The Effect of Explicit Instruction through Combined Input-Output Tasks on the Acquisition of Indirect Reported Speech in English

Seyed Ehsan Afsahi¹ & Ahmad Reza Lotfi²

¹ PhD Candidate in TEFL, Islamic Azad University, Isfahan (Khorasgan) Branch, Isfahan, Iran
² Assistant Professor, Islamic Azad University, Isfahan (Khorasgan) Branch, Isfahan, Iran

Correspondence: Seyed Ehsan Afsahi, Islamic Azad University, Isfahan (Khorasgan) Branch, Isfahan, Iran.
E-mail: S.e.afsahi@gmail.com

Received: August 2, 2016   Accepted: September 3, 2016   Online Published: December 1, 2016
doi:10.5539/ijel.v6n7p59       URL: http://dx.doi.org/10.5539/ijel.v6n7p59

Abstract

Grammar is being rehabilitated (e.g., Doughty & Williams 1998a) and recognized for what it has always been (Thornbury, 1997, 1998, cited in Burgess & Etherington, 2002): an essential, inescapable component of language use and language learning. Few would dispute nowadays that teaching and learning with a focus on form is valuable, if not indispensable. What perhaps is still the subject of debate is the degree of explicitness such teaching and learning should display. The ultimate goal of any instruction is to make L2 learning implicit, like L1 (due to ease of access and automaticity of it). The current study examines the effect of explicit instruction on the participants’ acquisition of explicit and implicit grammatical knowledge in the case of indirect reported speech. The descriptive-survey method was used in this research. The results revealed that this type of instruction fosters both short- and long-term acquisition of explicit grammatical knowledge. However, the study could not foster the acquisition of implicit knowledge.

Keywords: form-focused instruction, explicit instruction, implicit instruction, Interface Hypothesis, noticing, input enhancement, output-based tasks, metalinguistic explanation

1. Introduction

In recent years, the teaching of linguistic forms, especially grammar, continues to occupy a major place in language pedagogy. There are now strong theoretical reasons for claiming that the teacher’s role in a communicative task should not be limited to that of communicative partner. The teacher also needs to pay attention to form. There are a number of ways in which this can be accomplished and this is discussed later. Teachers in training need to develop a repertoire of options (e.g., input- or output-based) for addressing form in the context of communicative teaching (Ellis, Basturkmen, & Loewen, 2002).

Research suggests that traditional instruction on isolated grammar forms (focus on forms) is insufficient to promote their acquisition (Long & Robinson, 1998), yet purely communicative approaches (focus on meaning) have been found inadequate for developing high levels of target language accuracy. By introducing the focus on form instruction (i.e., the treatment of linguistic form in the context of performing a communicative task) two general solutions have been proposed in the literature: one is to encourage learners to attend to target forms by noticing them in input (Schmidt, 1990; Doughty & Williams, 1998a), thus assisting in their processing. The other is to provide learners with opportunity to produce output containing target forms enabling them to notice the gap between their current target language ability and the correct use of the target forms (Swain, 1985, 2005, cited in Fotos & Nassaji, 2007).

In the research literature there is tendency to investigate the effect of specific instructional options in form-focused instruction. Ellis (1998, see Ellis, 1999) identifies four macro-options based on a psycholinguistic model of L2 acquisition. These are (1) input-based instruction, (2) explicit instruction, (3) output-based
instruction, and (4) feedback. As Williams (2001) states, a substantial body of research offers the growing consensus that explicit attention to form can facilitate second language learning. Second language educators generally agree that the combination of some type of grammar instruction and the provision of opportunities to receive meaningful input and to produce meaningful output constitutes an optimal approach to L2 instruction (Fotos & Hinkel, 2007). Because in my previous attempts explicit instruction or output alone or the combination of them did not work the present study adopts explicit instruction together with combined input-output activities. In a survey of the role of frequency effects in promoting SLA, N. Ellis suggests that both input and output containing target forms can favorably affect their acquisition (2002b, cited in Fotos & Nassaji, 2007).

Furthermore, since in English as a Foreign Language (EFL) context there is often little opportunity for learners to learn the language in a natural or near natural interaction, the study tries to investigate the role that input plays in language learning. Learners always have the opportunity to be exposed to input, thus manipulating input in order to provide learners with form-focused input makes L2 acquisition an intrapersonal process and it will certainly contribute to SLA. According to Ellis, Loewen, Elder, Erlam, Philp, & Reinders (2009) input-based options means instruction that involves the manipulation of the input that learners are exposed to or are required to process. They include several techniques such as: enriched input enhanced input and structured input. In addition to input, the researcher tries to create opportunities for learners to produce output, because learners show weak proficiency whenever they try to produce indirect reported speech.

After presenting the significance of the problem, the general purpose of the study is to examine the influence of explicit teaching on the acquisition of implicit and explicit grammatical knowledge. Particular purposes of the study are indicated as research questions under a separate heading below.

1.1 Implicit and Explicit L2 Knowledge

By the introduction of form-focused instruction, the very nature of implicit and explicit learning and teaching changed. There has been considerable focus of attention on the relationship between explicit (analyzed) grammatical knowledge and implicit (unanalyzed) grammatical knowledge and how this might relate to language development (Macaro & Masterman, 2006). It is generally accepted that explicit knowledge is acquired through controlled processes in declarative memory, while implicit knowledge is acquired through much less conscious or even subconscious processes. Implicit knowledge is procedural, unconscious and can only be verbalized if it is made explicit. It is accessed rapidly and easily and thus is available for use in rapid, fluent communication (Ellis, 2005b). As Noonan (2004) makes it clear, implicit knowledge is unconscious, internalized knowledge of a language that is available for spontaneous speech. In contrast, explicit knowledge is the declarative knowledge of the phonological, lexical, grammatical, pragmatic and socio-critical features of an L2 together with the metalanguage for labeling this knowledge. It is conscious, learnable and verbalizable and is typically accessed through controlled processing when learners experience some kind of linguistic difficulty in the use of the L2 (Ellis, 2005b). In addition, according to Noonan (2004), explicit knowledge is conscious knowledge of grammar rules learned through formal classroom instruction.

Researchers agree that it is implicit knowledge that underlies the ability to communicate fluently in an L2, so it is this type of knowledge that should be the ultimate goal of any instructional program (Ellis et al., 2009). One of the implications of these two types of knowledge for L2 instruction is that if grammar is taught explicitly it can then become automatic so that language can be understood and produced without constant recourse to the rules that generated the explicit knowledge in the first place?

According to Lynch (2011) adult language students, have two distinct ways of developing skills and knowledge in a second language, acquisition and learning. Acquiring a language is “picking it up”, that is, developing ability in a language by using it in natural, communicative situations. Learning language differs in that it is “knowing the rules” and having a conscious knowledge of grammar/structure. Adults acquire language, although usually not as easily or as well as children. Acquisition, however, is the most important means for gaining linguistic skills. A person’s first language (L1) is primarily learned in this way. This manner of developing language skills typically employs implicit grammar teaching and learning.

Based on Hulstijn (2005) explicit learning is input processing with the conscious intention to find out whether the input information contains regularities and, if so, to work out the concepts and rules with which these regularities can be captured. The intentionality and consciousness of explicit learning means learners make and test hypotheses in search for structure. However, Williams (1999) points out that implicit learning is input processing without such an intention (i.e., the learning process is automatic), taking place unconsciously. R. Ellis (2009) emphasizes that implicit learning is learning without any metalinguistic awareness. Ellis (1999) defines explicit learning a conscious process in which learners are aware of the new knowledge they are receiving.
1.2 Implicit and Explicit Instruction

Ellis et al. (2009) define instruction as an attempt to intervene in interlanguage development and implicit and explicit instructions are two ways of drawing learners’ attention to target features during tasks (Takimoto, 2006). Scott (1990) stated that while there are many different grammar-teaching strategies that are currently being used in high school and college foreign language classrooms, there are essentially two basic approaches, namely explicit and implicit. An explicit approach to teaching grammar insists upon the value of deliberate study of a grammar rule, either by deductive analysis or by inductive analogy, in order to organize linguistic elements efficiently and accurately. An implicit approach, by contrast, is one that suggests that students should be exposed to grammatical structures in a meaningful and comprehensible context in order that they may acquire, as naturally as possible, the grammar of the target language.

