

Exploring the Efficacy of Instruction and Its Interaction with Linguistic Complexity: Explicit or Implicit Form-Focused Instruction?

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ABSTRACT

A classroom-based study was designed to compare the effectiveness of explicit FFI and implicit form-focused instruction (FFI) for learning two English verbs forms and to investigate whether their effectiveness varies according to linguistic complexity. Specifically, two intact intermediate English grammar classes of thirty-two female nursing students were assigned to explicit FFI and implicit FFI and were taught two English verb tenses: simple past (SP) and present perfect (PP). Participants' performance was then measured on a discrete-point task (DPT) and a writing task (WT) at three periods of time: before the instruction (pretest), after the instruction (posttest1), and six weeks following the instruction (posttest2). Major findings were (i) each of the explicit FFI and implicit FFI instruction was effective for their group over time, (ii) no statistically significant differences between the two groups were found in the effect of instruction on the DPT and the WT, (iii) no significant differences were found between the explicit FFI group and the implicit FFI group on the SP in the DPT and the WT, (ix) the explicit FFI group significantly outperformed the implicit FFI group on the PP in the DPT, and (v) the performance of the two groups diminished significantly on the PP in the writing task.

Keywords: explicit/implicit instruction; form-focused instruction; second language learning; grammar instruction; linguistic complexity; efficacy of grammar instruction

Grammar instruction has always held a central position in second/foreign language (L2/FL) teaching (Ellis, 2002b). Traditionally, grammar instruction was directed toward accuracy of form through direct grammar rule teaching followed by repetitive, decontextualized exercises (see Larsen-Freeman, 2015 for review). This approach was, however, criticized on the grounds that learning discrete linguistic items and grammar rules do not develop learners' communication skills. Thus, a more communicative and interactive approach to grammar instruction was advocated (Spada & Lightbown, 2008). The latter approach emphasizes an inextricable link between form and meaning that arises within the context of communication and meaning-focused activities (Richards & Rippen, 2014). Accordingly, English language teachers have been encouraged to incorporate grammar in communication and allocate more target language use to students to maximize the effectiveness of their language learning.

Paradoxically, the realities of many language classrooms in some foreign language contexts have remained unchanged (Ellis, 2008). Some traditional practices in grammar instruction still persist, such as explicit explanations of linguistic items in a non-integrative manner (Larsen-Freeman, 2015) and the existence of synthetic, predetermined grammatical syllabi (Ellis, 2008). For this reason, there still exists a need for research to investigate the effects that explicit form-focused instruction (FFI) and implicit FFI have on grammar learning.

LITERATURE REVIEW

The term form-focused instruction refers to different types of instruction used to teach language form (Ellis, 2008). The present study focuses on two types of FFI, namely explicit FFI and implicit FFI. According to Housen and Pierrard's (2005) characterization of explicit and implicit instruction, explicit FFI "directs attention to target form, is predetermined and planned, is obtrusive, presents target forms in

isolation, involves controlled practice of target form,” whereas implicit FFI “attracts attention to target form, is delivered spontaneously, is unobtrusive, presents target forms in context, makes no use of meta language, and encourages free use of the target form” (cited in Ellis, 2008, p.438).

Research into the effectiveness of explicit and implicit FFI has yielded mixed results. A number of laboratory experiments and classroom-based studies have found explicit FFI to be more effective than implicit FFI in L2 language production by producing larger, more durable language gains (see Goo, Granena, Yilmaz, & Novella, 2015; Norris & Ortega, 2000 for review). On the contrary, other experimental and classroom-based studies have found that implicit FFI is more useful than explicit FFI (see Larsen-Freeman, 2015; Loewen & Sato, 2017 for review). Still other research studies (e.g., Andringa, Gloppe, & Hacquebord, 2011; Soleimani, Jahangiri & Gohar, 2015) have found both types of instruction to be equally effective in developing communicative skills.

The effects of explicit FFI and implicit FFI on language development have been also examined in connection with the complexity of grammatical form. The term complexity is often associated with a multiplicity of different meanings and considerations, including psycholinguistic, linguistic, and pedagogical (Pallotti, 2015). The present study focuses on linguistic complexity, which involves formal complexity and functional complexity (DeKeyser, 2005). By definition, linguistic complexity refers to the number of structural and semantic features of an individual linguistic form. For example, some grammatical features have a one-to-one mapping between meaning and form (1 form-1 function as in the English plural marker -s). Such structures are described as less complex to learn compared to those that have multiple mappings between its form and function (1 form-n functions; n forms-1 function as in the English present perfect tense) which are considered more complex to learn (Bulte & Housen, 2012)

Research into FFI has examined the effectiveness of different instruction methods on simple and complex grammatical features. Mixed results have been produced. Specifically, Ellis (2002a) reviewed a number of FFI studies

and found that EI was only effective for simple rules, whereas II was more effective for complex rules. However, in a recent meta-analysis review by Spada and Tomita (2010), the effects of EI were found to be statistically more significant than II on simple and complex features. Similar findings were observed in research studies in which EI was equally useful for simple and complex features (e.g., Robinson; 1996; Housen, Pierrard, & Vandaele, 2006). For instance, Robinson (1996), for example, studied the differential effectiveness of instructed, conscious learning of rules and implicit, incidental acquisition of rules. Participants in the instructed group outperformed participants in the II on easy rules, but II participants did not perform better than EI on complex rules. The finding that II was not significantly effective for complex rules is consistent with DeKeyser (1998) who reported that straightforward, categorical (simple) rules were learned significantly better through explicit-deductive learning, whereas fuzzy, rules were not significantly promoted through implicit/inductive learning. Accordingly, he suggested that concrete structures with clear, observable patterns could be taught implicitly; however, abstract linguistic features which do not have recognizable and concrete patterns could not be taught implicitly but require more EI.

