictionary of Philosophy, Blackburn (1996) defines "function based on logic and mathematics as a map or mapping that associates members of one class with some unique member of another class" (p. 12). In process of second language learning, the map is formed between form and potential meaning. In other words, "meaning-making efforts on the part of learners are a driving force in an ongoing second

language development, which interact with the development of formal grammatical systems" (Mitchell & Myles, 2004, p. 45).

The move from a product to a process in the analysis of inter-language has led second language researchers to examine how learners map form-function relationships (McLaughlin, 1987). Two kinds of views have been carried out to examine the relationship between form and function in the learning of L2. Some researchers in this field claimed that second language learners start from forms and some hold this belief that learners begin with functions (Mitchell & Myles, 2004).

It seems that both form-to-function and function-to-form analyses need to realize the process of second-language learning (McLaughlin, 1987), "that is, researchers need to look at how forms are mapped onto functions, and how functions are mapped onto forms" (p. 74). The functional approach has the advantage of releasing how it is that second-language beginners demonstrate functions they express in their first language such as temporality in a language in which they don't have adequate syntactic and lexical commands.

In functional research in the process of second language learning, researchers deal with how second language learners set about conveying meaning and attaining their communicative goals and objectives (Mitchell & Myles, 2004).

2.2 Form-to-Function Analysis

Huebner's (1983) study is a good illustration of form to function analysis in the learning process. One of the characteristics he investigated in his learner was the use of the form *is a*. This form came from Standard English and was utilized initially to mark topic-comment boundaries. For instance, a participant produced, *<<what I do every day is to water the plants, and what I eat for breakfast are bread and butter>>*. This first usage served a specific function and performed as a discourse marker, not a copular verb. That is, the form identified a discourse boundary. Later the learner started producing the form in its copular verb function in a variety of syntactic forms.

Further, Ellis's (1985) point of view concerning this idea that second language is concerned with the sorting out of form-function relationships is that the second language learners start with forms. He is accurate in mentioning that analyses are required to investigate how forms acquire new functions and lose old ones when they are mapped into the exact functions they serve in the second language.

On the other hand, concerning function-to-form analysis, some researchers have argued that second language findings reveal evidence of the learning of function without learning forms (McLaughlin, 1987).

Hatch (1983), for example, has argued that language learning emanates from learning how to continue a conversation and those syntactic structures develop out of conversations. Rather than thinking that the second language learners initially learn a form and then utilize that form in discourse. Hatch (1983) mentioned that the learners first learn how to start a conversation, how to have interaction verbally, and through this interaction syntactic forms develop.

The argument is made that "conversation precedes syntax, or syntax emerges from pragmatics" (Ninio, 2001, p.433). McLaughlin (1987) maintained that, in establishing a conversation with adults and later with their peers (vertical construction), children need to build the prototypes for later syntactic progress (horizontal construction).

2.3 Given's functional-typological syntactic analysis

As mentioned earlier the main body of functionalist inter-language research has been dependent upon the study of Givon (2005). His main aim is a unified theory of all types of language changes, including second language learning. To obtain this goal, he has proposed an approach named functional-typological syntactic analysis, referring to Larsen-Freeman and Long (1991) " [he] is a functionalist in its view that syntax emanates from properties of human discourse, and typological in its consideration of a diverse body of languages, not simply a single language or language family" (p.32).

Givon (2005) claimed that syntactic change comes mainly from psycholinguistic and pragmatic principles, which are pertinent to speech perception and production in face-to-face communication. These principles are themselves emanated from more underlying human perception and cognition. Although the functional-typological syntactic analysis was initially developed in the realm of historical language change, particularly diachronic syntax; he believed that it can be employed in all situations of language variation and change, such as synchronic variation in adult conversations, the progress of pidgins and change, child language learning, and second language learning.

2.4 Syntactic mode features

Based on the functional-typological syntactic analysis, learning is featured by syntactization (the slow shift from a pre-grammatical to a grammatical mode). However, adults gain access in the pre-grammatical mode, which they apply when the situations are suitable. Other characteristics of language like the historical evolution of languages and creolization are also characterized by the same process of syntactization (Givon &Yang, 1997). In other words, they asserted that in the early second language learning, vocabulary and grammar compete against some features such as memory, attention, and processing capacity. Since second language learners can communicate with vocabulary without relying on grammar but not vice versa. They pointed out that second language learners gaining simple input would learn vocabulary well compared to learners facing a challenge of the two tasks of learning vocabulary and grammar at the same time. Moreover, when vocabulary processing skills are automated, second language learners will learn grammatical structures more quickly.

