Effects of Two Different Grammar Instruction Approaches Depending upon EFL Learners’ Grammar Knowledge

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ABSTRACT

The present study aims at investigating the effects of two grammar instruction approaches in the development of EFL learners’ grammar knowledge and in learning of four grammar types, along with their perception of the approaches, depending upon their grammar knowledge level. For the study, 88 college students were divided into two groups according to their grammar knowledge. The results were that 1) low-level learners obtained a better result in the deductive approach, but not in the inductive one, while high-level learners failed to show any differences in both approaches; 2) no differences were found between the post-test scores of each grammar type in both approaches, and among the four types, articles were found to be the most difficult one in both approaches, whereas verbs revealed the most largest differences between pre- and post-tests in both approaches; and 3) they showed some similarities and differences in their perception of the benefits and drawbacks of each approach. Teaching implications are discussed.

Keywords: grammar instruction, grammar instruction approach, deductive approach, inductive approach, grammar type

1. Introduction

The importance and necessity of grammar instruction for acquiring a second/foreign language have been a critical issue to researchers and practitioners in accordance with prevailing theories of language teaching of the times. Some researchers, such as Krashen (1981), standing up for communicative language teaching argued that grammar instruction did not play a major role in language acquisition. They strongly stated that language learners should be sufficiently exposed to a naturalistic setting, leading to become fluent learners who are equipped with communicative competence (Genesee, 1987).
Second/foreign language teaching has placed overly excessive focus on language fluency, not accuracy, so that it left legions of learners at the low level of grammatical competence. On the contrary, form-focused instruction (hereafter, FFI) was introduced as an alternative teaching approach, which emphasized more both on form and meaning in second language acquisition (Fotos, 2011; Long, 1983; Rutherford and Sharwood Smith, 1988). In line with such movement, grammar instruction has been brought to life again.

It is quite obvious that grammar is a necessary factor in language acquisition of all times (Ellis, 2006; Fotos, 2011). According to Ellis (2006), grammar teaching is an instructional technique that enables ESL/EFL learners to pay attention to a specific grammatical form, consequently boosting their comprehending, producing, and even internalizing the form. In other words, grammar knowledge can help them improve their language proficiency (Ellis, 2006; Fotos, 2011). Such awareness and understanding of grammar instruction paved the way for grammar teaching methodologies. A great number of researchers and teachers seemed eager to come up with a variety of methods (e.g., deductive/inductive, explicit/implicit, metalinguistic/direct written feedback) for more effective grammar teaching.

Among them, two different approaches—deductive and inductive—are still the most controversial types of grammar instruction. Because many of the researchers have different views on the issue, they failed to yield consistent findings yet, even though they have studied on which is more effective in grammar instruction. Deductive grammar instruction (DGI, hereafter), also called rule-driven learning, provides explicit explanation of the target grammar rules to learners, followed by specific examples of the rules (Decoo, 1996; Larson-Freeman, 2001; Wang, 2012). DGI has been supported by many researchers with some advantages that it could help cultivate learners’ grammatical competence, and particularly in a teacher-centered language learning environment, it could help them acquire grammatical concept clearly through explicit explanation offered by their teachers (Erlam, 2003; Lin, 2007; Wang, 2012). On the other hands, inductive grammar instruction (IGI, hereafter), an example-driven type, has a sequence of learning from specific examples of language use to general rule discovery. IGI is widely known that it could enhance learners’ motivation for learning a language by their active involvement in deeper learning process, and it will be more useful for low-level learners as well as the young (Decoo, 1996; Rivers, 1975).

There have still existed conflicting arguments among the researchers over the drawbacks of the two types of instruction: DGI impedes learners’ meaningful input due to too much focus on grammatical accuracy (Prabhu, 1987), whereas IGI brings concerns that learners might have possibility of inducing incorrect rules for themselves, leading to fossilization (Kim, 2014). Furthermore, this dichotomous approach to grammar instruction has been sharply criticized for an unnecessary debate (Hammerly, 1975). Notwithstanding, Ellis (2002) gives voice to the necessity for a differentiated approach to grammar knowledge, suggesting that careful consideration should be given to a variety of factors such as specific grammatical features and complexity of grammar rules since such variables may influence learners’ language performance in contexts. That is, further studies should be conducted to conform the effectiveness of the pedagogical techniques of grammar instruction types on the mastery of grammatical features and structures (Ellis, 2006; Erlam, 2003).