One language feature that has received considerable attention in SLA research is the English present perfect tense (Kearns, 2011). ESL Teachers often notice that present perfect (PP) is one of the most semantically complex verbs to teach and learn. Its complexity is attributed to its formal and semantic intricacies (Park, 2016). Broadly, the PP is used to refer to an event or situation that took place in the past but has present relevance. Formally, the PP is structurally complex, formed by the auxiliary has or have and the past participle of a lexical verb (e.g., sing-sung). Despite the number of the structurally complex strategies involved in its formation, ESL teachers believe that it is more problematic to teach when to use the PP than how to form it (Kearns, 2011). The link between the anteriority and current relevance expresses an array of meanings: (i) resultative (e.g., He will not eat lunch because he has already eaten.), (ii) continuative (e.g., I have lived in Cyprus since 2003), (iii) experiential (e.g., I have never been to Africa), and (iv) recent past (e.g., The prime minister has resigned recently).

Its rich semantic nature is a source of confusion for many foreign language students (e.g., Park, 2016; Chareonkul & Wijitsopon, 2020). They are often unable to understand it and use it appropriately.

What further heightens the complexity of teaching and learning the PP is when it is studied in contrast to the simple past tense (SP) (Khan, 2011). In general, the SP refers to an event that happened at a definite time in the past. Its semantic reference to anteriority overlaps with the PP although the latter differs from the SP tense with respect to its current relevance (Park, 2016). This common semantic feature may be problematic for students depending on the interference of the first language (L1) with the second language (L2) (Carless, 2008). That is, when L1 and L2 possess equivalent grammatical features, the positive transfer of L1 knowledge to L2 serves as a scaffolding tool in L2 learning (Carless, 2008). In consequence, EFL learners will find an equivalent L2 grammatical feature comparatively easy to learn. However, when L1 and L2 display grammatical differences, the absence of an equivalent L1 grammatical feature in L2 will bring about more difficulties in mastering the complex grammatical feature of L2 (Swan & Smith, 2001). In the latter case, students may thus commit overgeneralization errors (i.e., the overuse of PP in context where other tenses are expected to be used) or under generalization errors (i.e., the absence of PP in contexts where it is expected) (Bardovi-Harlig, 1997). For example, in a study on the proper production of present perfect in undergraduate Lebanese students' writings, Tahseldar, Kanso, and Sabra (2018) found that the present perfect was the verb form least used properly in their writings, and the simple past tense was mistakenly overused in the place of the present perfect. These findings demonstrate the difficulties that Arabic-speaking students encounter in mastering the PP tense. As mentioned earlier, this could be attributed to the absence of a corresponding English present perfect form in L1. Given the complexity of teaching and learning PP in contrast to SP, the PP tense and the SP tense were chosen as the two target forms of the study.

Although the link between instruction and the nature of grammatical features has been already established in the literature, it has remained

unclear due to two shortcomings in SLA/FL research, namely the ambiguous definition of L2 complexity and the use of general measurements for broad grammatical categories (Bulte & Housen, 2012). In an attempt to address these limitations, Bulte and Housen have called for the use of more specific measures for individual grammatical forms. Taking Bulte and Housen's methodological recommendation into consideration, the present study is designed (i) to explore differential effects of the explicit FFI and the implicit FFI in improving students' language ability to use two grammatical features in both controlled practice and writing task and (ii) to determine whether their effects vary depending on the linguistic complexity of the two grammatical features.

METHOD

Design

A quasi-experimental design was used for the present study in which two non-randomly selected English grammar classes were assigned to either explicit FFI or implicit FFI. The explicit FFI group included 17 students, and the implicit FFI group consisted of 15 students. These two intact groups were tested at three points of time to measure their progress: immediately before the instruction (pretest), immediately after the instruction (posttest1) and after a delay of 6 weeks (posttest2), each time by using measures of a discrete-point test and a writing task. The two English grammatical features chosen for this study were the simple past tense and the present perfect tense, in order to find out if the effectiveness of the explicit FFI and the implicit FFI depends on the type of the grammatical feature. Thus, this design allowed the researcher to explore (i) any differential effects of the explicit FFI and the implicit FFI on the learning of two grammatical forms and (ii) whether the effects of the two methods of instruction vary depending on the nature of the grammatical features. Two specific research questions motivating the present study were as follows:

RQ1. Is there a difference between the effects of the explicit FFI and the implicit FFI on the learners' performance on the discrete-point test (DPT) and the writing task (WT) in the short and long term?

RQ2. Do the effects of explicit FFI and implicit FFI vary with the nature of the selected verbs?

Context and Participants

The study took place at a public university in the Kingdom of Saudi Arabia. The university provides undergraduate and postgraduate health science programs that use English as the primary medium of instruction. Since Saudi students admitted to study in these programs do not speak English as their first language, the university offers an intensive English language program to provide them with the language skills (i.e., oral communication, reading, and writing) that are essential for studying and communicating in an English-medium university. Two intermediate English grammar classes of thirty-two female nursing students were chosen for the study. The participants were all relatively homogeneous with respect to their age, cultural background, native language, and English language abilities. Specifically, they were all Saudi students, were all aged 18 or 19, spoke Arabic as their first language and were identified as intermediate learners. The participants' English proficiency level was determined by their scores on the University's English Performance Test (EPT) taken after their university admission. In the first academic term, an intermediate-level English grammar course was designed according to a structured syllabus that covered all the English verb tenses and wh-question formation. The course was offered five times a week.