Givon (2005) postulated that both informal style and learner speech convey meaning through dependence on context while a more formal speech of language depends upon more explicit language, with reduced reliance on contextual meaning. According to Givon (2005), these pragmatic and syntactic styles are the ends of a continuum, rather than separate classifications. In every language and in every communicative circumstance, a special balance of the two modes is preserved. Colloquial language, for example, is governed by the pragmatic mode, whereas carefully planned written language is controlled by the syntactic mode. Givon (2005) defines language learning, language change and language shifts in terms of movement along this continuum.

In the functionalist approach in second language learning, it is believed that plenty of interlanguage structures produced by second language learners cannot be interpreted if attention isn't directed to the speech acts that learners are want to perform, therefore, they resort to the immediate social, physical and discourse context to assist them in conveying meaning (Mitchell & Myles, 2004).

Align with the above paragraph, MacWhinney (2008) proposed three major differences between first and second language learners. Firstly, children learning their first language are also involved in learning about how the world works. In contrast, second language learners are already fully aware of the world and human society. Secondly,

children are capable of depending on a flexible brain that has not been committed to other tasks yet. In contrast, second language learners need to cope with a brain that has already been committed in a variety of ways to the task of making process of the first language. Thirdly, children can depend upon social support from those taking care of them. In contrast, second language learners are generally engaged in social and business commitments in their first language which prevents them from communicating in the new language.

Looking from another point of view, generally, four types of sentence structures exist in language: declarative structure (with the direct function of giving information), question structure (with the direct function of gaining information), imperative structure (with the direct function of making requests), and exclamation form (with the direct function of showing feelings). These four structures are utilized in several varied functions. *It is hot in here* is considered as a declarative sentence that might have a function of making requests (i.e., would you open the window) not providing information. Thus, the map that exists between form and function is not always direct, and in some situations, it is indirect.

2.5 Studies Supporting Given's theory

Linguistically, Newmeyer (2001) asserted that grammaticalization is generally considered in the literature as a specific process that needs explanatory machinery to its field. However, he pointed out on the contrary that "grammaticalization is simply a cover term for certain syntactic, semantic, and phonetic changes, all of which can apply independently of each other" (p. 187).

Regarding Givon's disagreement on pragmatic and syntactic modes of communication (syntactization), mixed findings gained so in second language research (Ellis, 1994: Larsen-Freeman & Long, 1991) "suggesting that it is too early to judge how well the distinction serves researchers as a point of departure of the functionalist analysis of language change"(p. 45).

Sato's (1988) study on two child Vietnamese learners of English indicated little evidence of vertical constructions and scaffolded speeches. Both learners, in contrast to the theory, produced a number of simple complete propositions from the beginning and were capable of doing it without the assistance of interlocutor scaffolding. Evidence of the absence of syntactization, was observed in the learners' failure to make complete relative

clauses and gerundive complements. Sato postulated that interaction may not be enough to make sure full syntactization, and that encounters with written language seem to be essential. With regard to Goven's (2005) ideas second language learners will be functionally encouraged to improve their interlanguages. That is, the drive to communicate more successfully helps second language learners to syntacticize. However, Sato was skeptical whether communicative need by itself is adequate to make sure high levels of inter-language progress.

3. Methodology

3.1 Participants

The sample population of this research was picked out from elementary the criterion for the selection of the participants was based on the administration of a sample of OPT test. The test was administered to sixty learners learning English as a foreign language. Therefore, the first concern was that learners should be homogenous. Out of sixty learners who took the test, forty-one learners were recognized to be at a lower-intermediate level. Randomly twenty of them were regarded as one comparison group and another twenty-one as another comparison group in this research. To avoid disruptions in the educational program of the institutes, the researcher did not randomly select the participants of this research. They were chosen from intact groups, which were already placed into different classes. The forty-one participants of this research were learning English in four classes, each of which had ten students. Other characteristics of the participants can be described as follows:

- They were male and female language learners.
- Their age range ranged between 15 and 30, so they were all adults.
- Learners were learning English in Bijan, Shayan, and Shaygan institutions located in Tehran.

3.2 Instruments

In this research, to ensure that learners were homogenized regarding their language proficiency in this research, the researcher used an OPT test, and their fluency and accuracy in speaking were measured through a speaking interview test at the beginning and the end of the research.