Dekeyser (1998) made a distinction between implicit and explicit instructions, and deductive and inductive instructions. According to Dekeyser, explicit teaching always includes working with the rules of language. This process can be done either deductively, that is through traditional explanation of rules, or inductively, in which learner are required to find rules after examining examples from a text. In situations where none of these treatments is present, the instruction can be called implicit.

Explicit Instruction means learners receive information concerning rules underlying the input (Hulstijn, 2005). Ellis (2008) defined it as an instruction, which helps learners to develop explicit knowledge (i.e., externally prompted awareness). We talk about explicit instruction when learners think about a rule during learning process or while they are encouraged to develop metalinguistic awareness of the rule. On the other hand, Implicit Instruction means learners do not receive information concerning rules underlying the input. In other words, it enables learners to infer rules without awareness. It gives learners exemplars of a rule while they are not trying to learn it (i.e., focus on meaning). Therefore, they internalize the rule without their attention being explicitly focused on it, e.g., enriched input (Ellis, 2009). Macaro & Masterman (2006, p. 298) defined the explicitness of grammar teaching in nice sentences. They stated that “What exactly is meant by teaching grammar explicitly is, of course, highly dependent on the viewpoint of the person advocating it or otherwise”. Explicit instruction means “establishing as the prime objective of a lesson (or part of a lesson) the explanation of how a morpho-syntactic rule or pattern works, with some reference to metalinguistic terminology, and providing examples of this rule in a linguistic, though not necessarily a functional, context”.

1.3 The Role of Combined Input-Output in SLA

In the literature, practice with the structural points, often takes one of the two forms, namely comprehension (input) practice or production (output) practice (Tanaka, 1999). The bulk of the studies tried to investigate the effect of one of them. However, some studies drew on the combination of them by this rationale and logic that the two forms of practice can serve complementary roles and can have positive impact on the acquisition of grammatical structures. Taking input and output as mutually exclusive, led the previous studies to contradictory results; some advocated the positive effect for input-based approaches and the others praised the role of output in instruction.

More recently, there has been interest in experimental research that supports a positive role for output practice in conjunction with input (Izumi, 2002; Bigelow, 2000; Izumi et al., 1999; Morgan-Short & Bowden, 2006; Swain & Lapkin, 1995; cited in Erlam, Loewen, & Philp, 2009). For instance, in Izumi’s (2002) study, students who experienced a treatment that included opportunities to engage in language output as well as exposure to input, outperformed those exposed to input only in learning English relativization.

Tanaka (1999) takes a very conservative position by stating that, while comprehension practice develops procedural knowledge that enables learners to draw meaning from language, production practice develops procedural knowledge that enables learners to express meaning. Second language acquisition is believed to involve the development of two mental mechanisms, i.e., the automatization of information processing (control) and the construction of knowledge (Bialystock & Smith, 1985). Control refers to how existing knowledge is utilized during actual performance (being automatic with little effort in handling a lot of information simultaneously is the goal) and knowledge refers to how the language system is represented in long-term storage. Both comprehension and production practice function to automatize the receptive and productive language processing. A substantial body of research indicates that comprehension and production practice may serve independent but significant roles in the construction of the learners’ knowledge system. In comprehension practice, the learners notice the form and function of a specific structure (see Schmidt, 1990). During production practice, the learners notice a gap in what they want to say and what they are able to say, resulting in increased awareness of those structures so that they are noticed in subsequent input (de Bot, 1996; Swain, 1993, 1995,
cited in Tanaka, 2001). By the comprehensive discussion above, then it appears that both comprehension practice and production practice are important in grammar learning and each has a unique role to play.

Researchers have concluded that meaningful input alone, even enhanced input, does not promote the development of target-like L2 accuracy (Fotos & Hinkel, 2007). That is why this study hypothesizes that grammar instruction along with enhanced input and opportunities for producing output are essential approaches to FFI. One way of promoting pushed output is through focused communicative tasks where learners are pushed to reproduce language forms accurately (Ellis, 2003). Thus, the various task-based approaches to grammar instruction appear to be successful in promoting awareness of target forms and promoting accuracy gains.

Empirical Literature on the Explicit/Implicit Instruction

There are piles of studies investigating the effects of implicit and explicit instruction on learners’ second language acquisition and comparing the two.

The vast majority of publications since the early 1990s support the idea that some kind of explicit formal instruction is useful for L2 development (Doughty & Williams, 1998). At the same time that there is research evidence that some focus on the grammatical features of the L2 is beneficial to developing the interlanguage of a learner, the evidence with regard to the explicit teaching of grammatical features is not sufficiently conclusive to be able to influence pedagogy directly. Particularly inconclusive is the issue of whether being taught rules explicitly lead to successful internalization of those rules (Macaro & Masterman, 2006).

Studies of explicit grammar instruction that are relevant to our research fall into two categories: (a) those which have simply compared the relative effectiveness of different instructional approaches on learners’ explicit grammatical knowledge, and (b) those which have investigated the relationships between instructional approaches and both explicit grammatical knowledge and production. We will start by reviewing studies in the first category.

2. The Effect of Instruction on Both Explicit Knowledge and Production

Studies measuring the impact of instruction on both explicit grammatical knowledge and production have produced conflicting findings, too.

Frantzen (1995, cited in Macaro & Masterman, 2006) investigated whether explicit grammar teaching and corrective feedback improved grammatical knowledge, accuracy, and fluency of writing, as measured by a discrete-point grammar test and an essay before and after the intervention. Both treatment and comparison groups made significant progress in both areas. However, the experimental group outperformed the comparison group on the grammar test only. A similar study but without a comparison group (Manley & Calk, 1997) found that although some error reduction followed the treatment, there was no holistic improvement in written production.

More positive findings are reported by Leow (1996, cited in Macaro & Masterman, 2006) who tested undergraduate beginner students of Spanish after 6 hours and after 35 hours of formal exposure to the L2. Significant correlations at around the R 0.6 level were registered between the Grammaticality Judgment Tests and production tasks, suggesting an association between knowledge of the language and performance in it. However, the production tasks were heavily constrained; that is, students were posed a set of essentially closed questions, rather than being required to generate and monitor their own language.

Leow (2000) investigated the effects of awareness, or the lack thereof, on adult second or foreign language (L2) learners’ subsequent intake and written production of targeted Spanish morphological forms. The findings suggested that (1) aware learners were able to take in and produce in writing significantly more of these forms, compared to unaware learners during exposure, (2) awareness plays a crucial role in subsequent processing of L2 data by adult learners, especially in the classroom setting, (3) aware learners significantly increased their ability to recognize and produce in writing the targeted morphological forms immediately after exposure to these forms, whereas unaware learners did not.

Even though, Allen (2000) did not compare implicit and explicit instruction in her study, her findings are supported explicit instruction. Her study investigated the relative effect of two types of explicit grammar instruction on learners’ ability to interpret and produce sentences containing the French causative on three groups: (a) processing instruction, (b) traditional instruction, and (c) no instruction. The results indicated both types of explicit instruction were effective in contrast to no instruction.