Instruction

One group was exposed to the explicit FFI and the other group to the implicit FFI. In each group, different conditions for the explicit FFI and the implicit FFI were set to create between-group variations. However, language input was held constant between the two groups to ensure internal validity. More specifically, ten lessons (45-50 minutes) were designed for each grammatical feature. Each lesson treated a specific grammar point for the simple past tense and the present perfect¹ as set out in the course

syllabus. The lessons comprised a wide selection of passages which was rich in the target grammatical features and covered a variety of topics. The SP lessons specifically dealt with topics about past events, achievements, or discoveries (e.g., A Deadly Flu, The First Cell Phone, J.K. Rowling), and the PP lessons involved topics about general life experience or global concerns (e.g., Neighbours in My Apartment Building, A TV Interview with a Famous Actress, Global Warming). The passages were followed by a number of questions that differed for the explicit FFI and implicit FFI groups. Although the target grammatical features were presented in meaningful textual context for both groups, the questions for the explicit FFI group were grammatical in nature, ranging from receptive (observation of sentences and answering multiple choice questions about them) to more productive (fill in the blank). For the implicit FFI group, however, the questions were aimed at checking comprehension, with a focus on meaning (see Appendix A). The same lessons were used with both groups but were delivered either explicitly or implicitly depending on the group the students belonged to.

In the explicit FFI group, the lesson began with a short statement clearly introducing the point(s) to be taught. Next, a specific grammar rule(s) was presented on the board and explained in small steps to develop an explicit understanding of the target form. Several examples were provided to clarify the rule. After the explanation stage, students engaged in a structured input activity that drew their attention to the target form in the input. They were specifically given a passage with a set of questions about the target form to complete individually by applying the rule taught in the lesson. As the students finished the exercise, they were given turns to respond with (and explain) their answers to check for their understanding. When the students gave wrong answers, they were interrupted to be corrected and retaught the rule, when necessary, on the grounds that immediate and explicit feedback would prevent error fossilization. The same procedure was followed in the other lessons.

In the implicit FFI group, students were not taught the grammar rules. Instead, their attention was directed onto the target forms while they

¹In the chapter on the simple past tense, the focus was on the following grammar points: expressing past time; forms of the simple past (statement, negative, question, and short answer); spelling of -ed forms; the principal parts of a verb (regular and irregular); common irregular verbs; expressing past time using time clauses. In the present perfect chapter, the primary focus was on these grammar points: past participle; present perfect with since and for; negative, question and short-answer forms;

present perfect with unspecified time; simple past vs. present perfect.

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were performing focused tasks that were designed to provide context for the use of the target forms. Specifically, they were given the same passages of the explicit FFI group and were instructed to answer the comprehension questions in small groups. The students were encouraged to work collaboratively and communicate with one another, exchange information and agree on a task solution. When the task was completed, the students were allowed enough time to share their answers with the class. When an error was committed, the teacher used recasts (reformulating part of the incorrect word or phrase) to show the correct form without explicitly identifying the error on the bases that what was being communicated by the students was more important than the accuracy of the target form being used. The same teaching approach was adopted for the other lessons.

Measures

The ability of the explicit FFI and implicit FFI groups to use the target grammatical features was measured with two tests: (1) a controlled discrete-point test (DPT) and (2) a writing task (WT). These measures were hypothesized to test two types of knowledge. The DPT was used to tap into explicit knowledge which involves “explicit, that is, deliberate and conscious, learning of grammatical information” (Suzuki & DeKeyser, 2017 p.752). Three different versions of the DPT were designed to measure the explicit knowledge of the participants at three different points of time (i.e., before the instruction, after the instruction, and six weeks after the instruction). Each test version consisted of multiple choice and gap fill questions. The test items were taken from previous exams that were written by course coordinators, proofread by course supervisor, and piloted with other nursing students who took the same course in previous years. The test items which assessed different grammar points covered in the simple past and the present perfect chapters were selected and equally distributed among the three versions. The participants were given 50 minutes to complete each test.

The first section in the DPT consisted of a set of twenty multiple-choice questions about the two grammatical features (10 MCQs for the simple past and 10 MCQs for the present perfect). In the MCQ section, participants were asked to select only one correct answer from the four choices offered as a list. For example, “I bought

a new dress yesterday. My friend _____ my dress yet. A. did not see B. haven’t seen C. saw D. hasn’t seen.”

In the fill-in-the-blank section, students were given two short passages to put the verbs in brackets into the correct simple past tense or the present perfect. The two passages consisted of a total of 10 blanks (5 blanks for each grammatical feature). Each passage was selected appropriately to match participants’ intermediate English proficiency level. One example is as follows:

My name is Surasuk Jutukanya prateep. I am from Thailand. I (be) _____ at this school since the beginning of January. I (arrive)_____ here January 2nd. Since I (come)_____ here, I (do)_____ many things, and I (met)_____ many people.

The second test was an unplanned WT. The purpose of the unplanned WT was to measure implicit knowledge, which accounts for students’ ability to use the target features. A written production task, rather than an oral task, was selected because it is claimed that “the effects of instruction are expected to affect written proficiency before they do oral proficiency” (Andringa et.al, 2011, p.886). This could be explained by the potential interference of certain variables (e.g., time pressure and fear of speaking) that may prevent students from using and applying their explicit knowledge in oral activities and, as a result, it may moderate the effects of instruction on L2 learning. In contrast, a written production task does not exert pressure on students to respond within a given short time limit, so students have sufficient time to respond and retrieve their explicit knowledge of the target features. This increases the chance to find instructional effects on L2 learning.

Accordingly, it was decided that a writing task was an appropriate measurement tool for the present study. Three writing topics that stimulate the use of the two grammatical features were carefully selected and given to students at specific points in time (before the instruction, immediately after the instruction, and 6 weeks following the instruction). The topics were as follows: (1) write about someone you know and something interesting about his/her life; (2) describe your experience of learning English from high school up to the present, and (3) describe a past hobby that you continue to enjoy. Students were instructed to

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write a short paragraph (5-8 sentences) in a fifty-minute session but were not explicitly told or guided to use the simple past or the present perfect tense in their paragraphs.