3.2.1 Oxford Placement Test

A sample of the Oxford Placement Test was employed to ensure the homogeneity of the learners concerning their language proficiency. This test includes 200 items and takes 60 minutes to be completed. It does not have a listening section. It has been made by Oxford University and Cambridge Examinations Syndicate.

3.2.2 Role Play Test

This test was administrated both at the beginning and the end of the treatments to see how accurately participants used the structures. The students were put into pairs, each pair performed in a situation already introduced by the teacher. For example, they were asked to speak about a situation that one was inviting and another one was responding to. To measure the accuracy in this study, the percentage of error-free C-units (Robinson, 2003) was used. The scale has been used in many studies. This scale measures the speaking ability of the learners from A2 to C2. It is taken from Cambridge ESOL's Main Suite exams.

3.3 Procedures

3.3.1 Pilot study

To pilot the research, the researcher implemented the research in a similar situation to twenty students in two classes. Initially, at the outset of a piloting procedure, the OPT test, as well as the role-play test, was administered. OPT was used to see whether the learners were at the lower-intermediate level. Having gained assurance about their homogeneity, the role-play test was administered by the researcher to twenty-one students as a pretest. One class was taught the constructions through a structural approach and another class through a functional approach. The role-play test was administered both before and after the treatment, which focused on the grammatical structures of the book. The reliability and validity of the tests as well as the accuracy scale were calculated.

3.3.2 Main study

The researcher experimentally conducted this research. This study involved pretest, treatment, and posttest phases. In this section, all details of how the study was carried out are mentioned.

The OPT sample test was administered to sixty learners learning English in Shayan, Bijan, Shayegan Language Institute in Tehran. Forty-one learners were shown to be homogenous at the same level, so they were selected and divided into two experimental groups. Therefore, two groups contributed to the completion of this research.

The role-play test was administered to all the forty-one learners in the two groups and their voices were recorded by the researcher. The role-play focused on the grammatical structure points covered in the students' textbook. The students were introduced to the situation through slips of papers given to them. Then, they performed the situation and their voice was recorded.

The students underwent the treatment, which lasted for a term. Some experiment teachers taught the two groups through the textbook *Four corners* (Richards & Rodgers, 2014). They taught one based on the structural approach. They put many examples of them on the board with all the related forms. Then, they explained the rule to the students.

3.4 Design

As mentioned already, the current research involved a pretest, a treatment, and a posttest. The treatment was given to two comparison groups, both of which were experimental. The pretest and the posttest (a role-play test) were administered in this research to investigate the possible difference created in accuracy as a result of treatment. The participants of this research were not selected randomly, i.e. the researcher selected the participants from intact groups. All of these features boil down to the fact that this research will be the quasi experimental. Mackey and Gass (2005) point out that if a study involves a pretest, a treatment, and posttest, it can be called a quasi-experimental.

3.5 Data Analysis

The data were collected from the homogeneity test which was the OPT test, the pretest, and the posttest. The obtained data were fitted into SPSS for statistical analyses. Therefore, two sets of data were collected in this research. Furthermore, the data of the pretest and the posttest were derived from two groups that participated in this research. Because of having a pretest and a posttest administered to two groups, the researcher was justified to analyze the data through Ancova (Mackey & Gass, 2005).

4. Results

As pointed out earlier, three tests were used in the current study: OPT, Role-play Task as the pretest, Role-play Task as the posttest. To validate these two tests, a group of 20 lower-intermediate EFL students who had the same features as the main population of the study took part in the pilot study. As shown in Table 1, the results indicated that the reliability for OPT turned out to be 0.91.

Moreover, Table 1 indicates that the inter-rater reliability index for the Role-play Task (used as the pretest) using the 1-5 analytical scale (Council of Europe, 2001) reached 0.89 totally (intra-rater = 0.91, inter-rater = 0.87) estimated through Pearson Product Moment correlation coefficient between the three raters' scores who scored the task.

Besides, according to the results outlined in Table 1, the inter-rater reliability value for Role-play Task (used as the posttest) using the 1-5 analytical scale (council of Europe, 2001) was estimated .90 totally (intra-rater = .92; inter-rater = .88) via Pearson product-moment correlation coefficient between the three raters' scores who scored the task.

Table 1.