Using an input-processing approach (VanPatten, 1996; VanPatten & Cadierno, 1993; cited in Macaro & Masterman, 2006), Benati (2001, ibid.) investigated the acquisition of the future tense in Italian by three groups
of university students. The first group was taught via focus on positive evidence of the inflected form in the input, the second via paradigms to explain the rules followed by output-based practice, and the third, a control, received non-systematic exposure to the target feature. Both the treatment groups outperformed the control group in tests of implicit knowledge, explicit knowledge and oral production. However, in none of the tests did the “explicit group” outperform the “input processing group”, suggesting no advantage for the explicit explanation of rules. They noted, additionally, that the future tense in Italian is a comparatively easy rule.

The line of enquiry regarding easy and hard rules was pursued by Robinson (1996, cited in Macaro & Masterman, 2006). In a controlled experiment, subjects were taught rules in four different conditions: they viewed sentences and were told it was a memory test; they viewed sentences and were told to look for meaning; they viewed sentences and were told to try to identify rules; they read through the rules that were the focus of the study, then saw some sentences and were asked metalinguistic questions about them. Results showed that simple rules were indeed learnt more easily under all conditions. Ellis (2002) by asking the question “Does form-focused instruction affect the acquisition of implicit knowledge?” examines the role of FFI in developing implicit knowledge by reviewing 11 studies that have examined the effect of FFI on learners’ free production. The review suggests that FFI can contribute to the acquisition of implicit knowledge. Macaro & Masterman’s (2006) paper investigates the effect of explicit grammar instruction on grammatical knowledge and writing proficiency in first-year students of French at a UK university. A cohort of 12 students received a course in French grammar immediately prior to their university studies in order to determine whether a short but intensive burst of explicit instruction, a pedagogical approach hitherto unexamined in the literature, was sufficiently powerful to bring about an improvement in their grammatical knowledge and performance in production tasks. Participants were tested at three points over five months, and the results were compared with a group which did not receive the intervention. The results support previous findings that explicit instruction leads to gains in some aspects of grammar tests but not gains in accuracy in either translation or free composition.

Now that the studies were presented that compared and contrasted explicit and implicit instruction on L2 acquisition, it can be of great use that a brief comparison between two techniques (input- and output-based tasks) in such studies be indicated. In addition, a brief empirical justification of the use of them in this study is dealt with.

2.1 The Effectiveness of Combined Input-Output Tasks

Whereas studies by Doughty (1991, cited in Rahimpour & Salimi, 2010) and Fotos (1994) reported positive results in terms of awareness of target structures and proficiency gains resulting from textually enhanced structures, a study by White (1998) did not show that. Similarly, Leow (2001) investigated the effects of textual enhancement on learning Spanish formal imperatives and found no advantage for enhanced text over unenhanced text. Finally, Izumi (2002) compared two types of focus on form strategies, output and visual input enhancement, on the learning of English relativization by adult ESL learners, finding that those who produced output developed more than those merely received input. However, the visual enhancement did not result in gains in accuracy using the target form.

Thus, the results of the studies on textual enhancement suggest that, while this strategy may promote noticing of grammatical forms (Fotos, 1994, 1998), it may not be sufficient for their acquisition. Thus, while it was said that noticing may be a necessary condition for acquisition, it is not the only condition. As Batstone notes, if learners want to learn grammar effectively, they have to “act on it, building it into their working hypothesis about how grammar is structured” (1994, p. 59, cited in Nassaji & Fotos, 2004). This may not happen unless the learners are exposed to continue and sustained noticing activities as well as many opportunities for producing the target form. Even this production can generate noticing because learners notice a gap between what they know and what they are to say while they are producing output.

Due to the contradictory results from the studies on the positive effect of input alone or output alone (see also Erlam, 2003), the present study decided to combine some types of both input and output tasks in order to see the impact of their combination. There are some studies similar to the case mentioned above. For instance, Tanaka (1999) concluded that combined input-output practice not only results in immediate improvement in both comprehension and production performances, but also obtains a durable effect. Similarly, Tanaka’s (2001) study suggests that combining practice types may promote better learning than their use separately. The results of this like his previous study (Tanaka, 1999) support the claim that combining comprehension and production practice can increase not only immediate comprehension and production abilities, but also may promote durability.

To sum up, there is now a substantial body of research that has investigated the role of form-focused instruction in assisting learners to learn the grammar of an L2. However, it is becoming increasingly difficult to compare
results due to different research designs and different variables. It is clear that indirect reported speech is one of those structures that are not used a lot in EFL classroom context; thus, input and output are limited for the learners. In addition, because input and output have a direct relationship with acquisition, instruction seems to be necessary, especially in EFL settings.

Adopting weak interface position (which identifies that explicit knowledge helps implicit one to develop) along with Schmidt’s Noticing Hypothesis, the current study aims to investigate the effect of explicit instruction, by the aid of enhanced input and output-based tasks, on the acquisition of implicit and explicit knowledge of indirect reported speech in English. The current study is interesting for me because it tries to find a solution to a real question, which was my concern for many years; it uses the combination of input- and output-based tasks, and tries to investigate the application of the theory of noticing to the classroom context.

In addition, this type of instruction, unexamined in the literature, attempts to contribute to the ongoing discussion of the effects of instruction and attempts to provide additional empirical findings that support explicit teaching by the help of combined input-output tasks in second language acquisition. Besides, instructing the target structure of the study (i.e., indirect reported speech) as an insufficiently studied structure in the literature tries to fill this gap if possible.

3. Methodology

The study was conducted in Shokooh English language Institute in Tehran. The participants were initially 40 students in each term, but due to the absences in treatment sessions, five of them were excluded from the analysis. Therefore, they were 35 students from an intermediate level learning English as a foreign language in each term. The study was conducted over five terms among overall 180 students as a population test. It should be noted that the institutes’ tests of various sorts (such as placement tests) administered diachronically, had already determined their level of proficiency as intermediate.

Information from a very brief background questionnaire indicated that the most participants were teenagers with the mean age of them was 13.5. None of them had spent even a day in an English speaking country and the majority of them had studied English in the institutes for about two to three years. L1 for all participants was Persian. 86% of them were female and 14% were male. There was no separate control group, because the only students in the appropriate level for the study were those 180 learners in 5 terms. In addition, assigning at least ten of them to control group would lower the number of the students of experimental group. The current study examines the effect of explicit instruction on the participants’ acquisition of explicit and implicit grammatical knowledge in case of indirect reported speech.

The participants received exposure to a short reading passage in which the target form was made bold and underlined, and before it the instructor explicitly and specifically drew their attention to targeted form. That is, they were said to read carefully and pay attention to the bold phrases. After that, they participated in two task-based activities in order to make the treatment similar to form-focused tasks.

Then, handouts in two pages consisting of grammar explanation of indirect reported speech together with some examples were distributed. The researcher explained the grammatical points in every three sessions and students were allowed to ask questions if not understood. Such metalinguistic explanation made the treatment explicit. After working with the handout, the subjects took part in two output-based activities. These activities involved text-manipulation and text-creation as Ellis et al. (2009) suggested.

The first task was fill-in-the-blanks written production task. The participants read two short texts seeded with direct reported speech and did four fill-in-the-blanks tasks (in indirect form) for each text. Furthermore, all the correct responses to these fill-in-the-blanks tasks were checked aloud by the teacher and learners so as not to leave learners with their uncertainties of the answers.

The second task elicited reconstruction of a passage by learners; i.e., they read a short text, which was enhanced in case of the target form once in one minute. Then the researcher collected the texts and asked students to rewrite it.

Note that in each of the three treatment sessions the texts and the tasks (except the handout of target structure) were not the same in content. The texts were from a popular book called Steps to Understanding, which was selected for that semester by the institute. The researcher in case of some vocabularies manipulated the texts. In addition, some statements were added or deleted and all the direct speeches were turned into indirect type. The researcher herself created the tasks, though. Appendix B shows all four parts of the treatment.

Participants completed a package of two tests during each of the four testing episodes (pre-tests, immediate post-tests 1, delayed post-tests 2 and delayed post-test 3)—an Untimed Grammaticality Judgment Test (UGJT)
and a Text Reconstruction Test (TRT).