DATA COLLECTION AND ANALYSIS PROCEDURES

In this study, I acted as both the teacher and the researcher. That is, I gave instruction to the two experimental groups and collected data. All the data were collected over a period of three months. In the first week, I described the research project to the students and obtained their consent to take part in the project. Then a pretest and a writing task were given to the two groups during class time to identify any differences in their level of knowledge of the two verb forms before the period of instruction. In the second week, I taught the two verb forms to the two groups for a period of 4 weeks. Immediately after the period of instruction, the two groups were tested using measures of DPT (Posttest1) and another writing task in order to determine the amount of learning the two groups had acquired and, thus, compare the efficacies of the two methods of instruction in teaching the two verb forms in the short term. After that, the two groups continued to receive the explicit FFI and the implicit FFI on other grammar topics (i.e., past perfect and wh-question formation) which were not the focus of the study. After a delay of six weeks, the two groups were given another posttest (Posttest2) and a writing task in order to determine whether the knowledge of the two verb forms had been more-or-less well-integrated in learners' "inter language" and, thus, examine the durable effects of the explicit FFI and the implicit FFI in the long term.

With respect to scoring procedures, each discrete-point test (pretest and posttests1 & 2) was worth 30 points. In each test, the multiple choice section consisted of twenty MCQs (worth 20 points). One point was assigned for each correct response; incorrect responses or no responses received a zero. The fill-in-the-blank section consisted of ten blank spaces (worth 10 points). One point was assigned for each correct response; incorrect responses, including misspellings or no responses, received a score of zero.

As for the writing task, each paragraph was read and marked by the teacher-researcher for

grammatical accuracy. Grammatical accuracy refers to the accuracy of the form as well as the production of the structurally correct and meaningful use of SP and PP in context.

Accordingly, the writing tasks were scored by counting the total number of the correct occurrences of the two verb forms in context. Each correct use of the SP or PP structure was given one mark. No marks were given to verb form errors (e.g., I teached myself piano.), wrong verb form use (e.g., I studied English since September), subject-verb agreement errors (e.g., my parents has travelled to many countries.), and spelling errors in verb forms (e.g., I tried to practice swimming when I was a child). Other grammatical mistakes that were irrelevant to the focus of the study were disregarded. Before marking the students' paragraphs, the teacher-researcher involved an experienced native-English speaking writing teacher to mark a random sample of the paragraphs to determine the reliability of the marking scheme.

As for statistical analysis, repeated-measures ANOVA tests were conducted to address the purpose of the study which is (i) to determine whether there were significant main effects of time and instruction on the test scores across the two post-tests and (ii) to find out whether the effect of instruction varies according to the linguistic complexity of the two verb forms.

First, means and standards deviations for the explicit FFI and implicit FFI group separately on the DPT and the WT at the three time periods were computed. Then matched pair t-tests was performed to determine how each group performed separately on DPT and WT at each point of time. However, to compare the performance of the two groups on all tests across time, the different pretest mean scores of both groups should be adjusted. This is because the two groups did not begin the period of instruction with the same level of knowledge of verb forms. In order to adjust for the pre-existing differences in the level of knowledge at the time of the pretest, the pretest scores were used as covariate (a variable that a researcher seeks to statistically subtract the effect of pretest when measuring the effects of instruction in Posttest1 and Posttest2 (Vogt, 1999). In addition, time was used as a within-subjects factor, instruction as a between-subjects factor,

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and the test scores (Posttest1 and Posttest2) as dependent variables.

In the output data, within-subjects effects tests were analysed to study the effect of time on the DPT and WT scores, whereas between-subjects effects tests to explore the effect of instruction on the DPT and WT scores across the two post-tests.

When interpreting the results of the study, F-values (sample mean difference) and p-values (statistical significance) were examined to determine whether time and instruction had significant or non-significant effects on the test scores for the two groups. A large F-value with a p-value less than 0.05 (typically ≤ 0.05) implied a significant effect. However, a small F-value with a p-value greater than 0.05 (> 0.05) indicated a non-significant effect. Furthermore, descriptive statistics (means and standard deviations) of the adjusted test scores and dependent t-tests (comparing the means between two related groups on the same dependent variable) were calculated for the two groups.

RESULTS

RQ1: Is there a difference between the effects of the explicit FFI and the implicit FFI on the learners' performance in the DPT and the WT in the short and long term?

Table1. Descriptive Statistics and Matched Pair t-test for Performance of Each Group on DPT and WT at Three Time Periods

Measure	Instruction	Pretest M (SD)	Post1 M (SD)	Post2 M (SD)	Matched pair t-test		
					Pretest-Post1	Post1-Post2	Pretest-Post2
DPT	Explicit	14.94 (2.63)	20.41 (3.87)	19.11 (3.77)	p < 0.0001*	0.1	p<0.0001
	Implicit	13.06 (2.404)	17.466 (3.642)	18.6 (3.439)	p < 0.0001*	0.37	p<0.0001*
WT	Explicit FFI	2.88 (0.60)	4.29 (1.75)	4.35 (1.49)	0.0025*	0.9	0.001*
	Implicit FFI	2.13 (1.30)	4.13 (1.92)	3.13 (2.35)	0.0019*	0.55	p < 0.0001*

Difference between Groups' Performance on DPT and WT across Time

Adjusted mean scores and standard deviations for the performance of the explicit and implicit

Table2. Adjusted Means and Standard Deviations for Explicit and Implicit FFI on DPT and WT Scores on Posttest1 and Posttest2

Measure	Time of Measurement	Explicit FFI M (SD)	Implicit FFI M (SD)
DPT	Posttest1	19.64 (0.78)	18.33 (0.83)
	Posttest2	18.45 (0.78)	19.35 (0.83)
WT	Posttest1	4.11 (0.45)	4.34 (0.48)
	Posttest2	4.03 (0.44)	3.49 (0.47)

Performance of Each Group on DPT and WT at Three Time Periods

As can be seen from Table 1 below, each group separately improved and had significantly higher mean scores at Post1 than at Pretest ($p < 0.0001$). In the six-week period following the instruction, their performance remained relatively steady. That is, the mean score of the explicit FFI group at Post2 decreased non significantly by 1, while the mean score of the implicit FFI group increased non significantly by 1. Overall, there was significant improvement for each group separately on the DPT over time ($p < 0.0001$). Furthermore, each group separately produced significantly more accurate grammatical features in their paragraphs at WT Post1 than at WT Pretest ($p=0.0025$ and $p=0.0019$ respectively). Their scores increased significantly by 1.4 and 2 respectively.

