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THE IMPACT OF TEACHING AIDS ON IRANIAN LEARNERS’ READING COMPREHENSION ABILITY

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ABSTRACT

THE PRESENT STUDY SOUGHT TO INVESTIGATE THE EFFECT OF TEACHING AIDS ON IRANIAN EFL LEARNERS’ READING COMPREHENSION. THE MAIN QUESTION OF THIS STUDY ATTEMPTED TO ANSWER WHETHER TEACHING AIDS MIGHT ENHANCE HIGHER KNOWLEDGE AND ABILITY OF READING COMPREHENSION IN THE IRANIAN EFL LEARNERS IN JAVANEHA LANGUAGE INSTITUTE AT HASHTPAR, IRAN. TO ANSWER THIS QUESTION, 30 INTERMEDIATE-LEVEL LANGUAGE LEARNERS WHO WERE THE AGE RANGE BETWEEN 14-16 YEARS PARTICIPATED IN THE STUDY. THEY WERE RANDOMLY SELECTED FROM AMONG A POPULATION OF 100 VIA A QUICK PLACEMENT TEST (QPT) SCORE. THEN, THEY WERE DIVIDED INTO TWO GROUPS OF 15 AND WERE RANDOMLY ASSIGNED TO AN EXPERIMENTAL AND A CONTROL GROUP. A PRETEST OF READING COMPREHENSION WAS ADMINISTERED TO BOTH GROUPS. THE EXPERIMENTAL GROUP WAS TAUGHT TEACHING AIDS INCLUDING, FLASH CARD; WHITEBOARD, POWER POINTS IN FIVE SESSIONS WHILE THERE WAS NO TREATMENT FOR THE CONTROL GROUP. A POSTTEST OF READING COMPREHENSION WAS, THEN, ADMINISTERED TO BOTH GROUPS AND THE DATA GATHERED WERE ANALYZED VIA CALCULATING AN INDEPENDENT SAMPLES T-TEST AND A ONE-WAY ANCOVA. THE RESULTS ILLUSTRATED THAT THE IRANIAN EFL LEARNERS IN EXPERIMENTAL GROUP RECEIVED HIGHER SCORES IN READING COMPREHENSION AFTER BEING TREATED WITH 5 SESSIONS OF TEACHING AIDS.

KEY WORDS: TEACHING AIDS, READING COMPREHENSION, EFL LEARNER’S, INTERMEDIATE LANGUAGE LEARNERS

1. Introduction

The use of teaching aids in the process of teaching learning depends upon the different types of equipment available in the classroom. The students can learn better when they are motivated properly through different teaching aids. Teaching aids create the environment of interest for the students. Teaching aids help to increase the vocabulary of the students. Chapelle (2008) points out that “second
language teachers today need to be able to choose, use and in some cases, refuse technology for their students” (p. 9).

Barclay (1984) states, that “the role of teaching aids in the classroom is to make learning real, practical, and fun through seeing, hearing, discovering, and doing,” (1984, p. 8). “Materials may contribute in some way, but cannot determine content” (Allwright, 1981, p. 8) that is, the role of teaching materials is limited even if what learners learn is an important way independent of the materials used.

Reading is a complex activity; two approaches known as extensive and extensive reading have been used in developing reading skills. It is believed that these two approaches can be beneficial, in one way or another, for improving students’ reading comprehension ability (Popescu, 2012; Attaprechakul, 2013; Alpatkein, 2006; Gorsuch, 2012; Grabe, 2010; Huang, 2013; Bernhardt, 2010; Abraham Pula, 2002). Reading is essential to every aspect of learning, and the purpose of reading is to construct meaning from text (comprehension). A major goal of reading comprehension instruction is to help students develop the knowledge, skills, and experiences they need to become independent readers and lifelong learners.

2. Statement of the Problem

The role of teaching aids in the classroom is to make learning real, practical, and fun through seeing, hearing and discovering. To make learning very effective it is not only necessary to utilize the factors and techniques that facilitate learning, the teacher are to create certain conditions in the classroom that may improve learning. These conditions are providing teaching aids, creating rivalry and co-operation, giving the knowledge of progress and success, praising or reprimanding and guiding learning.