The Untimed Grammaticality Judgment Test adapted from Ellis et al. (2009), was a pen-and-paper test consisting of 24 sentences evenly divided between grammatical and ungrammatical. All 24 items created an obligatory context for use of the target form. Learners were required to judge whether sentences were grammatical/ungrammatical by putting a check mark or cross, respectively in the relevant column. If a sentence was judged ungrammatical, the subjects had to correct it.

From each twelve items (both for grammatical and for ungrammatical), four items contained indirect reported statements, four items contained indirect reported wh-questions and finally four consisted of indirect reported yes/no questions.

As the name of the test indicates, it was not pressured and participants were allowed to hand in their papers to teacher whenever they wanted to. This test was supposed to measure the participants’ explicit knowledge of the target feature because based on Ellis et al. (2009), if there is no time limit for answering the items, the test will show explicit knowledge of the subjects.

One of the important parts of the analysis which was showing the effectiveness of the instructional treatment, dealt with the significant difference among the four testing episodes. By using ANOVA, it is possible to examine the differences between the means and decide whether those differences happened by chance or by treatment effect. In order to determine if there were any statistically significant difference among the pretest, posttest 1, posttest 2 and posttest 3, a one-way ANOVA (analysis of variance) was performed. A probability level of .05 was set for the ANOVAs. SPSS (PASW) 17.0 was used to calculate all statistics. In order to respond to the research question 1, which dealt with the effect of instruction on the acquisition of implicit knowledge, the analysis of TRT, which is used for this reason, is discussed below.

At first all the pretests were corrected based on Ellis & Barkhuizen’s (2005) concept of obligation; i.e., obligatory occasions (i.e., target-like use) for the use of main parts of the indirect reported speech (i.e., word order, use of if, and tense back shifting). That is, each paper was corrected based on the five statements containing indirect reported speech existed in the text given to the participants. After that, the number of times the correct parts in each obligatory occasion were supplied was counted.

Then the percentage of accurate use was calculated. All these procedures were calculated by the following formula:

\[
\frac{n \text{ correct suppliance in contexts} \times 100}{n \text{ obligatory contexts}}
\]

The procedures were repeated for all three main parts separately, for all students separately and for the three post-tests separately.

Then the overall accuracy scores for the three main parts were determined. These percentage scores were fed into the SPSS package and mean percentage scores for each of the four tests were obtained. In order to examine the extent to which accuracy improvements were achieved because of the treatment period, the difference between the mean score of the pre-test and those of the immediate post-test and two delayed posttests were calculated. To test the statistical significance of these differences, ANOVA were conducted.

4. Validity and Reliability

To construct the tests, the researcher prepared a table of specifications of the course book in order to contribute to content and construct validity. It should be mentioned that the UGJT included four items for each type of indirect reported speech, both in grammatical and ungrammatical items. This shows that it is valid because it tested what the study was interested in testing (Thornbury, 1999, p. 144) and it is consistent with the course objectives.

In case of content validity for UGJT, the test is valid because the institute had chosen the content (including vocabularies and grammar) for the level of proficiency of the participants and this selection of book and the content of it including the target structure of the present study for this level of learning is after many examinations (e.g., placement tests) and based on some criteria that the institute had to take into account under the supervision of some authorities.

In addition, Ellis (2009) reported that their UGJT is a valid test of explicit knowledge by meeting two criteria (1-learners answer the intended feature and 2- learners show they were aware while judging the grammaticality...
of items) by asking learners to indicate whether they used rule or feel, and to indicate the level of confidence they had.

The TRT also contained all three types of indirect reported speech. A time allocation of 1 minute was also estimated for the final version of the test based on the time the pilot-test sample needed to read the whole text just once. However, for rewriting the text, the time was not limited. To justify the reason for using a short story in this test, a definition of this test is reported. Izumi and Bigelow (2000, cited in Ellis, 2003) investigated a task called Text Reconstruction Test which required learners to read a short written passage that had been seeded with the target structure. The content validity of this test is high again based on the decision of the institute for using the book, which contained such stories for this level of participants.

Moreover, after reviewing and rewriting the items, the tests (Untimed Grammaticality Judgment Test and Text Reconstruction Test) were first piloted with 40 participants at the same intermediate level as that of the participants of the study, studying at the same institute (but the students of one semester prior to the semester when the study was carried out) to determine item characteristics; i.e., item facility, item discrimination, and reliability.

By achieving item characteristics; i.e., item facility, item discrimination, as well as reliability, out of 24 items, some were not responded to by the sample at all, indicating the high level of difficulty of those items. Despite the difficulty of those items, all items were selected for the final version of the test. The rationale behind it is that the researcher wanted to see whether instruction can help the main participants answer those items.

The reliability of the UGJT was calculated through KR-21 formula, which turned out to be 0.77 on the performance of the pilot-test participants. It shows that the test is satisfactorily reliable in terms of its internal consistency.

Furthermore, as mentioned in Farhady, Ja’farpur, & Birjandi (2003), some factors increasing the reliability are met. For instance, the UGJT was not speeded and participants had sufficient time to take the test. In addition, the length of the test was not too short (24 items) as it was figured in the same book (p. 143).

In terms of the influence of scoring factors on the reliability, it should be mentioned that the test is more like an objective test, which is not really influenced by this factor. However, the researcher corrected the papers six times during five months after collecting the data in order to check any fluctuation of scoring. Honestly, the results of the scoring had some fluctuation; but this was the case for the first, second and third time of scoring. Fortunately, the scores were fixed in the last three scoring sessions. In the case of TRT, the same rater (researcher) corrected the tests three times and the scores did not change at each time, indicating the reliability for this test. The analysis took place after this time-consuming scoring.

The design of the study is pre-experimental with a pretest, instructional treatment, as well as three posttests (i.e. one group-pretest-posttest design). There is no control group in the study, because learners’ proficiency at the end of the treatment is compared with their own at the beginning of the semester determined by pretests. This will be discussed later in “Limitation” section, though. The schematic representation of the design is shown as follows:

| Day 1 (2 days before treatment) | Pretest |
| Day 3 | Treatment |
| Day 5 | Treatment |
| Day 7 | Treatment |
| Day 8 (1 day after treatment) | posttest 1 |
| Day 22 (14 days after treatment) | posttest 2 |
| Day 71 (63 days after treatment) | posttest 3 |

Participants completed pretests two days prior to the pedagogical treatment. The pretests were applied to assess learners’ prior knowledge of the targeted form, i.e., indirect reported speech. All participants who received the same treatment and testing took part in a period of seventy days (from pretests to delayed posttests 3). The treatment instruction took place over a week in three sessions in the even days of the week, each of 40 minutes duration. In order to measure acquisition one day after the last session of treatment, immediate posttests 1 were administered. Then, delayed posttests 2 and 3 were administered two weeks after the first posttests and fifty days after the post-test 2, respectively.
The study consisted of one independent variable (one of the techniques of focus on form, i.e., explicit focus on form through combined input-output tasks), and one dependent variable (linguistic accuracy).

Students were informed that their responses would not influence their final grade and the results were important for the researcher as a teacher to find a better way to teach grammar points. Also they were required to take part in every sessions of that semester, so that their absences would not spoil the study. Unfortunately, nine students were absent in the last testing session; i.e., post-test 3, because this session was held 50 days after the last day of that semester and Noruz holidays were another reason. Put it simply, the teacher was the researcher too; so up to the end of that semester the treatment sessions and two post-tests finished successfully. However, post-tests 3 were completed at the beginning of a new semester. That is why nine participants were absent because they did not register for the new semester in the institute.

5. Discussion and Results

In this part of the article, the findings of the statistical operations (Zarei, 2004) done on the raw data based on the research questions as follows:

Does explicit instruction with the integration of input and output in FFI lead to acquisition of explicit grammatical knowledge?