Accordingly, the current study aims at investigating the effects of the two different grammar instruction approaches—deductive or inductive—depending upon EFL learners’ grammar knowledge on the development of their grammar knowledge and the learning of four grammatical structures—articles, prepositions, verbs, and tenses—that are believed to paly a crucial part in the development of grammatical competence (Doughty and Williams, 1998), along with their perception of the two approaches. To fulfill the research purposes, the following specific
research questions are posed:

(1) Which approach is more effective in the development of EFL learners’ grammar knowledge depending upon their level of grammar knowledge?
(2) Which approach is more effective in their learning of four grammar types depending upon their level of grammar knowledge?
(3) How do they perceive the two grammar instruction approaches depending upon their level of grammar knowledge?

2. Literature Review

2.1 Grammar Instruction

Grammar has been considered a key factor in language acquisition over a long period of time with the benefits that the grammatical knowledge can help language learners improve their language proficiency (Ellis, 2006; Fotos, 2011). The emphasis on grammatical form(s), however, has changed the importance of grammar teaching and learning according to the theory of language teaching of the past times. For example, since 1980s, the introduction of a dominant approach, CLT negatively influenced grammar teaching, even resulting in the exclusion of grammar or little emphasis on structure (Ho, 2004), while communicative competence, acquired in natural settings that provides sufficient amount of comprehensible, meaningful input, was more focus placed on. Otherwise, CLT, which had more priority on language fluency, failed to foster learners’ grammatical competence, one component of communicative competence (Schenck, 2018). It brought on more trouble especially in EFL settings, in which authentic learning environments were very limited to learners (Fotos, 1998; Lee, 2005), since the learners had little exposure to a target language except for experiencing it in a classroom.

Due to those limitations of the natural language learning approach, form-focused instruction was introduced as an alternative, and then the role of grammar was back in the spotlight in language teaching. It was claimed that FFI is necessary for language learners to become more proficient learners with both accuracy and fluency in their acquisition of a second/foreign language (Long, 1983; Rutherford and Sharwood Smith, 1988). Fotos (2011) also asserted the necessity of grammar instruction in order to achieve good communication skills, stating that language fluency must accompany language accuracy. For these reasons, the role and effectiveness of grammar have consistently been verified by a good many of researchers. In addition, how and what to teach grammar has been their primary concerns, closely related with their constant effort of understanding of its role and effectiveness.

2.2 Deductive and Inductive Grammar Instruction Approaches

There are two types in the methodologies of grammar teaching depending on how to present learners with the rules of grammar. One is deductive grammar instruction, also called a rule-driven learning that grammatical rules are explicitly explained to learners and then followed by specific examples of language use (Decoo, 1996; Larson-Freeman, 2001; Wang, 2012). Norris and Ortega (2000) contended that the DGI has several advantages in cultivating learners’
grammatical competence, that is, it helps raise their awareness of complex grammatical rules and reduce the frequency of grammatical errors or mistakes repeatedly made by them (Lin, 2007; Wang, 2012). On top of that, Erlam (2003) took a positive stance on the effectiveness of the DGI, particularly in teacher-centered language learning environments. Learners in EFL settings, whose exposure to natural learning settings are limited, may experience explicit grammar explanation from their teachers in a classroom, foster grammatical knowledge through manipulative exercises, and acquire the grammatical concepts. In addition, it is, allegedly, very conducive to mature, well-motivated learners in an intensive class (Rivers, 1975). However, its focus mainly on grammatical accuracy or drills was refuted by researchers like Prabhu (1987) by reason of impeding a comprehensive and meaningful input.

In contrast, inductive grammar instruction, an example-driven type, makes learners first exposed to the contexts and examples, with which "they infer the rule or generalization" (Larson-Freeman, 2001. p. 264), understand the underlying pattern, and finally, induce the grammar rule for themselves. That is, the IGI has a sequence of learning from specific examples of language use to general rule explanation. According to Shaffer (1989), it was reported that it might enhance learners’ motivation for learning a language by their active involvement in the deeper learning process than the DGI, and it could be beneficial for low-level learners and young learners (Decoo, 1996; Rivers, 1975). Otherwise, other researchers argued against the IGI as it was unsuccessful in gaining an accurate understanding of grammatical features (Adair-Hauck and Donato, 2010; Herron and Tomasello, 1992; Paesani, 2005). Along with the argument, several drawbacks are pointed that the approach takes learners too much time to discover grammar rules by themselves as well as the discovered rules have the possibilities of being wrong, leading to fossilization (Kim, 2014).

To date, the effectiveness of deductive and inductive grammar instructional approaches is not still conclusive. Ellis (2006) stated that which grammatical approach is more beneficial to learners depends on many variables, including specific grammatical features, learners’ age, aptitude and proficiency, or rule complexity, and so on. For example, DGI may be better to teach simple rules, while inductive one is useful for more complicated rules. Those who are skillful in grammatical analysis may be better with DGI than learners less skilled. Fischer’s (1979) research presented that the mode of grammar instruction should be applied to learners with consideration of the similarities of their native language rules with the target language’s. IGI is appropriate when the target language grammar rule is similar or simpler than the rule of the mother tongue. If the rule of the target language is dissimilar and more complex than the native language one, DGI may be better. Hammerly (1975), however, sharply criticized the constant controversy, stressing that the traditional dichotomy was “an unnecessarily polarizing distinction” (Decoo, 1996, p. 5).