Reliability Statistics for the Instruments of the Study

Instrument	Reliability Method	Reliability Value	
OPT	Cronbach's Alpha	.914	
Role-play Task (Pretest)	Intra-rater (Pearson Correlation)	.911	.87
	Inter-rater (Pearson Correlation)	.875	
Role-play Task (Posttest)	Intra-rater (Pearson Correlation)	.923	.88
	Inter-rater (Pearson Correlation)	.880	

4.1 Homogeneity Results Through OPT

OPT was administered to 60 participants to select homogenous lower-intermediate participants. The descriptive statistics, as represented in Table 2, reflects that the mean, median, and mode of the OPT scores are 126.48, 126, and 125 respectively. These central parameters are near to one another indicating that the scores are dispersed normally around the mean.

Table 2.

Descriptive Statistics for OPT Scores (Out of 200)

N	Mean	Median	Mode	SD	Skewness Ratio	Kurtosis Ratio
60	126.48	126.00	125	6.72	.469	-1.184

Based on the results of OPT represented in Table 2, those 41 learners whose scores were between the range of 120-134 were chosen as homogeneous pre-intermediate participants for the present study. Moreover, according to Table 2, the OPT scores have normal distribution because the ratios of skewness and kurtosis over their respective standard errors are not beyond the ranges of +/- 1.96. Figure 1 demonstrates the distribution of the OPT scores on a normal curve.
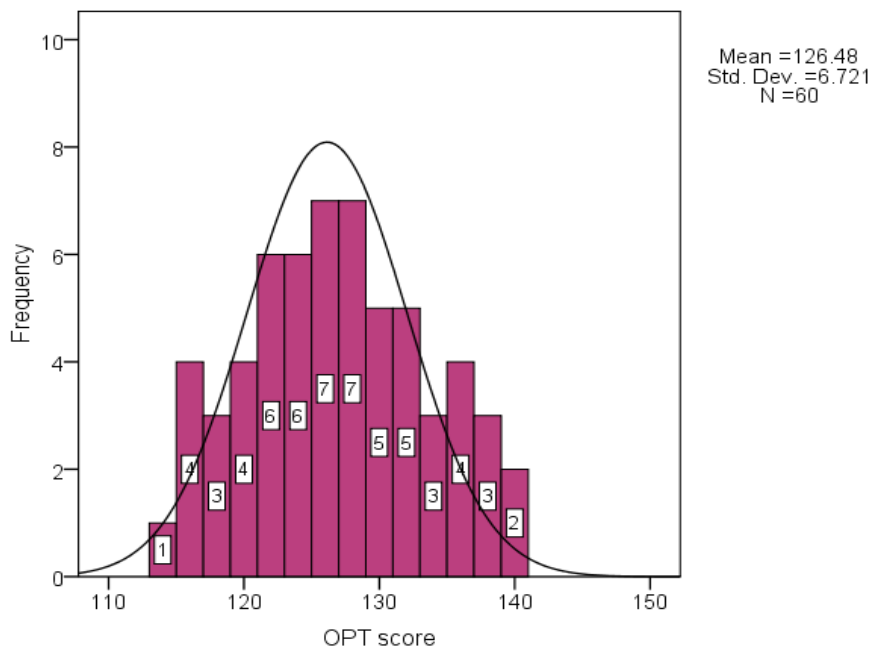

Figure1. Distributions of OPT results

4.2 Research Question 1

The aim of the first research question of this study was to see if the functional-based approach to foreign language instruction has any effect on the accuracy of certain grammatical structures. To answer this research question, a paired-samples *t*-test was conducted. According to Pallant (2013), "a paired-samples t-test is employed when you have only one group of people and you collect data from them on two different occasions or times (pretest and posttest in this study) or under two different conditions"(p.1). Before

explaining the results of inferential statistics, the results of descriptive statistics for the grammatical accuracy scores in the functional group are presented (Table 3). It should be noted here that the oral production of the students was scored three times. The current researcher scored them one time, and another experienced TEFL instructor scored them two times, and finally, the average score obtained from these three sets of scores was computed and used in the main analysis.

Table 3.

Descriptive Statistics and Normality Test for Pretest and Posttest of Grammatical Accuracy Scores (Functional Group; Average of the three Raters' Scores)

Test	*N*	Mean	*SD*	*Std*. Error Mean	Skewness Ratio	Kurtosis Ratio
Pretest	20	2.35	.820	.183	-.355	-.769
Posttest	20	3.25	.917	.205	-.092	-.023

Table 3 shows the mean and standard deviation of grammatical accuracy scores for the pretest ($\bar{x}$ = 2.35, *SD* = .82) and posttest ($\bar{x}$ = 3.25, *SD* = .92) in functional group. Also, as seen in Table 3, the normality of the grammatical accuracy scores gained on both pretest and posttest in the functional group was approved as the ratios of skewness and kurtosis over their respective standard errors do not go beyond the ranges of +/- 1.96.