Does explicit instruction with the integration of input and output in FFI lead to acquisition of implicit grammatical knowledge?

In summary, one of the more notable results from the above table and figure is the poorer performance of the participants on the ungrammatical items on the four tests, mostly on pretest.

Next, one-way ANOVA was performed to establish if there was an effect for instructional treatment on learners’
correct responses; that is, whether there was any significant difference amongst pretest and the three posttests. The results for grammatical items (Table 2) revealed statistically significant differences among the four tests, $F(3, 127) = 18.16, p<.05$.

Table 2. One-way ANOVA for grammatical items

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>131.084</td>
<td>3</td>
<td>43.695</td>
<td>18.160</td>
</tr>
<tr>
<td>Within Groups</td>
<td>305.573</td>
<td>127</td>
<td>2.406</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>436.656</td>
<td>130</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: $p<.05$.

In order to see where the differences lie, a post hoc test called Scheffé test was conducted. The results of the post hoc analysis (Table 3) indicated that there was a statistically significant difference between pretest and posttest 1, between pretest and posttest 2, and between pretest and posttest 3. However, there were no significant differences between posttest 1 and posttest 2, between posttest 1 and posttest 3, and between posttest 2 and posttest 3.

Table 3. Post hoc Scheffé test for grammatical items

<table>
<thead>
<tr>
<th>Pretest</th>
<th>posttest 1</th>
<th>posttest 2</th>
<th>posttest 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>$X^2 = 8.82$</td>
<td>$X^2 = 10.91$</td>
<td>$X^2 = 11.08$</td>
<td>$X^2 = 11.26$</td>
</tr>
<tr>
<td>Pre vs. P 1</td>
<td>.000*</td>
<td>Pre vs. P 2</td>
<td>.000*</td>
</tr>
<tr>
<td>P1 vs. P2</td>
<td>.975</td>
<td>P2 vs. P3</td>
<td>.854</td>
</tr>
<tr>
<td>$p&lt;.05$</td>
<td>$p&lt;.05$</td>
<td>$p&lt;.05$</td>
<td>$p&lt;.05$</td>
</tr>
</tbody>
</table>

Note: Pre = pretest, p1 = posttest 1, p2 = posttest 2, p3 = posttest 3.

Likewise, One-way ANOVA for ungrammatical items was performed on the four testing episodes and consequently found statistically significant differences among the four tests, $F(3, 127) = 7.22, <.05$ (Table 4).

Table 4. One-way ANOVA for ungrammatical items

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>184.677</td>
<td>3</td>
<td>61.559</td>
<td>7.224</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1082.224</td>
<td>127</td>
<td>8.521</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1266.901</td>
<td>130</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: $p<.05$.

Again, in order to see where the differences lie, a post hoc Scheffé test was conducted. The results of the post hoc analysis (Table 5) revealed that there was a statistically significant difference between pretest and posttest 1, between pretest and posttest 2, but not between pretest and posttest 3. However, like grammatical items there were no significant differences between posttest 1 and posttest 2, between posttest 1 and posttest 3, and between posttest 2 and posttest 3.
Table 5. Post hoc Scheffé test for ungrammatical items

<table>
<thead>
<tr>
<th>Pretest</th>
<th>posttest 1</th>
<th>posttest 2</th>
<th>posttest 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\bar{X} = 1.17$</td>
<td>$\bar{X} = 4.02$</td>
<td>$\bar{X} = 3.91$</td>
<td>$\bar{X} = 3.3$</td>
</tr>
</tbody>
</table>

Comparisons  
Pre vs. P 1  
Pre vs. P 2  
Pre vs. P 3  
P1 vs. P2  
P1 vs. P3  
P2 vs. P3  

sig.  
.001*  
.002*  
.051  
.999  
.823  
.886  

$\rho<.05$

Note. Pre= pretest, p1= posttest 1, p2= posttest 2, p3= posttest 3.

The results of One-way ANOVA for the total scores (grammatical with ungrammatical items) indicated statistically significant differences among the four tests, $F (3, 127) = 15.06, <.05$, as illustrated in Table 6.

Table 6. One-way ANOVA for total scores

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>609.967</td>
<td>3</td>
<td>203.322</td>
<td>15.063</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1714.232</td>
<td>127</td>
<td>13.498</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2324.198</td>
<td>130</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. $p<.05$.

Moreover, the post hoc analyses once again found that for total items there was a statistically significant difference between pretest and posttest 1, between pretest and posttest 2, but not between pretest and posttest 3. However, there were no significant differences between posttest 1 and posttest 2, between posttest 1 and posttest 3, and between posttest 2 and posttest 3 (Table 7).

Table 7. Post hoc Scheffé test for total items

<table>
<thead>
<tr>
<th>Pretest</th>
<th>posttest 1</th>
<th>posttest 2</th>
<th>posttest 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\bar{X} = 10$</td>
<td>$\bar{X} = 14.94$</td>
<td>$\bar{X} = 15$</td>
<td>$\bar{X} = 14.57$</td>
</tr>
</tbody>
</table>

Comparisons  
Pre vs. P 1  
Pre vs. P 2  
Pre vs. P 3  
P1 vs. P2  
P1 vs. P3  
P2 vs. P3  

sig.  
.000*  
.000*  
.000*  
1.000  
.985  
.978  

$\rho<.05$

Note. Pre= pretest, p1= posttest 1, p2= posttest 2, p3= posttest 3.

In each test, two other factors were analyzed, called Recognized and Change scores. To be clearer, Recognized score is given to those grammatical items that were correctly recognized as grammatical by the learners and those ungrammatical items, which were correctly recognized as ungrammatical. Obviously, each participant could get the score 24 if s/he could recognize all twenty-four items correctly. In Table 8, mean, standard deviation and percentage scores for learners’ accurate recognition on pretest, posttest1, posttest 2 and posttest 3 are demonstrated.

In addition to Recognized scores, the study tried to consider a change in learners’ proficiency, which was somehow different from recognized score. Change means any correct recognized scores for grammatical items, that is, for leaving sentences unchanged, and in case of ungrammatical items, it is correct recognition for that item and complete or partial correction of it. It should be noted that there were many cases for ungrammatical items that were not considered in the Change score. For instance, many ungrammatical items were recognized ungrammatical but were not corrected. Or there were many ungrammatical items which were recognized...
ungrammatical but were corrected incorrectly. In addition, there were many ungrammatical items, which were recognized ungrammatical but were corrected unrelated to the target structure (i.e., indirect reported speech) of the study. This will be discussed later in this section.

Table 8. Descriptive statistics and accuracy scores for correct recognition and for changed proficiency

<table>
<thead>
<tr>
<th></th>
<th>Recognized</th>
<th></th>
<th></th>
<th>Change</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>%</td>
<td>Mean</td>
<td>SD</td>
<td>%</td>
</tr>
<tr>
<td>Pre-test</td>
<td>13.74</td>
<td>3.67</td>
<td>57.26</td>
<td>11.72</td>
<td>4.28</td>
<td>34.49</td>
</tr>
<tr>
<td>Post-test 1</td>
<td>18.54</td>
<td>3.82</td>
<td>77.26</td>
<td>20.15</td>
<td>6.56</td>
<td>59.28</td>
</tr>
<tr>
<td>Post-test 2</td>
<td>19.45</td>
<td>3.57</td>
<td>81.07</td>
<td>21.18</td>
<td>6.54</td>
<td>62.31</td>
</tr>
<tr>
<td>Post-test 3</td>
<td>18.26</td>
<td>4.09</td>
<td>76.12</td>
<td>18.80</td>
<td>6.88</td>
<td>55.31</td>
</tr>
</tbody>
</table>

As illustrated in the table above, the results of the Recognized scores showed that learners’ accuracy score on the pretest averaged less than 58%. In contrast, participants had an average accuracy score of above 78% on the three post-tests. Likewise, in the same table the results of the Change scores revealed accuracy score less than 35% on the pretest. In contrast with that, the average accuracy score on the three phases of post-testing was about 60%. It should be noted that the standard deviation for Recognized scores on pretest was almost the same as their standard deviations on the three posttests. However, the standard deviation for Change scores on pretest was relatively lower than their standard deviations on the three posttests.