### 2.3 Types of Grammar Instruction Approaches and Grammatical Structures

Ellis (2002) emphasized the necessity for a differentiated approach to grammar knowledge, and he added that the application of a certain grammar teaching method should depend on the various factors: specific grammatical features, complexity of grammar rules, or learners’ age, and proficiency, etc. In addition, it was mentioned that much more focus on grammatical structures which make problems to learners’ productive language was needed rather than trying to teach the whole of grammar from cover to cover.

In fact, Schenck (2018) made a thorough investigation into the effectiveness of the different types of grammar instruction in terms of grammatical features, with forty-six experimental studies in a meta-analysis. The results of the
study present that the effectiveness of FFI considerably varies with the type of grammatical features targeted. For example, input-based instruction (e.g., input enhancement or explicit rule presentation) was more helpful for grammatical features like the plural -s, past -ed, and third person singular -s, which have morphological regularity, yet not salient features, while output-based instruction (e.g., corrective writing feedback or recast) was very beneficial to syntactic or semantic complicated grammatical features (questions, phrasal verbs, conditionals, and articles). In particular, he reported that the explicit rule presentation failed to have a meaningful effect size for articles, supporting Bitchener and Knoch’s (2008, 2009a, 2009b, 2010a, 2010b) contention that the output-based instruction was so effective with the feature that it could enhance learners’ acquisition of grammatical features like articles, which is syntactically simple but semantically complex (Bitchener and Knoch, 2008, 2009a, 2009b, 2010a, 2010b). Finally, his inquiry of pedagogical techniques generated some suggestions for further studies: 1) input-based instruction may be more effective for articles and questions that are semantically or pragmatically complex; 2) explicit instruction may be more helpful for learners to identify syntactic relations between phrases such as third person singular or conditionals; 3) explicit instruction may be less effective for grammatical properties with complex semantic or pragmatic meanings like articles and questions; and 4) corrective written feedback may help teach semantically or syntactically complex grammatical features (Schenck, 2018, pp. 239).

In addition, Erlam’s research (2003), whose purpose was to examine the effect of deductive and inductive grammar instruction on the acquisition of direct object pronouns in French as L2, reported that the deductive instruction group had a significant advantage of acquiring morphological syntactical features, specifically direct object pronouns, resulting in a positive support of the deductive language instruction.

Despite many of the studies on the issue mentioned above, there have still been indecisive debates on the efficacy of grammar instructional types (deductive/inductive) according to grammatical features. Erlam (2003) emphasized that further studies should be conducted to conform the effectiveness of grammatical features and structures in terms of the form-focused pedagogical techniques (Ellis, 2006). Lee (2005), who conducted a questionnaire survey in an EFL setting in order to investigate EFL teachers’ and learners’ perception of types of grammar instruction, also stressed the need of more research on the relationship between the type of grammar instruction and grammatical structure, pointing out lack of related studies especially in EFL contexts.

### 3. Design

#### 3.1 Participants

The total number of 88 college students were participated in the current study. The participants consisted of 78 male students (91.2%) and 10 female students (8.8%), who enrolled in General English for freshman as a mandatory course during the spring semester in 2019, at a college in the central region of Korea. Seven students out of the total were excluded for research analyses since their sickness or private matters caused a leave or absence from participation. The final number of the participants was 81, ranging from the age of 18 to 22. All of them were in four intact classes with 16, 23, 20, and 22 attendees for each, and they were randomly divided into two groups (the DGI group and the IGI group) in consideration of the balance in number for the experiment of the study purpose.
A pre-survey was conducted in order to obtain their background information, including language ability and grammar learning methods. According to the survey, only 2.5% of them responded that they have a high level of English proficiency, while most of the participants (mid-high: 96.3%; mid: 25.9%; mid-low: 55.6%; and low: 14.8%) considered their English levels a mid-level of proficiency. Furthermore, their grammatical competence showed similar results to the English proficiency mentioned above (high: 1.2%; mid-high: 17.3%; mid: 54.3%; mid-low: 23.5%; and low: 3.7%). In fact, their average TOEIC score was 735, which signifies that they appeared to have an intermediate level of English proficiency. Additionally, they responded to a survey item to ask of the previous grammar learning modes they had used. It revealed that many of them (70.4%) had considerably learned grammar knowledge by DGI (explicit explanation about the grammar points by their teachers), whereas 21% of them acquired it using IGI.