Reading is the most important skill that any foreign language learner has to know. It is among the four important dimensions of language learning process identified by Chen and Hsu (2008); that is, listening, reading, speaking and writing skills. Language learners need to read different text from their academic textbooks, stories and newspaper. It can be seen that reading can act as a source of getting information and pleasure and also a means of enhancing one’s knowledge of the target language (Keshavarz & Ashtarian, 2008). At any level of language proficiency, language learners have problems in reading comprehension tests. Hence, language teachers need to pay special attention to this skill and to find a way to help students in the reading process and to improve their reading skill and as a result their knowledge of the target language. One of the ways that can help to improve learners’ reading skill is focusing on teaching vocabulary.

Reading is a complicated skill. As Richards (quoted in Aebersold & Field, 1997) says, Reading in a second language is a dynamic and interactive process in which learners make use of background knowledge. Students cannot learn all the words necessary to promote their reading comprehension during the class time. Moreover, teaching vocabulary to improve reading comprehension requires a labor and time intensive method. Teachers need to find a complement or alternative to classroom teaching of vocabulary. In order to add to the body of existing knowledge in this area, this study attempted to answer to the following questions:

1. Do teaching aids have any significant effect on the Iranian learners’ reading comprehension ability?

3. Review of the literature

Teaching aids are important because they create a visual and interactive experience for the students. As the students become more engaged, they are more likely to understand the topic being taught. Teaching aids assist students in learning. These aids consist of video, audio and hands-on tools to help involve the students and enhance the learning experience. Teachers begin using visual, audio and hands on aids as
Teaching aids can be as basic as a blackboard or whiteboard. Audio and visual equipment, such as DVD players and video projectors, are commonly used as tools for learning with a very effective output. Students tend to get more involved when learning if teaching aids are implemented into the curriculum. Hands-on aids, such as computers, maps and other tools that require some sort of interaction from the students, have the highest levels of effectiveness.

The main factor in the effective use of teaching aids is that a skilled teacher is behind the tools being used. The use of a variety of teaching aids enriches the learner’s experience and helps more learners to benefit from the teaching. (Van Rooyen & van der Merwe, 1996). The teacher task is to help the learners to organize their experience and learning. This can be done effectively through classroom activities whose purpose according to Coppen (1969) and Romizowski (1968) could be (a) to develop skills, (b) to presents facts, (c) to organize knowledge into concepts, (d) to stimulate imagination, and (e) to develop attitudes or change existing ones.

According to Alduais (2012, p. 115), learning occurs in terms of association. It is like connecting two things together. In fact, the more use of aids will give the students full exposure to certain linguistics items. The use of teaching aids in English classes will ease the process of teaching and learning English language. Teaching aids are important to help the teacher to teach and the learners to learn. They bring the outside world inside the classroom to facilitate teaching and using teaching aids in English classes in Saudi Arabia learning. English teacher can use many kinds of teaching aids which help students to learn, like: audio, visual, charts, flash cards, and etc. Certainly, it is an effective way to use the aids while teaching English in the class, especially in Saudi Arabia, where English is taught as a foreign language.

Reading comprehension is the process of making meaning from text. The goal, therefore, is to gain an overall understanding of what is described in the text rather than to obtain meaning from isolated words or sentences. Reading is one of the most important skills for educational and professional success (Alderson, 1984). In highlighting the importance of reading comprehension Rivers (1981, p.147) stated that “reading is the most important activity in any language class, not only as a source of information and a pleasurable activity, but also as a means of consolidating and extending one’ s which are knowledge of the language”.

The most important skill for second language learners in academic context is reading (Lynch& Hudson, 1991, cited in Grabe, 1991). Thus, it can be concluded that perhaps the most fundamental skill to be taught in Iranian academic context, where English is taught as a foreign language, is reading comprehension. Therefore, there is a need for EFL teachers to know about the different approaches they can use while teaching reading comprehension.

According to Oxford and Crookall (1989), strategies are learning techniques, behaviors, problem-solving or study skills which make learning more effective and efficient. In the context of second language reading, a distinction can be made between strategies that make learning more effective, versus strategies that improve comprehension. The former are generally referred to as learning strategies in the second language literature. Comprehension or reading strategies on the other hand, indicate how readers conceive of a task, how they make.