In the six-week period following the instruction, the explicit FFI group continued to produce appropriate grammatical features in their writing, while the grammatical accuracy rate of the implicit FFI group decreased non significantly by 1. Overall, the explicit FFI group significantly improved in grammatical accuracy in writing over time ($p=0.001$), whereas the implicit FFI did not.

FFI groups on the DPT and the WT on the two post -tests were computed, as shown in Table 2.

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DPT and WT means and standard deviations were adjusted at the following covariates:
DPT pretest=14.06 and WT pretest =2.53

Table3. Repeated-measures ANOVA for the DPT and WT

	DPT		WT	
	F	P	F	P
Time	F (1, 29) = 0.128	0.723	F (1,29)= 2.269	0.146
Instruction	F (1,29) = 0.052	0.821	F (1,29) = 0.079	0.781
Time*Instruction	F (1,29) = 2.098	0.158	F (1,29) = 1.550	0.291
Pairwise Comparison (Explicit-Implicit)	Posttest1 F= 1.241	0.274	Posttest1 F= 0.112	0.740
	Posttest2 F= 0.582	0.452	Posttest2 F= 0.671	0.419

In the discrete-point test, the explicit FFI group scored higher than the implicit FFI group at Posttest1 (see Table 2), yet there were no significant differences in the mean scores of the two groups at Posttest1, as can be seen from Table 3. At Posttest2, however, the mean score of the explicit FFI group decreased non-significantly by 1, while the mean score of the implicit FFI group increased non-significantly by 1 (see Table 2). Nevertheless, there were no statistically significant differences between the two groups at Posttest2 as shown from Table 3.

These results confirm that there was no significant differences between the effect of instruction on the performance of the two groups on the controlled task across the two post-tests.

In the writing task, the two groups produced almost equal number of correct target verb

forms Posttest1, as shown in Table 2. At Posttest2, the explicit FFI group somehow continued to produce more correct verb forms in their writing than the implicit FFI group whose linguistic accuracy rate decreased non-significantly by 1. However, there were no significant differences in the two groups' ability to use and produce correct verb forms in context across the two post-tests, as can be seen in Table 3. These results suggest that instruction had no significant effect on the learners' linguistic accuracy in the WT across the two post-tests, and time had no significant effect on the two groups.

RQ2: Do the effects of the explicit FFI and the implicit FFI vary with the nature of the two verb forms?

Table4. Adjusted Means, Standard Deviations, and Dependent t-tests for SP and PP scores in the DPT and WT

Measure	Target Features	Time	Explicit FFI M (SD)	Implicit FFI p	M (SD)	p
DPT	SP	Posttest1	8.75 (0.58)	9.01 (0.62)	9.48 (0.57)	0.564
		Posttest2	8.80 (0.53)	0.946		
	PP	Posttest1	10.90 (0.49)	9.16 (0.52)	9.84 (0.49)	
		Posttest2	9.67 (0.46)	0.046*		
WT	SP	Posttest1	3.14 (0.30)	3.90 (0.32)	3.27 (0.45)	0.202
		Posttest2	3.81 (0.43)	0.149		
	PP	Posttest1	1.26 (0.24)	1.23 (0.25)	0.43 (0.13)	
		Posttest2	0.38 (0.12)	0.004*		

Table5. Repeated-measures ANOVA for SP and PP on the DPT and WT

	DPT				WT			
	SP		PP		SP		PP	
	F	P	F	P	F	P	F	P
Time	0.892	0.353	0.326	0.572	0.280	0.601	4.163	0.05*
Instruction	0.577	0.454	1.968	0.171	0.062	0.805	0.002	0.964
Time*Instruction	0.135	0.716	4.608	0.04*	3.824	0.06	0.062	0.842
Pairwise Comparison (explicit-implicit FFI)	Posttest1	0.771	5.589	0.025*	Posttest1	0.102	0.009	0.927
	0.086				2.851			
	Posttest2				Posttest2			
	0.714	0.405	0.06	0.808	0.750	0.394	0.075	0.786

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Means and standard deviations were adjusted at the following covariates: SP pretest = 7.56 and PP pretest = 6.47 in the DPT, and SP pretest = 2.31 and PP pretest = 0.56 in the WT.

As can be seen from Table 5, the performance of the two groups in the SP DPT was not significantly different at the two post-tests. In the PP, the explicit FFI group did significantly better than the implicit FFI group at Posttest1 ($p = 0.025$). However, their knowledge of the PP gained at Posttest1 was not sustained but diminished significantly at Posttest2 ($p = 0.04$) compared to the implicit FFI group whose knowledge remained unchanged (see Table 5). These results confirm that the explicit FFI was significantly more effective for teaching the complex form (PP) than the implicit FFI in the short term, but its effect was not durable in the long term. However, neither instruction was significantly different in teaching the simple form (SP).