All the participants were randomly divided into two groups for the analyses of group differences depending upon the two grammar learning instruction approaches: one group for the DGI (n = 39) and the other for the IGI (n = 42). The two groups were homogeneous in their grammar knowledge according to the pre-test (t = 1.828; p = .073). They also were divided into two groups depending upon their grammar knowledge based on the pre-test results. For the high group, 42 students were assigned (DGI: n = 19, IGI: n = 23), while 39 were included in the low group (DGI: n = 20, IGI: n = 19).

3.2 Instruments

3.2.1 Grammar Tests

Two times of grammar tests were implemented during the course. One was conducted for the pre-test at the beginning of the course and the other for the post-test at the end of the course. They were aimed to measure the improvement of the participants’ grammatical competence after the experimentation using the two different grammar instruction approaches (DGI and IGI). Both tests were the same in the number and types of questions, and grammatical features in the questions, but different only in the arrangement of the questions in the post-test in order to reduce practice effects. Each test consisted of a total of 40 multiple-choice questions asking about four grammatical features such as prepositions, transitive and intransitive verbs, tenses, and articles (10 questions per each grammatical feature). The questions were sampled from several TOEIC books such as ETS TOEIC Test for practice (YBM, 2017), Speed Reading (Neungyule, 2012), Basic TOEIC Grammar (Pagodabooks, 2013), and Sinagong TOEIC 850 (Gilbut, 2017).

3.2.2 Questionnaire

First, a pre-survey was conducted at the beginning of the course so as to gain the participants’ background information, such as their age, gender, TOEIC score, English proficiency and grammar ability, a grammar learning approach they had used before the course, and specific grammatical features that they had difficulty in learning English. Next, a post-survey was carried out at the end of the course with the following questions: Which approach did they use for grammar learning during the course?; Was the grammar instruction helpful to improve their grammatical competence?; What were the benefits and drawbacks of the two approaches they experienced during the course?; Which do they prefer, DGI or IGI, and what is the reason? Both closed and open-ended questions were used according to the question types.
3.3 Procedures

At the first week of the course, the participants were divided randomly into two groups (the DGI group: \(n = 39\), the IGI group: \(n = 42\)) in the way of achieving balance in the number in both groups. After that, they took the pre-test as well as the pre-survey for the analysis of the study.

Two weeks later, those who were in the DGI group received explicit rule explanation about a grammatical feature, “preposition,” from their instructor, who was one of the researchers, followed by examples of the feature for them to apply the rules to other cases. They were allowed to ask questions to the instructor. The first 30 minutes of the class was allotted to grammar instruction. The other grammatical features of “transitive and intransitive verbs,” “tenses,” and “articles” were instructed under the same procedure as the case of “preposition.”

As for the IGI group, the participants were divided into groups of 3 or 4 members. First, the example sentences of a grammatical feature, “preposition,” and a reading text including the feature were provided by the same instructor. After reading the materials, the group members were guided to discuss together to elicit rules of the target feature by themselves. Then they were asked to submit the task results in a written form to the instructor. The rest of the grammar features were presented one by one in each class.

Lastly, a post-test was administered at the end of the course to measure the participants’ improvement of grammar knowledge depending upon the two different grammar instruction approaches, followed by a post-survey. Figure 1 illustrates the procedure of the study.

<table>
<thead>
<tr>
<th></th>
<th>DGI Group ((n = 39))</th>
<th>IGI Group ((n = 42))</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Grouping, Pre-survey, Pre-test</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Preposition</td>
<td>Preposition</td>
</tr>
<tr>
<td></td>
<td>• Explicit rule explanation</td>
<td>• Example sentences + Reading text</td>
</tr>
<tr>
<td></td>
<td>• Examples of the feature</td>
<td>• Elicit rules of the feature</td>
</tr>
<tr>
<td></td>
<td>• Ask questions to the instructor</td>
<td>• Submit the results in a written form to the instructor</td>
</tr>
<tr>
<td>3</td>
<td>Transitive/Intransitive verbs</td>
<td>Transitive/Intransitive verbs</td>
</tr>
<tr>
<td>4</td>
<td>Perfect Tenses</td>
<td>Perfect Tenses</td>
</tr>
<tr>
<td>5</td>
<td>Articles</td>
<td>Articles</td>
</tr>
<tr>
<td>6</td>
<td>Post-test, Post-survey</td>
<td></td>
</tr>
</tbody>
</table>

**Fig. 1.** Summary of the procedure of the current study

3.4 Analysis

The test results were submitted for statistical analysis, using the SPSS statistical package, version 24. The significance level was set at \(p < 0.05\). To answer the first and second research questions, t-tests were performed to investigate any significant differences in the post-test results between the two grammar instruction groups in general and in terms of each specific grammatical features depending upon the participants’ levels of grammar knowledge. Plus, the frequency of their responses to the post-survey items was tallied to see their opinion about the two different grammar instruction approaches qualitatively.
4. Results and Discussion