4. Method

Participants

The participants of the current study were 30 Iranian EFL learners of English language in institute. They were at the age range 14-16 years, and were selected randomly from among 100 trainees in the Javaneha language institute at Hashtpar (Iran), based on the results of QPT (Quick Placement Test) administered. They were all native speakers of Persian and learners of English as a foreign language. The 30 participants were randomly assigned to the experimental group and the control group.
5. Materials
As to the purpose of the study, two types of tests (QPT, Reading comprehension test) were used. The tests were of standard language tests. They included QPT for matching the participants on their levels of proficiency in each group. The materials for the treatment of the study consisted of teaching aids (e.g., flash card, whiteboard, power points) and, then, the pre-test and posttest of the study. The pre-tests and post-tests were vocabulary and grammar tests used by the researcher based on the institute students’ textbook.

6. Procedures
The data needed for this study were collected from the classes in Javaneha language institute at Hashtpar. The QPT of the study administered for measuring the degree of the participants’ proficiency was a paper-pencil test. The time allowed was 15 minutes as determined in the QPT. The pretest of the study was a reading comprehension test. The time for the reading comprehension pretest was about 30 minutes. The treatment of the study included 5 sessions of teaching aids to experimental group. During the treatment, were taught. They were included: flash card, whiteboard, PowerPoint and computer. The participants in this study were divided into experimental and control groups. A pre-test of reading comprehension was administered to both groups. Then, the experimental group received treatment, which included the use of teaching aids in five sessions. The participants in both groups took pre-test and post–test. Each test (both pre & post) consisted of one passages.

7. Data Analysis
Data obtained from the quasi-experimental study were submitted for statistical analysis by using the statistical package for the social science (SPSS) software, and data obtained from the students were submitted for qualitative analysis. The researcher also used an independent samples t-test and a one-way ANCOVA to determine the differences between the two groups both in their pre and post tests.

8. Result
A descriptive statistical analysis was done on the collected data of QPT (Quick Placement Test) test to the participants. The results are shown in Table (1).

<table>
<thead>
<tr>
<th>N</th>
<th>Mean</th>
<th>Std.Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>14</td>
<td>±1.529</td>
</tr>
</tbody>
</table>

The descriptive analysis of the data was employed to show the number, mean, standard deviation, and standard error of measurement for pre-test and post-test for participants in both groups. Such analysis was done using the SPSS software. In order to identify the English knowledge of the participants, a proficiency test (QPT= Quick Placement Test) was administered to the participants.

Table 2. Descriptive statistics of the study
As table 2 indicates, the number of participants has been 15 in each group (experimental=15, control =15). The mean and standard deviation of each group are included. The mean of the experimental group is (M=7.2000) and of the control group is (M=5.4000). The standard deviation of experimental group is (St=1.37321) and of the control group is (St=1.05560). This gives an image of the participants’ posttest scores after conducting the treatment of the study (using existing method). The differences between the means are significant. This section emphasizes the inferential analysis of the obtained data of this study. The analysis of the data was done via using the SPSS software.

Table 3. t-test results of the study

<table>
<thead>
<tr>
<th>Reading Comprehension</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>4.025</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>4.025</td>
</tr>
</tbody>
</table>

As table 3 indicates, the t-value was calculated between the posttests of reading comprehension of the participants in the experimental and the control groups. The observed t value was calculated as to be 4.025 (t obs), and the critical t value was 2.048 (t crit). Thus, the observed t was higher than the critical t and high enough to reject the null hypothesis of the current study. It means teaching aids have improved learners’ reading comprehension level in experimental group.

Table 4. One-way ANCOVA results for the Experimental Group of the study

<table>
<thead>
<tr>
<th>Source</th>
<th>Type of Squares</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td></td>
<td>19.347^a</td>
<td>1</td>
<td>19.347</td>
<td>105.395</td>
<td>0.000</td>
</tr>
<tr>
<td>Intercept</td>
<td></td>
<td>0.045</td>
<td>1</td>
<td>0.045</td>
<td>0.246</td>
<td>0.628</td>
</tr>
<tr>
<td>PreEX/PosEX</td>
<td></td>
<td>19.347</td>
<td>1</td>
<td>19.347</td>
<td>105.395</td>
<td>0.000</td>
</tr>
<tr>
<td>Error</td>
<td></td>
<td>2.386</td>
<td>13</td>
<td>0.184</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>649.000</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4. One-way ANCOVA results for the Experimental Group of the study

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>19.347</td>
<td>1</td>
<td>19.347</td>
<td>105.395</td>
<td>0.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.045</td>
<td>1</td>
<td>0.045</td>
<td>0.246</td>
<td>0.628</td>
</tr>
<tr>
<td>PreEX/PosEX</td>
<td>19.347</td>
<td>1</td>
<td>19.347</td>
<td>105.395</td>
<td>0.000</td>
</tr>
<tr>
<td>Error</td>
<td>2.386</td>
<td>13</td>
<td>0.184</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>649.000</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>21.733</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As table 4 shows, the F value in experimental group is 105.395 (F=105.395) that is higher than (1) based on ANCOVA rule. This means that the distance between the pretest and, the posttest scores is significantly different. The level of significance is lower than 0.05. It shows that is not randomly but also in order to variable.