Figure 3. Comparison of means for recognized and change scores on all four UGJT testing phases

For the analysis of the collected data, a one-way ANOVA was carried out (Table 9) to examine the differences between the means on learners’ Recognized and Change scores and to find out whether the differences, if any, occurred by chance or treatment influence; that is, whether there was any significant difference amongst pretest and the three posttests. The results for the former (i.e., Recognized) revealed statistically significant differences among the four tests, $F(3, 127) = 15.94, p<.05$.

Table 9. One-way ANOVA for recognized scores

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>681.255</td>
<td>3</td>
<td>227.085</td>
<td>15.941</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1809.173</td>
<td>127</td>
<td>14.245</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2490.427</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: $p<.05$. 

70
In order to see where the differences exist, a post hoc Scheffé test was conducted. The results of the post hoc analysis (Table 10) indicated that there was a statistically significant difference between pretest and posttest 1, between pretest and posttest 2, and between pretest and posttest 3 for Recognized category. However, there were no significant differences between posttest 1 and posttest 2, between posttest 1 and posttest 3, and between posttest 2 and posttest 3.

Table 10. Post hoc Scheffé test for recognized scores

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>posttest 1</th>
<th>posttest 2</th>
<th>posttest 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\bar{X}$</td>
<td>13.74</td>
<td>18.54</td>
<td>19.45</td>
<td>18.26</td>
</tr>
</tbody>
</table>

Comparisons     sig.     
Pre vs. P 1      .000*     
Pre vs. P 2      .000*     
Pre vs. P 3      .000*     
P1 vs. P2        .795      
P1 vs. P3        .994      
P2 vs. P3        .688      

$p<.05$

*Note.* Pre= pretest, p1= posttest 1, p2= posttest 2, p3= posttest 3.

Similarly, the results (Table 11) for the latter one (Change) revealed statistically significant differences among the four tests, $F (3, 127) = 17.1$, $p<.05$.

Table 11. One-way ANOVA for change scores

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1910.602</td>
<td>3</td>
<td>636.867</td>
<td>17.107</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4728.138</td>
<td>127</td>
<td>37.229</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6638.740</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$p<.05$.

The post hoc Scheffé test was conducted to see where the differences lie. The results of the post hoc analysis (Table 12) showed that learners’ performance on the posttest1, posttest 2 and posttest 3 was significantly better than that of pretest; whereas the learners’ performance on three posttests did not differ from each other significantly.

Table 12. Post hoc Scheffé test for change scores

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>posttest 1</th>
<th>posttest 2</th>
<th>posttest 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\bar{X}$</td>
<td>11.72</td>
<td>20.15</td>
<td>21.18</td>
<td>18.80</td>
</tr>
</tbody>
</table>

Comparisons     sig.     
Pre vs. P 1      .000*     
Pre vs. P 2      .000*     
Pre vs. P 3      .000*     
P1 vs. P2        .919      
P1 vs. P3        .866      
P2 vs. P3        .521      

$p<.05$

*Note.* Pre= pretest, p1= posttest 1, p2= posttest 2, p3= posttest 3.

In light of these outcomes, it can be concluded that the first research question was supported safely due to the considerable improvement gained by the participants from pretest to the immediate and two delayed posttests. Therefore, it can be claimed that, the particular type of instruction used in the present study had a positive impact on learners’ acquisition of explicit grammatical knowledge, particularly in case of indirect reported speech.

Now that the results of research question 1 (part 1) is shown, the answer to two sub-questions of it concerning the durability of the results are presented below.
5.1 Short-term Acquisition of Explicit Knowledge

By a short glance at the Tables 1 and 8, and the results from the one-way ANOVA done on the data, the answer to this sub-question is “yes”. Because in case of grammatical, ungrammatical, total, Recognized and Change scores, participants performed significantly better on immediate posttests (which was held 2 days after the last treatment session) than did on pretest.

5.2 Long-term Acquisition of Explicit Knowledge

The results indicated that like the above question, it can be claimed that instruction had a positive influence on learners’ performance, because of participants’ great performance on the two delayed posttests (i.e., posttest 2 and posttest 3 held 14 days after the first posttest and 50 days after the post-test 2, respectively) in contrast to their performance on pretest. The answer to this question is again supported by the findings taken from ANOVA results. To deal with part 2 of research question1, the results of the tests in terms of the influence of instruction on the acquisition of implicit knowledge are presented below.

Explicit instruction and implicit acquisition of indirect reported speech: To address this research question, the results of the Text Reconstruction Test is analyzed.

6. Results from Text Reconstruction Test

First, it should be noted that the results of this question and the last question are the same. However, below a very short analysis of the data and total scores for participants (sum of the means of word order, use of if and tense back shifting) are provided in terms of comparing and contrasting four testing episodes.

The results in Table 13 showed that learners’ total accuracy score on the pretest in the case of word order, use of if, tense back shifting was around 37%, and their average accuracy score on the three phases of post-testing was about 49%.

It should be noted that the standard deviation for the participants for word order, use of if and tense back shifting on pretest were somehow similar to their standard deviations on the three posttests.

The most noticeable result was the participants’ similar performance across testing episodes and some degree of implicit knowledge on pretest before treatment sessions.

Table 13. Descriptive statistics and accuracy scores for total correct use of word order, if and tense in TRT

<table>
<thead>
<tr>
<th></th>
<th>Order + If + Tense</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td>Pre-test</td>
<td>1.10</td>
</tr>
<tr>
<td>Post-test 1</td>
<td>1.50</td>
</tr>
<tr>
<td>Post-test 2</td>
<td>1.58</td>
</tr>
<tr>
<td>Post-test 3</td>
<td>1.32</td>
</tr>
</tbody>
</table>

Figure 4. Comparison of means for total correct use of word order, if and tense on all four TRT testing phases

Next, one-way ANOVA was performed to establish if there was any effect for instructional treatment on learners’ performance in total correct use of word order, if and tense back shifting; that is, whether there were any significant differences amongst pretest and the three posttests. The results of Table 14 revealed no statistically
significant differences among the four tests, \( F(3, 127) = 1.69, p<.05 \).

Table 14. One-way ANOVA for total correct use of word order, if and tense back shifting

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4.615</td>
<td>3</td>
<td>1.538</td>
<td>1.699</td>
<td>.171</td>
</tr>
<tr>
<td>Within Groups</td>
<td>114.985</td>
<td>127</td>
<td>.905</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>119.600</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. \( p<.05 \).

6.1 Short-term Acquisition of Implicit Knowledge

By considering the results from Table 14 and ANOVA results, it is obvious that there was no significant effect for instruction because there was no statistically significant difference between pretest and the immediate posttest. Thus, explicit instruction did not lead to short-term acquisition of implicit grammatical knowledge.

6.2 Long-term Acquisition of Implicit Knowledge

Overall, the instruction had no effect on the acquisition of implicit knowledge as measured by the total scores of the TRT and Table 14 revealing that the limited insignificant accuracy scores gained on posttests 1 and 2 did not last (i.e., it disappeared in the second delayed posttest).

6.3 Explicit Instruction and Main Aspects of Indirect Reported Speech

In order to answer this research question, the results of the two tests (i.e., Untimed Grammaticality Judgment Test and Text Reconstruction Test) are pointed out. Note that the findings are addressed in relation to the four testing episodes (i.e., pre-test, post-test 1, post-test 2 and post-test 3). First, the results from the Untimed Grammaticality Judgment Test are indicated.