4.1 Differences Between the Results of the Pre- and Post-tests in the Two Approaches

First, t-tests were administered to see which approach—deductive or inductive—is more effective in grammar instruction depending upon EFL learners’ level of grammar knowledge. As shown in Table 1, the learners in the low level of grammar knowledge obtained a significantly better result when they were taught grammar in the deductive approach, but not in the inductive approach. This result is against the previous studies (Decoo, 1996; Rivers, 1975) that the inductive approach is more beneficial for low-level learners. This might be interpreted that the learners in the present study are mature enough to raise their awareness of grammatical rules in an intensive class (Rivers, 1975), which, in turn, results in substantial achievement in their post-test results. So, it is highly likely that the deductive approach could also be effective on grammar instruction for those who are mature adults in teacher-centered language learning environments, EFL contexts in particular, even though their grammar knowledge has not fully developed (Erlam, 2003).

On the other hand, the high-level learners in grammar knowledge failed to reach any significant differences in the results of pre- and post-tests in both approaches. It can be safely said that it does not really matter which approach is engaged in grammar instruction for those who have high levels of grammar knowledge since they may have good enough skills in grammatical analysis (Ellis, 2006) as well as strong motivation to be actively involved in deeper learning process (Shaffer, 1989).

Table 1. Differences Between the Pre- and Post-tests in the Two Approaches

<table>
<thead>
<tr>
<th>Level</th>
<th>Test</th>
<th>Deductive Approach</th>
<th></th>
<th>Inductive Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M(SD)</td>
<td>t</td>
<td>p</td>
</tr>
<tr>
<td>High Pre</td>
<td>29.21(1.988)</td>
<td>-0.286</td>
<td>.778</td>
<td>30.26(1.764)</td>
</tr>
<tr>
<td>High Post</td>
<td>29.37(3.113)</td>
<td>29.09(3.204)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Pre</td>
<td>23.25(2.149)</td>
<td>-2.785</td>
<td>.012</td>
<td>24.47(2.458)</td>
</tr>
<tr>
<td>Low Post</td>
<td>25.40(6.644)</td>
<td>26.11(4.189)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Pre</td>
<td>26.15(3.646)</td>
<td>-2.361</td>
<td>.023</td>
<td>27.62(3.602)</td>
</tr>
<tr>
<td>Total Post</td>
<td>27.33(3.482)</td>
<td>27.74(3.933)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Next, t-tests were again performed to check if the post-test results differ between the two grammar instruction approaches in the two levels of grammar knowledge. The results were not statistically different in the two levels (high: \( p = .776 \), low: \( p = .531 \)). That is, the two grammar instruction approaches failed to reveal any significant differences in their post-test scores in both levels. This signifies that whether they are in the high or low level, they attained a similar degree of grammar knowledge, regardless of which approach they were engaged in. This finding goes well with the belief that comprehensible input along with interaction seems to be conducive to grammar learning whatever approaches learners are exposed to (Norris and Ortega, 2000; Purpura, 2004).

4.2 Differences Between the Grammar Types in the Two Approaches

First, Table 2 shows means and standard deviations (in parentheses) of the post-test results according to the grammar types in the two grammar instruction approaches depending upon the learners’ grammar knowledge levels. Regardless of grammar levels and instruction approaches, they obtained the lowest score in articles followed by prepositions (except for the deductive approach in the low level) and verbs, and tenses were the highest. When \( t \)-tests were carried out to check if the post-test scores were statistically different between the two approaches in each level, no significant results were found. This result confirms that they were not influenced by an instruction approach and their grammar level in the acquisition of the grammar types since inherent difficulty of grammatical rules might matter more in EFL learners’ acquisition of grammatical features than an instruction approach and their grammatical competence. Accordingly, it is still too soon to jump into the conclusion that one of the approaches better explains learners’ acquisition of grammar knowledge depending upon their grammar knowledge, unless more is known about the issue.