As Field (2009) believes, four assumptions (interval data, independence of subjects, normality, and homogeneity of variances) should be met before one determines to run parametric tests. The first assumption is not violated because the present data are measured on an interval scale. Bachman (2005) stated that the assumption of independence of subjects is met when "the performance of any given individual is independent of the performance of other individuals" (p.236). The third assumption is the normality of the data which was tested through the ratios of skewness and kurtosis (Table 3). Accordingly, the researcher was justified enough to run paired samples t-test, which is parametric; otherwise nonparametric Wilcoxon signed rank test would be used.

Table 4 provides the results of paired samples t-test for that was used to compare the pretest and posttest of grammatical accuracy measures for the students in the functional group.

Table 4.

Paired Samples T-test for the Pretest and Posttest of Grammatical Accuracy Scores in Functional Group

Gain Score	SD	95% Confidence Interval of the Difference		T	df	Sig. (2-tailed)
		Lower	Upper			
.90	.52	.66	1.143	7.743	19	.000

Table 4 indicates that the paired samples t-test found a statistically significant increase ($t (19) = 7.74$, $p = .000$, $p < .05$) in grammatical accuracy scores from the pretest to the posttest of the students in the functional group; as a result, the researcher rejected the first null hypothesis predicted that functional-based approach to foreign language instruction has no positive effect on the acquisition of grammatical accuracy. So it is asserted that a functional-based approach enhances the acquisition of grammatical accuracy. The gained score in grammatical accuracy was .90 (out of 5) with a .95% confidence interval ranging from .66 to 1.43.

4.3 Research Question 2

The purpose of the second research question of this study was to examine if the structural-based approach has any effect on the accuracy of certain grammatical structures. We utilized the paired samples t-test to investigate this research question comparing the pretest and posttest grammatical accuracy measures for the functional group. The results of descriptive statistics for the grammatical accuracy scores in the structural group are provided in Table 5.

Table 5.

Descriptive Statistics and Normality Tests for Pretest and Posttest of Grammatical Accuracy Scores (Structural Group; Average of the three Raters' Scores; out of 5)

Test	N	Mean	SD	Std. Error Mean	Skewness Ratio	Kurtosis Ratio
Pretest	21	2.19	.86	.189	.405	-.298
Posttest	21	2.57	.88	.192	.717	-.380

Table 5 displays the mean and standard deviation of grammatical accuracy scores for the pretest ($\bar{x}$ = 2.19, SD = .86) and posttest ($\bar{x}$ = 2.57, SD = .88) in the structural group. Further, Table 5 manifests that the normality of the grammatical accuracy scores gained on both pretest and posttest was ensured since the ratios of skewness and kurtosis over their respective standard errors are not beyond the ranges of +/- 1.96.

The results of paired samples t-test for comparing the pretest and posttest of grammatical accuracy measures for the students in the structural group are summarized in Table 6.

Table 6.

Paired Samples t-test for the Pretest and Posttest of Grammatical Accuracy Scores in Structural Group

Gained Score	SD	95% Confidence Interval of the Difference		t	Df	Sig. (2-tailed)
		Lower	Upper			
.38	.62615	.09	.66	2.79	20	.011

As appeared in Table 6, the paired samples *t*-test detected a statistically significant increase (*t* (20) = 2.79, *p* = .01, *p* < .05) in grammatical accuracy scores from the pretest to the posttest in the functional group; consequently, the second null hypothesis that mentioned, "structural-based approach to foreign language instruction has no positive effect on the acquisition of grammatical accuracy" was rejected as well. The researcher could claim that the structural-based approach to foreign language instruction affects the acquisition of grammatical accuracy. The gained score in grammatical accuracy was .38 (out of 5) with a .95% confidence interval ranging from 0.09 to 0.66.

4.4 Research Question 3

The third research question of this study dealt with whether there is a statistically significant difference between the effects of functional-based and structural-based approaches on the accuracy of certain grammatical structures. Analysis of covariance was employed to examine this research question. According to Pallant (2013), ANCOVA is used when we have a two-group pretest/posttest design (e.g. comparing the impact of different interventions, taking before and after measures for each group). The scores on the

pretest are dealt with as a covariate to 'structural' for pre-existing differences between the groups.