6.4 Results from Untimed Grammaticality Judgment Test

The descriptive statistics for some key aspects of indirect reported speech (word order, use of if and tense back shifting) on the Untimed Grammaticality Judgment Test are presented in Table 15.

The results of the ungrammatical items having errors in word order showed that learners’ accuracy score on the pretest was about 5%. In contrast, participants had an average accuracy score of above 31% on the three post-tests. However, remarkably, in the same table the results of the ungrammatical items having errors in use of if revealed an accuracy score of 0% on the pretest. In contrast with that, the average accuracy score on the three phases of post-testing was about 30%. Finally, Table 15 shows that participants’ accuracy rates in the case of tense back shifting dropped to under 22% on pretest; however, they performed above 48% on the three posttests.

It should be noted that the standard deviation for the participants for word order on pretest was a bit lower than their standard deviations on the three posttests. However, the standard deviation for use of if on pretest was zero and it was noticeable in relation with three posttests. The standard deviation for tense back shifting on pretest was a bit lower than their standard deviations on the three posttests.

The most noticeable result was the participants’ zero accuracy score on the use of if on pretest.

Table 15. Descriptive statistics and accuracy scores for correction of word order, if and tense in UGJT

<table>
<thead>
<tr>
<th></th>
<th>Order</th>
<th>If</th>
<th>Tense</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>SD</td>
<td>SD</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Pre-test</td>
<td>0.37</td>
<td>0.0</td>
<td>2.52</td>
</tr>
<tr>
<td></td>
<td>1.03</td>
<td>0.0</td>
<td>2.61</td>
</tr>
<tr>
<td></td>
<td>5.3</td>
<td>0.0</td>
<td>21.07</td>
</tr>
<tr>
<td>Post-test 1</td>
<td>2.51</td>
<td>0.97</td>
<td>5.71</td>
</tr>
<tr>
<td></td>
<td>2.28</td>
<td>1.2</td>
<td>3.34</td>
</tr>
<tr>
<td></td>
<td>35.91</td>
<td>32.38</td>
<td>47.61</td>
</tr>
<tr>
<td>Post-test 2</td>
<td>2.6</td>
<td>1.14</td>
<td>6.35</td>
</tr>
<tr>
<td></td>
<td>2.36</td>
<td>1.3</td>
<td>3.58</td>
</tr>
<tr>
<td></td>
<td>37.14</td>
<td>38.09</td>
<td>52.97</td>
</tr>
<tr>
<td>Post-test 3</td>
<td>1.53</td>
<td>0.57</td>
<td>5.42</td>
</tr>
<tr>
<td></td>
<td>2.26</td>
<td>1.02</td>
<td>3.65</td>
</tr>
<tr>
<td></td>
<td>21.97</td>
<td>19.23</td>
<td>45.19</td>
</tr>
</tbody>
</table>
Next, one-way ANOVA was performed to establish if there was an effect for instructional treatment on learners’ performance in word order on the 12 items; that is, whether there was any significant difference amongst pretest and the three posttests. The results of Table 16 revealed statistically significant differences among the four tests, $F(3, 127) = 9.00, p<.05$.

Table 16. One-way ANOVA for word order

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>113.354</td>
<td>3</td>
<td>37.785</td>
<td>9.007</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>532.776</td>
<td>127</td>
<td>4.195</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>646.130</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. $p<.05$.*

In order to see where the differences lie, the post hoc Scheffé test was conducted. The results of the post hoc analysis (Table 17) revealed that participants in contrast with pretest performed significantly better in posttest 1 and posttest 2 but not in posttest 3. However, participants’ performance in posttest 1 did not differ from posttest 2 and posttest 3 significantly.

Table 17. Post hoc Scheffé test for word order

<table>
<thead>
<tr>
<th></th>
<th>X̅= 0.37</th>
<th>posttest 1 X̅= 2.51</th>
<th>posttest 2 X̅= 2.6</th>
<th>posttest 3 X̅= 1.53</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparisons</td>
<td>sig.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre vs. P 1</td>
<td>.000*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre vs. P 2</td>
<td>.000*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre vs. P 3</td>
<td>.189</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P1 vs. P2</td>
<td>.999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P1 vs. P3</td>
<td>.340</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2 vs. P3</td>
<td>.266</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. Pre= pretest, p1= posttest 1, p2= posttest 2, p3= posttest3.*

Similarly, one-way ANOVA was performed to establish whether there was an effect for instructional treatment on learners’ performance in the use of if on the 3 items. Table 18 revealed statistically significant differences among the four tests, $F(3, 127) = 8.53, p<.05$.  

![Figure 5. Comparison of means for word order, if and tense on all four UGJT testing phases](image)
Table 18. One-way ANOVA for use of if

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>26.931</td>
<td>3</td>
<td>8.977</td>
<td>8.533</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>133.603</td>
<td>127</td>
<td>1.052</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>160.534</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. p<.05.

The results of post hoc Scheffé test revealed that again participants in contrast with pretest performed significantly better in posttest 1 and posttest 2 but not in posttest 3. However, participants’ performance in posttest 1 did not differ from posttest 2 and posttest 3 significantly (see Table 19).

Table 19. Post hoc Scheffé test for use of if

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>posttest 1</th>
<th>posttest 2</th>
<th>posttest 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>$X^2$</td>
<td>0.0</td>
<td>0.97</td>
<td>1.14</td>
<td>0.57</td>
</tr>
</tbody>
</table>

Comparisons

- Pre vs. P 1
- Pre vs. P 2
- Pre vs. P 3
- P1 vs. P2
- P1 vs. P3
- P2 vs. P3

sig.

- .002*
- .000*
- .199
- .921
- .533
- .214

Note. Pre= pretest, p1= posttest 1, p2= posttest 2, p3= posttest3.

Finally, the results of the one-way ANOVA performed on learners’ performance on tense back shifting (Table 20), revealed statistically significant differences among the four tests, $F (3, 127) = 9.19, <.05$.

Table 20. One-way ANOVA for tense back shifting

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>300.685</td>
<td>3</td>
<td>100.228</td>
<td>9.192</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1384.746</td>
<td>127</td>
<td>10.904</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1685.431</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. p<.05.

The results of post hoc Scheffé test were similar to the results of the two other parts investigated above (i.e., word order and use of if). It revealed that again participants in contrast with pretest performed significantly better in posttest 1 and posttest 2 and posttest 3. However, participants’ performance in posttest 1 did not differ from posttest 2 and posttest 3 significantly (see Table 21).

Table 21. Post hoc Scheffé test for tense back shifting

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>posttest 1</th>
<th>posttest 2</th>
<th>posttest 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>$X^2$</td>
<td>2.52</td>
<td>5.71</td>
<td>6.35</td>
<td>5.42</td>
</tr>
</tbody>
</table>

Comparisons

- Pre vs. P 1
- Pre vs. P 2
- Pre vs. P 3
- P1 vs. P2
- P1 vs. P3
- P2 vs. P3

sig.

- .002*
- .000*
- .012*
- .882
- .990
- .755

Note. Pre= pretest, p1= posttest 1, p2= posttest 2, p3= posttest3.
Drawing on these outcomes, it can be concluded that the answer to third research question is that the instruction promoted learners acquisition of the main parts of the complex target structure of the study (i.e., indirect reported speech). The significant differences of learners’ mean scores on pretest and three posttests indicated that they improved considerably in using a statement instead of question form in indirect reported speech. In addition, they noticeably acquired that they should use if in yes/no indirect questions. Finally, the results revealed that instruction was very effective on learners’ knowledge and use of tense back shifting in indirect reported speech. Hence, the instruction had a positive impact on learners’ use of all three parts of the indirect reported speech.