Table 2. Post-test Results of the Four Grammar Types in the Two Approaches According to Grammar Levels

<table>
<thead>
<tr>
<th>Type</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deductive</td>
<td>Inductive</td>
</tr>
<tr>
<td>Article</td>
<td>6.26 (1.661)</td>
<td>6.26 (1.421)</td>
</tr>
<tr>
<td>Preposition</td>
<td>7.37 (1.257)</td>
<td>7.09 (1.782)</td>
</tr>
<tr>
<td>Verb</td>
<td>7.58 (1.305)</td>
<td>7.43 (1.161)</td>
</tr>
<tr>
<td>Tense</td>
<td>7.89 (2.258)</td>
<td>8.09 (1.952)</td>
</tr>
</tbody>
</table>

Next, \( t \)-tests were administered to see if there are any differences between the post-test results of each grammar type in the two approaches depending upon the learners’ grammar level. As in Table 3, articles were significantly more difficult than tenses and verbs for the participants to learn, regardless of the grammar instruction approaches in both grammar knowledge levels. Considering the article resists easy rule formation, it is a systematically complex structure not explicitly analyzed by the learner since the rules of its use are closely connected to semantic and discoursal concerns (Doughty and Williams, 1998; Hinkel and Fotos, 2002; Westney, 1994), and correct use of it requires a language user’s extremely intuitive knowledge because of its heavy dependence upon contextual concerns (Doughty and Williams, 1998; Hinkel and Fotos, 2002), it is quite understandable that the participants of the current study performed in an EFL setting had a hard time dealing with articles in the test. It stands to reason that EFL learners need to be exposed repeatedly to a variety of examples coupled with timely pedagogical intervention (Carroll and Swain, 1993; Hulstijn, 1995).
Table 3. Differences Between Grammar Types in the Two Approaches

<table>
<thead>
<tr>
<th>Level</th>
<th>Approach</th>
<th>Type</th>
<th>M(SD)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Article</td>
<td>6.26(1.661)</td>
<td>-3.664</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Verb</td>
<td>7.58(1.305)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Article</td>
<td>6.26(1.661)</td>
<td>-2.447</td>
<td>.023</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tense</td>
<td>7.89(2.258)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>Deductive</td>
<td>Article</td>
<td>6.26(1.421)</td>
<td>-3.084</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Verb</td>
<td>7.43(1.161)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Article</td>
<td>6.26(1.421)</td>
<td>-3.612</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tense</td>
<td>8.09(1.952)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inductive</td>
<td>Article</td>
<td>5.40(1.501)</td>
<td>-3.152</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Verb</td>
<td>6.65(1.089)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>Deductive</td>
<td>Article</td>
<td>5.11(1.629)</td>
<td>-3.525</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Verb</td>
<td>6.68(1.455)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Article</td>
<td>5.11(1.629)</td>
<td>-2.721</td>
<td>.014</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preposition</td>
<td>6.37(1.606)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Article</td>
<td>5.11(1.629)</td>
<td>-3.129</td>
<td>.006</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tense</td>
<td>6.95(2.697)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Now t-tests were conducted to see any differences in the pre- and post-test scores between the two approaches in the two grammar levels. Among the four grammar types they were taught, the learners attained significantly better results only in verbs, irrespective of the instruction approaches they were engaged in both levels of grammar knowledge. Transitivity of verbs is quite likely to be subject to formal instruction no matter which instruction approaches were used and how much knowledgable learners are in grammar. In other words, transitivity of verbs could be more learnable for learners and teachable for teachers than the other three grammar points including articles and preposition that are widely believed to be learned by “feel” supported partly by pedagogical intervention (Doughty and Williams, 1998).

Table 4. Differences Between the Pre- and Post-tests of Verbs in the Two Approaches

<table>
<thead>
<tr>
<th>Level</th>
<th>Type</th>
<th>Test</th>
<th>Deductive Approach M(SD)</th>
<th>Inductive Approach M(SD)</th>
<th>t</th>
<th>p</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre</td>
<td>6.05(1.311)</td>
<td>6.17(1.029)</td>
<td>-3.564</td>
<td>.002</td>
<td>-4.162</td>
<td>.000</td>
</tr>
<tr>
<td>High</td>
<td>verb</td>
<td>Post</td>
<td>7.58(1.305)</td>
<td>7.43(1.161)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pre</td>
<td>4.75(1.118)</td>
<td>4.58(1.465)</td>
<td>-5.596</td>
<td>.000</td>
<td>-5.121</td>
<td>.000</td>
</tr>
<tr>
<td>Low</td>
<td>verb</td>
<td>Post</td>
<td>6.65(1.089)</td>
<td>6.68(1.455)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pre</td>
<td>5.38(1.369)</td>
<td>5.45(1.468)</td>
<td>-6.367</td>
<td>.000</td>
<td>-6.452</td>
<td>.000</td>
</tr>
<tr>
<td>Total</td>
<td>verb</td>
<td>Post</td>
<td>7.10(1.273)</td>
<td>7.10(1.340)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3 EFL Learners’ Perception of the Two Grammar Instruction Approaches