Table 7 represents the number of students, mean, standard deviation, skewness ratio, and Kurtosis ratio for the scores in the functional and structural groups. As it's evident from Table 7, the mean of grammatical accuracy in the functional group ($\bar{x}$ = 2.35, *SD* = 0.82) and structural group ($\bar{x}$ = 2.19, *SD* = 0.86) do not look far from each other on the pretest, nonetheless the mean of grammatical accuracy in the functional group ($\bar{x}$ = 3.25, *SD* = 0.92) is noticeably greater than the mean in the structural group ($\bar{x}$ = 2.57, *SD* = 0.88) on the posttest. Besides, Table 7 indicates that the normality of the grammatical accuracy scores for both groups was proved as the ratios of skewness and kurtosis over their respective standard errors are not beyond the ranges of +/- 1.96.

Table 7.

Descriptive Statistics of Grammatical Accuracy Scores on Pretest and Posttest by Group (Scores out of 5)

Test	Group	N	Mean	SD	Skewness Ratio	Kurtosis Ratio
Pretest	Functional	20	2.35	.82	-.355	-.769
	Structural	21	2.19	.86	.405	-.298
Posttest	Functional	20	3.25	.92	-.092	-.023
	Structural	21	2.57	.88	.717	-.380

A Line Chart (Figure 2) was drawn to portray the results of both pretest and posttest of both groups considering grammatical accuracy. The Line Chart shows that the means of grammatical accuracy in the functional and structural groups are very close to each other on the pretest, though, on the posttest, the mean for the functional group is considerably higher than the structural group.

Testing assumptions: According to Hatch and Lazarton (1991), the assumptions of normality, homogeneity of variances, and homogeneity of regression slopes must be examined before applying ACOVA. The normality assumption was tested in the previous section (see Table 7). To assess the assumption of the linear relationship between the dependent variable (posttest of total grammatical accuracy) and the covariates (pretest of grammatical accuracy) in the two groups (functional and structural), the current researcher checked the general distribution of scores for each group (Figure 3). The distribution of

total grammatical accuracy scores indicated that there was a linear (straight-line) relationship for the two groups. Therefore the data for total grammatical accuracy has enjoyed the assumption of a linear relationship.
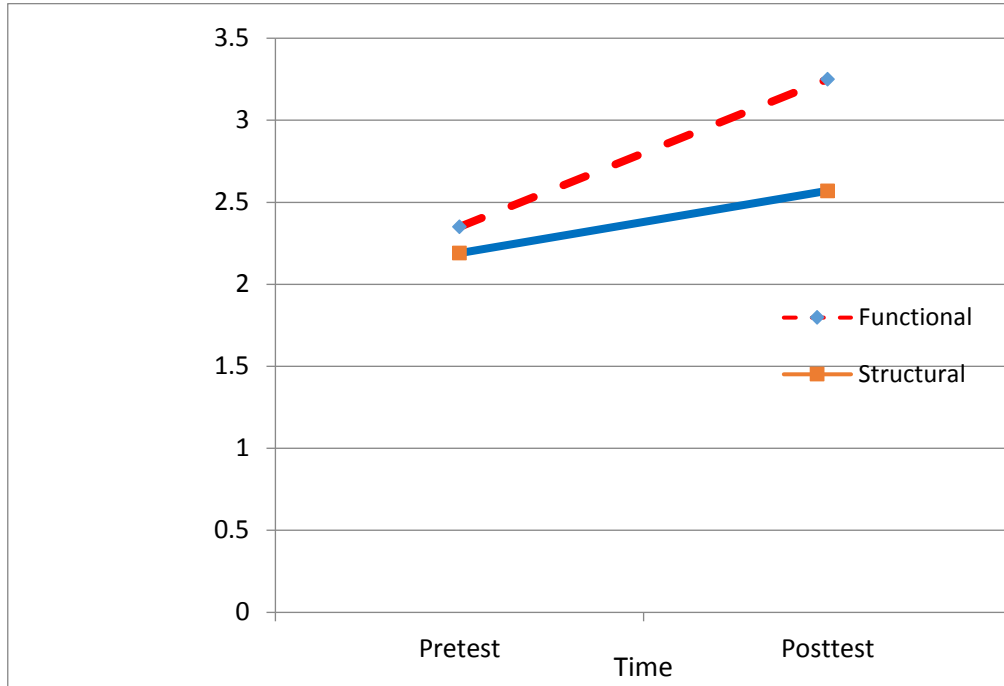