Table 4 shows that the implicit FFI group produced more correct SP in their paragraphs than the explicit FFI group at Posttest1, yet they did not reach a significant level. At Posttest2, both groups retained the accurate use of the simple form (SP) with no significant differences (see Table 5). With regard to the PP, both groups used almost equal number of correct PP in their paragraphs at Posttest1, as shown in Table 4. At Posttest2, both the explicit FFI group and the implicit FFI group showed a significant drop in the accurate and correct use of the PP in context ($p = 0.004$; $p = 0.012$ respectively). As shown in Table 4, the explicit FFI group exited the study with the baseline knowledge of the PP, and the implicit FFI had a significantly lower grammatical accuracy rate in the PP use compared to the Posttest1. These results confirm that there were no significant differences in the effects of instruction on the SP and PP scores for the two groups across the two post-tests. However, there was a significant effect of time on the performance of the two groups on the PP WT across the post-tests ($p = 0.05$). That being said, it can be inferred that neither instruction was effective for the complex grammatical structure in writing.

DISCUSSION AND CONCLUSION

This study was designed (i) to investigate the differential effects of the explicit FFI and the implicit FFI on L2 grammar learning and (ii) to determine whether their effects vary according to the linguistic complexity of the two English

verb forms. One major finding was that both types of instruction led to significant improvement in the students' grammatical knowledge of the target forms in both the controlled production task (DPT) and the uncontrolled writing task (WT) over time. This finding is consistent with previous findings in meta-analysis studies and reviews (e.g., Norris & Ortega, 2000; Russel & Spada, 2006). For example, Norris and Ortega (2000) in a meta-analysis of instructed SLA found that both FonF and FonFs were effective for L2 learning. Other meta-analyses also found a significant effect for FonF (e.g., Russel & Spada, 2006). Thus, this finding implies that FonF can also be beneficial for L2 learning. One possible explanation could be that implicit learning can take place irrespective of how target forms are presented (e.g., Ellis, 2006; Doughty, 2003). As long as learners receive language input relevant to target forms, significant knowledge gain can be obtained (Day & Shapson, 2001). However, this reasoning might be inconclusive due to the small sample size of the study. Another possible explanatory factor could be attributed to differences in learners' attentional, working memory, and processing abilities. According to Skehan (2009), learners with high attention abilities and larger working memory capacities tend to notice, process, and internalize information more efficiently. Thus, learners with different cognitive abilities may benefit from L2 instruction differentially (Schmidt, 2001).

Despite the improvement of each group separately over time, there was no significant differences between the effects of the two methods of instruction on either the discrete-point test or the writing task. This finding is not in line with studies that have generally found explicit instruction to be more effective than implicit instruction in all measures, including free written production tasks (for meta-analyses see Goo et al.), but it corroborates a number of previous research studies that have shown no effect differences in type of instruction in language learning (e.g., Martinez-Flor, 2006). The non-significance of differences found in this study could be attributable to the small sample size of the study or to other potential confounding variables like cognitive ability that could have interacted with learner-internal and learner-external factors, including a learners' proficiency level and language learning experience (Rodriguea Silva & Roehr-Brackin,

2016). It should be noted that this finding suggests that grammar learning can take place irrespective of how target forms are presented to students, whether explicitly or implicitly. As long as the students receive language input relevant to the target forms that they need to learn, learning can still occur, and knowledge can be obtained (Day & Shapson, 2001).

Regarding the second research question, this study found that the implicit FFI group had a higher total mean score on the simple grammatical form (SP) in the DPT and the WT across the two time points, whereas the explicit FFI had a significantly larger immediate effect size in the complex grammatical form (PP) on the DPT. In the writing task, however, both groups scored equally on the complex form immediately after the instruction, but their performance in the writing test taken six weeks after the instruction deteriorated significantly. Based on these findings, the generalizability of the claims made by Krashen (1994) is partially supported. According to Krashen, (i) implicit instruction is more effective than explicit instruction for complex target features and (ii) explicit instruction can only be effective when simple and complex structures are made salient in the input. The first claim is not endorsed by the study, possibly because of the short duration of the implicit FFI in the study. Additionally, implicit instruction may not be suited for “acquisition poor environments” (Ellis, 2009, p.237) where learners in many foreign contexts are linguistically impoverished and, thus, are unable to engage successfully in communicative-based task (Ellis, Li, and Zu, 2019). Thus, as Celce-Murica (1991) suggests, a more structured and explicit approach to teaching grammar is needed to help beginners develop the linguistic resources required for completing their written production tasks successfully.

However, Larsen-Freeman (2015) has warned against attention to decontextualized target forms because it facilitates the acquisition of explicit knowledge on discrete-point tests, but it does not prepare learners to produce and integrate their knowledge of grammatical rules correctly and freely in writing (Ellis, 2002; Macaro & Masterman, 2006). As a result, they may fail to acquire the target forms implicitly and fall behind in language development (Ellis et al., 2019). This would explain the short-term effect of the explicit FFI on the complex

grammatical form on the DPT and the WT and their loss of knowledge in the long term. Another possible explanation would be that students who receive explicit instruction are exposed to many grammatical rules which may cause some confusion for them, and, consequently, their performance might be adversely affected in the long term. Another explanation could also be that the attention and thinking of students in discrete-point tests are entirely directed toward choosing the correct answer or filling in the gap with the correct verb tense form; however, their attention in the writing task is distributed over a number of problems to be solved almost simultaneously (Macaro & Masterman, 2006).

CONCLUSION

The present study showed that both the explicit FFI and the implicit FFI separately were equally effective on the DPT and the WT over time. However, the effects of the explicit FFI and the implicit FFI on the controlled language and written production post-tests were not significantly different. Furthermore, both types of instruction were equally effective for the simple grammatical form on the DPT and the WT over time; nevertheless, the explicit FFI was more effective for the complex form on the WT in the short term only unlike the implicit FFI which was not effective at all. These findings imply both types of instruction can be effective under certain conditions; however, their effects may be influenced by the nature of target forms. Yet, this conclusion is indecisive given the limitations of the study including small sample size, lack of a control group, and the differences between the two groups at the pretest.