The participants’ responses to the post-survey items were tallied to examine their perception of the two grammar instruction approaches depending upon their grammar knowledge levels in terms of advantages and drawbacks of the approaches respectively. Firstly, they reported easy access to the understanding of the concepts and/or principles of the
target grammar points most frequently (9 times) as one of the strong points of DGI, which implies that the approach helps raise their awareness of grammatical rules (Lin, 2007; Wang, 2012), especially for the learners with low-level grammar knowledge (6 times). It is quite probably because the instructor’s clear explanation of the concepts and principles (3 times), followed by manipulative exercises, could be conducive to the cultivation of the low-level learners’ grammatical competence (Erlam, 2003; Norris and Ortega, 2000). Meanwhile, those with high-level grammar knowledge reported efficiency of the approach in that the instructor’s explicit help must be efficient for them to acquire the target grammar relatively in a short time (4 times). Both levels of learners mentioned with the same frequency that they could practice and apply the rules easily to new contexts (3 times in each level) (Thornbury, 1999).

However, the participants also reported some drawbacks of DGI. The most frequently mentioned one was quick forgetfulness of the knowledge gained from the class. Interestingly, only the learners with high-level grammar knowledge reported this drawback that they forgot the concepts and/or principles of the target grammatical rules quickly so that they had hard time applying the rules to new contexts after the treatment (6 times). This is conceivably because explanation is seldom effective in memorization of grammatical features (Thornbury, 1999), especially for high-level learners, and because the approach mainly concerns about grammatical accuracy, impeding comprehensive and meaningful learning (Prabhu, 1987), which is required for the learners to apply what they learned to various contexts. Another disadvantage both levels of learners mentioned with the same frequency was that they could not participate actively in the learning process (3 times in each level) probably because of the instructor’s transmission-style teaching that could sacrifice student involvement and interaction in the learning process (Thornbury, 1999). One more drawback worthy of mentioning is that the low-level learners confessed boredom of the grammar class (3 times) and difficulty in understanding the rules transmitted by the instructor (2 times), which must be closely related the fact that the class consists mostly of the instructor’s unilateral, direct explanation, and it invites little students participation in their learning process. It suggests that the inductive approach would be better for those who are less skillful in grammatical analysis (Decoo, 1996; Ellis, 2006; Rivers, 1975).

When it comes to IGI, both group of the participants reported the self-initiated learning mode of the approach to induce the grammar rule or generalization for themselves through group discussion (12 times for high level and 7 times for low level) most frequently as a benefit of the approach (Larson-Freeman, 2001). This might enhance their motivation for learning by their active engagement in the learning process (Shaffer, 1989) so that they can enjoy learning for themselves and also cooperating with their peers (5 times for high level and 7 times for low level). Moreover, the approach helps them use their mental structure to make the rules more meaningful and usable through active participation in group discussion (4 times for high level and 3 times for low level) and ensures them to memorize the concepts and/or principles of the target grammar points greater enough to apply them to new contexts easily (7 times for high level and 6 times for low level) (Thornbury, 1999). In particular, those with high level of grammar knowledge reported that they could gain deeper understanding of the rules and regulations of the target grammar features that they had learned (3 times). In general, the inductive approach appears to be effective in the enhancement of the participants’ grammatical competence, regardless of their grammar knowledge (Larson-Freeman, 2001).

On the other hands, the participants did not forget to mention some drawbacks of IGI. The most frequently mentioned drawback by the high-level learners was that they could only deal with grammar knowledge they already knew, but not even try to tackle unfamiliar or unknown one (5 times), whereas the low-level learners complained about that it took
quite too much time and energy for them to discover grammar rules by themselves through discussion (5 times) (Kim, 2014; Thornbury, 1999). As a natural result, both groups mentioned that they were highly likely to fail to gain an accurate understanding of the target grammatical features (3 times for high level and 5 times for low level) (Adair-Hauck and Donato, 2010; Herron and Tomasello, 1992; Paesani, 2005; Thornbury, 1999). Concerning the role and effectiveness of group discussion, the core part of the inductive approach, both groups of participants complained about the issue of free riders (2 times for high level and 3 times for low level), and the high-level learners added passive participation in group discussion (e.g., unwillingness to contribute, inattentiveness, tiresomeness) (4 times), which, in turn, might result in their ineffective learning process and unsatisfactory learning experiences.

5. Conclusion

The present study aims at investigating the effects of two different grammar instruction approaches in the development of EFL learners’ grammar knowledge and in their learning of four grammar types (articles, prepositions, verbs, and tenses), along with their perception of the two approaches, depending upon their level of grammar knowledge. The results can be summarized as follows.