Figure 2. Two groups' means of grammatical accuracy (pretest & posttest)
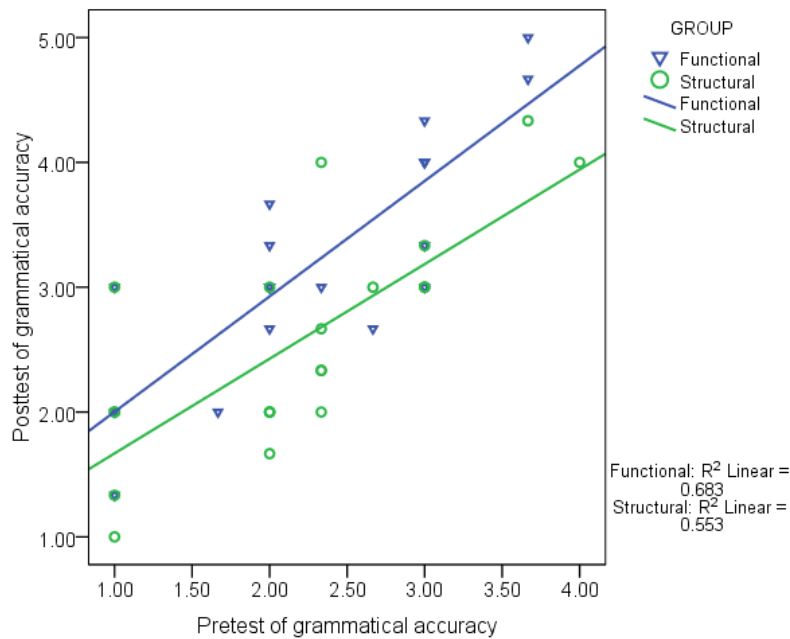

Figure 3. Linearity distribution between the pretest and posttest of grammatical accuracy scores by group

As seen in Table 8, the significant value associated with Levene's test (.73) was less than the selected significant level (.05). For this reason, the homogeneity of variance assumption was not violated for grammatical accuracy scores in the two groups.

Table 8.

Levene's Test of Equality of Error Variances for Grammatical Accuracy Scores by Group

Levene Statistic	*df1*	*df2*	*Sig.*
.123	1	39	.728

The fourth assumption relates to the homogeneity of regression slopes. As laid out in Table 9, the results showed that the significance level of the interaction (GROUP * PRETEST) between the group and the pretest of total grammatical accuracy was above .05 ($F = .59$, $p = .45$, $p > .05$) and so statistically significant, leading to the conclusion that the assumption of homogeneity of regression slopes was not violated for the pretest and posttest of grammatical accuracy scores in the two groups.

Table 9.

Homogeneity Test of Regression Slopes for the Effect of Type of Approach for Grammar Instruction on Grammatical Accuracy by Group

Source	Type III Sum of Squares	*Df*	Mean Square	*F*	*Sig.*	Partial Eta Squared
Corrected Model	24.255a	3	8.085	24.884	.000	.669
Intercept	4.657	1	4.657	14.334	.001	.279
PRETEST	19.532	1	19.532	60.114	.000	.619
GROUP * PRETEST	.191	1	.191	.588	.448	.016
Error	12.022	37	.325			
Total	381.667	41				
Corrected Total	36.276	40				

A one-way ANCOVA was utilized to compare the effectiveness of functional-based and structural-based approaches on grammatical accuracy. The independent variable is a type of approach for grammar instruction (Group), and the dependent variable is grammatical accuracy. Participants' scores on the pretest of grammatical accuracy are used as the covariate in this analysis. The results of ANCOVA are summarized in Table 10. After adjusting for the grammatical accuracy scores on the pretest, there was a significant

difference between the two groups' grammatical accuracy scores on the posttest, F (1, 38) = 9.39, p = .000, $p < .05$, partial eta squared = .20 (Table 10); accordingly, the third null hypothesis of the present study that states, "There is no statistically significant difference between the effects of functional-based and structural-based approaches on the acquisition of grammatical accuracy" is rejected and so it can be claimed that functional-based approach is more effective than structural-based approach on the acquisition of grammatical accuracy.

Table 10.