REFERENCES

- [1] Andringa, S., de Glopper, K., & Hacquebord, H. (2011). Effect of explicit and implicit instruction on free written response task performance. *Language Learning*, 61(3), 868-903.
- [2] Bardovi-Harlig, K. (1997). Another Piece of the Puzzle: The Emergence of the Present Perfect. *Language Learning*, 47(3), 375-422.
- [3] Bulté, B., & Housen, A. (2012). Defining and operationalising L2 complexity. *Dimensions of L2 performance and proficiency: Complexity, accuracy, and fluency in SLA*, 23-46.
- [4] Carless, D. (2008). Student use of the mother tongue in the task-based classroom. *ELT journal*, 62(4), 331-338.

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- [5] Celce-Murcia, M. (1991). Grammar pedagogy in second and foreign language teaching. *TESOL quarterly*, 25(3), 459-480.
- [6] Chareonkul, C., & Wijitsopon, R. (2020). The English Present Perfect in Authentic Use and Textbooks: A Corpus-Driven Study. *PASAA: Journal of Language Teaching and Learning in Thailand*, 60, 275-308.
- [7] Day, E. M., & Shapson, S. M. (2001). Integrating formal and functional approaches to language teaching in French immersion: An experimental study. *Language learning*, 51, 47-80.
- [8] DeKeyser, R. (1998). Beyond focus on form: Cognitive perspectives on learning and practicing second language grammar. In C. Doughty & J. Williams (eds.), *Focus on Form in Classroom Second Language Acquisition* (pp. 42-63). Cambridge: Cambridge University Press.
- [9] DeKeyser, R. (2003). Implicit and explicit learning. In C. Doughty & M. Long (eds.), *The Handbook of Second Language Acquisition* (pp. 313-348). Malden, MA: Blackwell Publishing.
- [10] DeKeyser, R. M. (2005). What makes learning second-language grammar difficult? A review of issues. *Language learning*, 55(S1), 1-25.
- [11] El-dali, H. (2010). Does form-focused instruction affect 12 learners' performance? Focus on grammatically judgments. *The Buckingham Journal of Language and Linguistics*, 3, 57-100.
- [12] Ellis, R. (2001). Introduction: Investigating form-focused instruction. *Language Learning*, 51(1), 1-46.
- [13] Ellis R. (2002a) Does form-focused instruction affect the acquisition of implicit knowledge? *Studies in Second Language Acquisition*, 24, 223- 236.
- [14] Ellis, R. (2002b). The place of grammar instruction in the second/foreign language curriculum. In E. Hinkel & S. Fotos (Eds.), *New perspectives on grammar teaching in second language classrooms* (pp. 14-34).
- [15] Ellis, R. (2008). Explicit form-focused instruction and second language acquisition. In B. Spolsky & F.M. Hult, *The handbook of educational linguistics*, (pp. 437- 455).
- [16] Ellis, R., Li, S., & Zhu, Y. (2019). The effects of pre-task explicit instruction on the performance of a focused task. *System*, 80, 38-47.
- [17] Goo, J., Granena, G., Yilmaz, Y., & Novella, M. (2015). Implicit and explicit instruction in L2 learning. Implicit and explicit learning of languages, 48, 443-482.
- [18] Hellström, R. (2015). *Task Based Language Teaching versus Presentation Practice Production*. Thesis. Linköping University.
- [19] Housen, A., Pierrard, M., & Vandaele, S. (2006). Structure complexity and the efficacy of explicit grammar instruction. In A. Housen & M. Pierrard (eds.), *Investigations in Instructed Second Language Acquisition* (pp. 199-234). Berlin: Mouton de Gruyter.
- [20] Kearns, K. (2011). *Semantics*. 2nd edition. London: Macmillan.
- [21] Khan, I. A. (2011). Learning difficulties in English: Diagnosis and pedagogy in Saudi Arabia. *Educational Research*, 2(7), 1248-1257.
- [22] Krashen, S. (1994). The input hypothesis and its rivals. In N. Ellis (Ed.), *Implicit and explicit learning of language*, (pp. 45-77). London: Academic Press.
- [23] Larsen-Freeman, D. (2015). Research into practice: Grammar learning and teaching. *Language Teaching*, 48(2), 263-280. <http://dx.doi.org/10.1017/s0261444814000408>.
- [24] Loewen, S. (2018). Instructed second language acquisition. In C. Chapelle (Ed.), *The Concise Encyclopedia of Applied Linguistics*.
- [25] Loewen, S., & Sato, M. (2017). Instructed second language acquisition (ISLA): An overview. In *The Routledge Handbook of Instructed Second Language Acquisition* (pp. 1-12). Taylor and Francis Inc. <https://doi.org/10.4324/9781315676968>
- [26] Macaro, E., & Masterman, L. (2006). Does intensive explicit grammar instruction make all the difference? *Language Teaching Research*, 10(3), 297-327.
- [27] Martínez-Flor, A. 2006. "The effectiveness of explicit and implicit treatments on EFL learners' confidence in recognising appropriate suggestions" in K. Bardovi-Harlig, C. Félix Brasdefer and A.S. Omar, eds. *Pragmatics and Language Learning*, vol. 11. University of Hawaii at Manoa: National Foreign language resource center.
- [28] Norris, J., & Ortega, L. (2000). Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. *Language Learning*, 50, 417-528.
- [29] Pallotti, G. (2015). A simple view of linguistic complexity. *Second Language Research*, 31(1), 117-134.
- [30] Park, H. (2016). The present perfect in written L2 English. *The Linguistic Association of Korean Journal*, 24(2), 1-23.
- [31] Presson, N., Macwhinney, B., & Tokowicz, N. (2014). Learning grammatical gender: The use