First, concerning which approach is more effective in grammar instruction depending upon the participants’ grammar knowledge level, those in the low level of grammar knowledge obtained a significantly better result when they were engaged in the deductive approach, but not in the inductive approach. This result was corroborated by their responses to the survey that they reported some advantages of the deductive approach, such as easy access to the understanding of the concepts and/or principles of the grammar points and grammar learning through the instructor’s clear explanation. It implies that the low-level learners may possibly achieve a certain degree of grammatical competence when they were involved in the deductive approach, which is contrary to common belief that the deductive approach is less beneficial for low-level learners than the inductive approach (Decoo, 1996; Rivers, 1975). It can be safely said based on this outcome that the teacher needs to keep in mind that effective use of the deductive approach could avail much for the improvement of low-level EFL learners’ grammatical competence.

On the other hand, the high-level learners failed to show any significant differences between the scores of pre- and post-tests in both approaches, which signifies that it does not matter which approach is engaged in the grammar class for those high-level learners probably because they have good enough knowledge in grammar. Also, no significant differences were found between the participants’ post-test scores in the both levels, regardless of the grammar instruction approach, which suggests that the approach does not exert much influence on the attainment of grammatical competence if comprehensible input is provided along with interaction (Norris and Ortega, 2000; Purpura, 2004). Second, as for the effectiveness of the two approaches in learning of the rules of four grammar types according to the participants’ grammar knowledge level, no significant differences were found between the post-test scores of each grammar type in the two approaches, which might be because inherent difficulty of grammatical rules matters more in the acquisition of the grammar features than the instruction approach and their grammatical competence. Among the four grammar types, articles were found to be more difficult than the other three types, irrespective of the approach in both levels. Considering specific properties and usage of articles mentioned elsewhere in this paper, the participants must have had hard time learning them in the grammar class. The best remedy for this grammatical problem could be
Effects of Two Different Grammar Instruction Approaches Depending upon EFL Learners’ Grammar Knowledge

Repeated exposure to illustrative examples coupled with appropriate pedagogical intervention since instruction might be beneficial even for rules that are not clearly explicit (Carroll and Swain, 1993; Hulstijn, 1995). EFL teachers have to take this into account when making a series of decisions about when and which grammar types to include in their grammar lessons. Meanwhile, the grammar type that revealed the most largest difference between pre- and post-tests was verbs, irrespective of the approach in both groups, which appears that transitivity of verbs is very subject to formal instruction.

Finally, regarding the participants’ perception of the two different grammar instruction approaches, they showed some similarities and differences in their perception of benefits and drawbacks of each approach. As for the deductive approach, those with low-level grammar knowledge reported easy access to the understanding of the concepts and/or principles of the target grammar features through the instructor’s clear explanation of the concepts and principles as the most significant advantage of the approach. It implies that the approach could help the learners raise their awareness of grammatical rules and, ultimately, cultivate their grammatical competence (Lin, 2007; Wang, 2012; Erlam, 2003; Norris and Ortega, 2000). Meanwhile, high-level learners mentioned the efficiency of the approach in time and energy to attain grammar knowledge, while both groups agreed that they could apply the rules they had learned using the approach easily to new contexts (Thornbury, 1999). They also reported some disadvantages of the approach: High-level learners confessed ineffectiveness of the approach that they forgot quickly the knowledge they had learned, whereas low-level learners complained of difficulty in understanding the rules probably because they are less skillful in grammatical analysis.

When it comes to the inductive approach, both groups thought it was conducive to the development of their grammatical competence, irrespective of grammar knowledge level (Larson-Freeman, 2001) because of self-initiated learning mode of the approach (Larson-Freeman, 2001), motivation enhancement through cooperation with peers along with active participation in learning process (Shaffer, 1989), and successful application of the rules to new contexts (Thornbury, 1999). High-level learners added that they could gain deeper understanding of the rules of the target grammar features. Meanwhile, they reported some drawbacks of the approach. Both groups worried unanimously about that they could not gain an accurate understanding of the rules induced from group discussion, which is known as the most serious problem of the approach (Adair-Hauck and Donato, 2010; Herron and Tomasello, 1992; Paesani, 2005; Thornbury, 1999). Another crucial worry high-level learners posed was that they could only deal with grammar knowledge they already knew, but not even try to tackle unfamiliar or unknown knowledge. These worries can be eased with the teacher’s efforts to include a post-hoc session to provide clear explanation and systematic practice when using the inductive approach in the grammar class (Decoo, 1996). Moreover, both group raised doubts about the ineffectiveness of group discussion, the core part of the approach, in terms of free rides and passive participation (unwillingness to contribute, inattentiveness, and tiresomeness). The teacher’s active and timely monitoring and involvement could be an effective remedy for the problem (Ur, 2012).

The present study has some limitations, such as the small number of participants, the number of grammar features dealt with, research tools, and factors not considered in the study. Nevertheless, it will suffice for the study to raise concerns about the issue of the effects of the two grammar instruction approaches on EFL learners’ grammar learning depending upon their level of grammar knowledge, the issue which for sure requires more empirical evidence to reach the reasonable, compelling consensus.
References


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