ANCOVA: Tests of Between-Subjects Effects of Type of Approach for Grammar Instruction on Grammatical Accuracy by Group

Source	Type III Sum of Squares	*df*	Mean Square	*F*	*Sig.*	Partial Eta Squared
Corrected Model	24.064	2	12.032	37.438	.000	.663
Intercept	4.922	1	4.922	15.316	.000	.287
Pretest	19.347	1	19.347	60.199	.000	.613
GROUP	3.020	1	3.020	9.395	.004	.198
Error	12.213	38	.321			
Total	381.667	41				
Corrected Total	36.276	40				

Besides, as it is observable from Table 10, there was seen a strong relationship between the pre-intervention and post-intervention scores on the total grammatical accuracy, as shown by a *p*-value of .000, F (1, 38) = 60.20, and a partial eta squared value of 61.

5. Discussion

In the literature of language learning and teaching, a plethora of studies have been done on the role of the functional approach to teaching English. In this section, the finding of this research will be compared and contrasted with the findings of other studies in the literature.

Dalrymple (2001) and Marin (2011) demonstrated in their studies that functional grammar helps in attaining the notion of grammatical accuracy among second/foreign language learners. The finding of this research, therefore, is congruent with the findings of

the studies done by Dalrymple (2001) and Marin (2011). Crystal (2003) states that functional grammar concentrates on the rules which rule verbal interaction which is viewed as a form of cooperative activity and focuses on the rules of syntax, semantics, and phonology which govern the linguistic expressions that are used as instruments of this activity.

These results obtained in this research support the research findings of several scholars who investigated the effectiveness of the functional approach to second language instruction (e.g. Harley, 1989; Lund, 1997; Day and Shopson, 2001; Mohan and Beckett, 2003; O'Halloran, 2003; and North, 2005; Martin, 2011). The findings of all these studies emphasize and Beckett, 2003; O'Halloran, 2003; and North, 2005; Martin, 2011). The findings of all these studies emphasize the superiority of the effectiveness of the functional approach in acquiring a second language.

A plethora of research has been done on using the functional approach to second language instruction (e.g. Cullen, 1996; Day & Shapson, 2001; Lund, 1997; Mohan & Beckett, 2003). The result of this research is consistent with the outcome of these studies which has centered on a common result that the functional approach to second language instruction has been the most effective in helping language learners use the language appropriately during their communicative interactions in a variety of real-world situations which can be utilized for teaching grammar interactions in a variety of real-world situations which can be utilized for teaching grammar.

Huang and Morgan (2003) created revolt against the formalized view of language, which is presented by the structural and the transformational schools of grammar. In this study, they showed that functional was more effective in teaching grammar. The result in this study also demonstrated that the functional approach was more effective in teaching grammar compared to the structural approach.

6. Conclusions and implications

Although many teachers in my country devote a lot of attention to the role of traditional approaches to teaching grammar observing language classes, one can easily notice that still teachers formally teach grammar even though they believe in the communicative and functional approaches to teaching grammar. They assign lots of

grammatical exercises to students since they believe that students should have a conscious awareness of grammatical structures.

Furthermore, most of the grammar lessons in textbooks today are based on notions of traditional approaches to teaching grammar. Grammar is presented in such a way that learners would learn different parts of a sentence.

As a consequence, learners do not learn the functional purposes which grammatical structures express. Learners fail to understand the situations in which they should use the grammatical structures. They learn a grammar point without understanding its function in a given situation.

According to Weaver (1996), the grammar studies have revealed that the formal study of grammar does not lead to better reading, speaking, writing, or editing grammar studies have revealed that the formal study of grammar does not lead to better reading, speaking, writing, or editing.

The following can be stated as the following implications of this research:

1. The English language teachers are recommended to apply the functional approach in teaching all the linguistic aspects including grammar.

2. English language teachers should help the learners to acquire and develop a holistic and comprehensive knowledge of the language rather than concentrating on discrete unrelated items of the language.

3. English language teachers should help the students to see grammar as a comprehensive term that incorporates all the branches of linguistics in the process of relating form-to-meaning and meaning-to-situation, which is the main concept of functional grammar.

4. The English language teachers should develop communicative competence in their students. Communicative competence is defined as the ability to produce and understand ideas appropriate to the social contexts in which they occur that leads to the accuracy of the communication process which is achieved by the use of accurate structure. The development of communicative interaction is one of the most important principles of applying the functional approach to second language instruction. Therefore, instructors of the English language should base their instruction on interactive tasks such as role-play, group discussion, information gap, etc.

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