- of rules by novice learners. *Applied Psycholinguistics*, 35(4), 709-737.
- [32] Richards, J., & Rippen, R. (2014). Towards a Pedagogy of Grammar Instruction. *RELC Journal*, 6-25.
- [33] Robinson, P. (1996). Learning simple and complex second language rules under implicit, incidental, rule-search and instructed conditions. *Studies in Second Language Acquisition*, 18, 233-247.
- [34] Rodríguez Silva, L. H., & Roehr-Brackin, K. (2016). Language learning aptitude and working memory as predictors of instructed adult L2 learners' explicit and implicit L2 knowledge. *Paper presented at the Cognitive Approaches to Language Pedagogy 2 conference*, Basel, Switzerland, 10-11 June 2016. Google Scholar
- [35] Skehan, P. (2009). Modelling second language performance: Integrating complexity, accuracy, fluency and lexis. *Applied Linguistics*, 30(4), 510-532.
- [36] Smith, L., Saez, L. & Doabler, C.T. (2018). Using explicit and systematic instruction to support working memory. *Teaching Exceptional Children*, 48, 275-281. doi: 10.1177/0040059916650633
- [37] Soleimani, H., Jahangiri, K., & Gohar, M. J. (2015). Effect of explicit and implicit instruction on implicit knowledge of English past simple tense. *International Journal of Asian Social Science*, 5(5), 257-265.
- [38] Spada, N., & Lightbown, P. M. (2008). Form-focused instruction: Isolated or integrated?. *TESOL quarterly*, 42(2), 181-207.
- [39] Spada, N., & Tomita, Y. (2010). Interactions between type of instruction and type of language feature: A meta-analysis. *Language learning*, 60(2), 263-308.
- [40] Suzuki, Y., & DeKeyser, R. (2017). The interface of explicit and implicit knowledge in a second language: Insights from individual differences in cognitive aptitudes. *Language Learning*, 67(4), 747-790.
- [41] Swan, M. & Smith, B. 2001. *Learner English: A Teacher's Guide to Interference and Other Problems*. 2nd ed. Cambridge: Cambridge University Press.
- [42] Tahseldar, M., Kanso, S., & Sabra, Y. The Effect of Interlanguage and Arabic Verb System on Producing Present Perfect by EFL Learners. *International Journal of New Technology and Research*, 4(8), 53-65.
- [43] Tode, T. (2007). Durability problems with explicit instruction in an EFL context: The learning of the English copula be before and after the introduction of the auxiliary be. *Language Teaching Research*, 11(1), 11-30.
- [44] Vogt, W. P. (1999). *Dictionary of Statistics and Methodology: A Nontechnical Guide for the Social Sciences* (2 nd ed.). Thousand Oaks, CA: Sage Publications.

APPENDIX A

An Example of a Lesson Taught Implicitly and Explicitly Neighbors in My Apartment Building

A few months ago, I moved to a new apartment. I have not met all my neighbors yet, but I have met some of them. They are interesting people.

My neighbor in 3G is a private pilot. Last week he returned from the South Pole, and before that he was in Africa. He has travelled all over the world.

My neighbor in 4F is a doctor, but she looks like a punk rocker. She has already changed the color of her hair four or five times since I moved in. Now it is purple.

The young man across the hall has a lot of parties. He has already given several parties since I moved in, but he has not invited me to any of them.

My next-door neighbors are musicians. They have just retired from the City Symphony Orchestra. They were with the orchestra for more than 20 years. Now they are looking forward to traveling and spending more time with their family.

The neighbors on the other side are mysterious. I saw them only once, but I have not seen them for a while. Nobody has. They have not picked up their newspapers for a week. There are six or seven newspapers on the floor in front of their door.

A young woman in the building is my new best friend. She has lived here for about a year. She owns a small advertising business. We have already spent many fun evenings together.

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Explicit FFI	Implicit FFI
<p>Read the passage and underline the present perfect verbs. Put brackets around the time expressions that are used with present perfect.</p> <p>These four sentences are taken from the passages. Which sentence expresses duration or the time that something continues? Choose all that apply.</p> <p>She has lived here for about a year.</p> <p>I have not seen them for a while.</p> <p>They have just retired from the City Symphony Orchestra.</p> <p>He has already given several parties.</p> <p>Which of the following correctly changes the sentence expressing past time to present perfect?</p> <p>They were with the orchestra for more than 20 years.</p> <p>They have been with the orchestra for more than 20 years.</p> <p>They been with the orchestra for more than 20 years.</p> <p>They have with the orchestra for more than 20 years.</p> <p>Fill in the blank with one of the phrases that correctly completes the sentence taken from the passage.</p> <p>Nobody has seen the mysterious neighbors _____ since a while.</p> <p>for a while.</p> <p>a while ago.</p> <p>Complete the sentence with the words in the list.</p> <p>since/have/last week/the newspaper/been/on the floor</p> <p>The neighbors have not picked up the newspapers for a week. In other words,</p> <p>_____</p>	<p>Read the passage and the statements that follow. Circle “T” if the statement is true, and “F” if the statement is false. Explain.</p> <p>My neighbor in 3G has travelled to South Pole and Africa.</p> <p>I have made a lot of new friends since I moved to my new apartment.</p> <p>The young man has held several parties in his apartment.</p> <p>My neighbor in 4F has just colored her hair purple.</p> <p>What does the following statement indicate?</p> <p>“They were with the orchestra for more than 20 years.”</p> <p>They were with the orchestra 20 years ago and are still at present.</p> <p>They are not with the orchestra anymore.</p> <p>The orchestra started 20 years ago.</p> <p>Choose the correct answer that completes the following sentence:</p> <p>The newspapers are still on the floor in front of the door because_____</p> <p>The neighbors have been mysterious for a week.</p> <p>They have not picked up the newspapers for a week.</p> <p>Nobody has seen them.</p> <p>Fill in the blank with the missing phrase that completes the sentence based on the passage.</p> <p>A young woman in the building is my new best friend now because_____</p> <p>They have passed time together.</p> <p>The young woman has lived in the same building since last year.</p> <p>The young woman is very sociable.</p> <p>Read the passage and summarize it in two complete sentences.</p> <p>_____</p> <p>_____</p> <p>_____</p>

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