7. Results from Text Reconstruction Test

In order to answer last research question concerning the effect of instruction on main aspects of indirect reported speech, the results of the two tests (i.e., Untimed Grammaticality Judgment Test and Text Reconstruction Test) are pointed out. Note that the findings are addressed in relation to the four testing episodes (i.e., pre-test, post-test 1, post-test 2 and post-test 3).

Above was the answer related to UGJT and below is the answer concerning TRT. The results showed that learners’ accuracy score on the pretest in the case of word order was about 32%. Participants had an average accuracy score of above 43% on the three post-tests. In the same table the results of the use of if revealed an accuracy score of around 31% on the pretest and the average accuracy score on the three phases of post-testing was about 48%. Finally, Table 22 shows that participants’ accuracy rates was about 47% on pretest and 55% on the three posttests.

It should be noted that the standard deviation for the participants for word order, use of if and tense back shifting on pretest were somehow similar to their standard deviations on the three posttests.

The most noticeable result was the participants’ similar performance across testing episodes and some degree of implicit knowledge on pretest before treatment sessions.

Table 22. Descriptive statistics and Accuracy scores for correct use of word order, if and tense in TRT

<table>
<thead>
<tr>
<th>Order</th>
<th>Mean</th>
<th>SD</th>
<th>%</th>
<th>If</th>
<th>Mean</th>
<th>SD</th>
<th>%</th>
<th>Tense</th>
<th>Mean</th>
<th>SD</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>0.32</td>
<td>0.27</td>
<td>32.11</td>
<td>0.31</td>
<td>0.47</td>
<td>31.42</td>
<td>0.47</td>
<td>0.28</td>
<td>47.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-test 1</td>
<td>0.46</td>
<td>0.32</td>
<td>46.37</td>
<td>0.45</td>
<td>0.50</td>
<td>45.71</td>
<td>0.58</td>
<td>0.30</td>
<td>58.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-test 2</td>
<td>0.46</td>
<td>0.35</td>
<td>46.82</td>
<td>0.54</td>
<td>0.50</td>
<td>54.28</td>
<td>0.57</td>
<td>0.25</td>
<td>57.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-test 3</td>
<td>0.36</td>
<td>0.33</td>
<td>36.96</td>
<td>0.46</td>
<td>0.50</td>
<td>46.15</td>
<td>0.49</td>
<td>0.27</td>
<td>49.61</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 6. Comparison of means for correct use of word order, if and tense on all four TRT testing phases

Next, one-way ANOVA was performed to establish if there was an effect for instructional treatment on learners’ performance in correct use of word order; that is, whether there was any significant difference amongst pretest and the three posttests. The results of Table 23 revealed no statistically significant differences among the four tests, $F (3, 127) = 1.72, p<.05$. 

76
Table 23. One-way ANOVA for word order

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.538</td>
<td>3</td>
<td>.179</td>
<td>1.728</td>
</tr>
<tr>
<td>Within Groups</td>
<td>13.182</td>
<td>127</td>
<td>.104</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>13.721</td>
<td>130</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Similarly, one-way ANOVA was performed to establish whether there was any effect for instructional treatment on learners’ performance on the use of if. Table 24 revealed that there were no statistically significant gains scores across testing episodes, F (3, 127) = 1.27, <.05.

Table 24. One-way ANOVA for use of if

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.945</td>
<td>3</td>
<td>.315</td>
<td>1.275</td>
</tr>
<tr>
<td>Within Groups</td>
<td>31.376</td>
<td>127</td>
<td>.247</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>32.321</td>
<td>130</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. p<.05.

Finally, the results of the one-way ANOVA performed on learners’ performance on tense back shifting (Table 25), indicated that there were no statistically significant differences among the four tests, F (3, 127) = 1.23, <.05.

Table 25. One-way ANOVA for tense back shifting

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.293</td>
<td>3</td>
<td>.098</td>
<td>1.235</td>
</tr>
<tr>
<td>Within Groups</td>
<td>10.039</td>
<td>127</td>
<td>.079</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10.332</td>
<td>130</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. p<.05.

In light of these findings, it can be claimed that instruction had no effect on the acquisition of the main parts of the complex target structure of the study (i.e., indirect reported speech). The differences of learners’ mean scores on pretest and three posttests were not statistically significant indicating that they did not improve considerably in using a statement instead of question form in indirect reported speech or they should use if in yes/no-indirect questions. Finally, the results revealed that instruction was not effective on learners’ knowledge and use of tense back shifting in indirect reported speech. Therefore, the instruction had no impact on learners’ use of all three parts of the indirect reported speech in Text Reconstruction Test.

8. Conclusion

On the one hand, this study has demonstrated that explicit instruction together with input-output tasks resulted in the acquisition of the explicit knowledge of the target structure of the study (i.e., indirect reported speech). However, this particular type of instruction could not influence the acquisition of the implicit knowledge of the target structure. The study is supportive of the claims that have been advanced on behalf of form-focused instruction (Doughty & J. Williams, 1998, cited in R. Ellis et al., 2009). The results show that explicit grammar instruction can have a great role in second language acquisition, at least in fostering the explicit knowledge. Drawing on the weak interface hypothesis and the well-known claim of Schmidt’s (1990) noticing hypothesis, the present study investigated the role of awareness on grammar acquisition. The noticing instruction provided in this study was sufficiently explicit to assist the learners to improve their explicit knowledge of the indirect reported speech. Since, there is a desire in the literature to make L2 learning and knowledge implicit like L1 (Hulstijn, 2005; R. Ellis, 2003, 2008) and since the weak interface hypothesis claimed that explicit instruction by the aid of noticing can serve to feed the internal monitoring that arises when learners notice the gap between their output and what they know consciously, explicit instruction of the study although did not enable learners to fully acquire but prepared them for subsequent acquisition and it indirectly helped acquisition of implicit knowledge (which was claimed to be one of the stages of implicit learning) by priming the processes involved in
its development (i.e., noticing).

The study is also in line with the large body of research that provided evidence that explicit form-focused instruction has a significant effect on the attainment of accuracy and supported the Teachability hypothesis (Pienemann, 1984, 1988, and 1999 cited in Nassaji & Fotos, 2004) which suggests that while certain developmental sequences are fixed and cannot be altered by grammar teaching, other structures can benefit from instruction any time they are taught. Furthermore, the study concluded that the effect of explicit instruction on explicit knowledge of target structure is durable in short-term and sustains over a longer period.

On the other hand, the conclusions drawn based on detailed analysis of the data, suggest that implicit acquisition of grammatical form did not take place by the aid of explicit instruction. The explanations offered were that the students could not perform a dual-task (paying attention to both form and meaning simultaneously in rewriting a story). Unfortunately, some structures are complex for the students to understand and to apply in spontaneous production. Indirect reported speech of three types (statement, WH-questions and yes/no questions) is one of those complex structures that are difficult and of time-consuming grammatical points that put a big burden on the part of both teacher and learners. May be at the intermediate levels acquisition of all three types of reported speech is a very optimistic view.

Some teachers think that explicit grammar instruction can be boring, but this study by means of input and output-based tasks put some variety to the traditional grammar instruction that helped students to see the patterns and structures of the language in context and made learners interested (as it was evident when they asked the researcher to teach all the lessons of the book by this particular type of method). Explicit teaching can still be interesting if the teachers know how to do it. In addition, for students who are preparing for external examinations, it is not surprising they wish to know the rules explicitly as it is a ‘short cut’ to understanding the rules. These findings regarding the idea that explicit instruction and awareness are necessary for acquisition are compatible with that of Schmidt (1990) which asserted that noticing is a prerequisite and a starting point for learning. The complexity of target form and learners’ inappropriate level of proficiency are discussed to be the reasons for failure in acquisition of implicit knowledge.

References


Williams, J., & Evans, J. (1998). What kind of focus and on which forms?. In Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 139-155). New York: Cambridge University Press.


Copyrights
Copyright for this article is retained by the author(s), with first publication rights granted to the journal.
This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).