Table 5. One-way ANCOVA results for the Control group of the study

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>7.756</td>
<td>1</td>
<td>7.756</td>
<td>13.308</td>
<td>0.003</td>
</tr>
<tr>
<td>Intercept</td>
<td>1.202</td>
<td>1</td>
<td>1.202</td>
<td>2.063</td>
<td>0.175</td>
</tr>
<tr>
<td>PreCon/PosCON</td>
<td>7.756</td>
<td>1</td>
<td>7.756</td>
<td>13.308</td>
<td>0.003</td>
</tr>
<tr>
<td>Error</td>
<td>7.577</td>
<td>13</td>
<td>0.583</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>442.000</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>15.333</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As table 5 indicates, the F value in control group is 13.308 (F=13.308). Although it is more than (1) but in compare with the amount of F value in experimental group, it is way less in experimental group which show that pre test and post test scores are very close. So, lack of teaching aids in control group cause the reading level of the participants not to improve. Consequences of such rejection or support, i.e. what would happen if hypothesis of the current study was rejected or supported.

9. Hypothesis Analysis
The hypothesis of the study which targeted the effect of teaching aids on Iranian learners’ reading comprehension ability was rejected. Evidence from various sources of data could help to verify the rejection. The results of the t-test of the study (see table T-test results of the study) could be employed to confirm this analysis, accordingly, the observed t value calculated by the SPSS software was 4.025 (t obs= 4.025) and the degree of freedom was 28 (df= 28) while the critical value of t determined on the basis of considering the 2-tailed significance level of 0.05 (sig= 0.00) was 2.048 (t crit= 2.048). Thus, the observed t was higher than the critical t and high enough to reject the null hypothesis of the current study.

The second evidence to verify the rejection of the hypothesis was the value of the level of significance calculated by the SPSS software to be 0.000 (Significance 2-tailed= 0.000). Since this value was lower than 0.05 (based on the SPSS regulations), the difference between the means of the posttests of the study could not be by the chance, and moreover, the rejection of the hypothesis of the study indicated that teaching aids would enhance the higher reading comprehension ability of the participants in the experimental group of the study. Also, the rejection of the hypothesis of the study could support by showing the experimental group participants’ progress from the pretest to the posttest.

According to table 5, the covariance value between the pretest and the posttest scores in the experimental group was higher than that of the control group. This means that the posttest scores of reading comprehension were distant from the pretest scores in the experimental group and indicated that teaching aids affected the participants’ reading comprehension ability and caused the posttest scores to stand higher.

Discussion

The findings of this study indicated that teaching aids could result in a better performance of language learners in reading comprehension. This finding seems to be compatible with the findings of Danan (1992) who states that language teachers use different visual materials so that they can increase students’ interaction and motivation in the classroom. The use of different types of visual materials can be helpful for teacher, too (Horn, 1998). Visual aids can provide useful and suitable solutions for problems of language teachers. If teachers use visual and verbal aids together, the students’ learning is better (Mayer & Sims, 1994). According to Levin and Mayer (1993), visual elements increase students’ learning because there is more concentration for them.

Moreover, the results of this study is in line with (Ozkan, 2002) Languages are not fixed but constantly changing, so is the media; television, radio and newspaper which are an extraordinarily rich source of language in use. In order to expose foreign language learners to the target language, the use of technology need to be exploited in the classroom as much as possible. For that reason a great tendency towards the use of technology and its integration into the curriculum developed by the foreign language teachers has gained a great importance. The finding of this study is also in line with the result of the study done by Burt (1999) who believes that videos are real and authentic because they are produced for native speakers and they are not simplified, also they are at normal speed and they have genuine accent.

The results of such a research will have both theoretical and practical implications. Certainly, the teaching practitioners will approaches with caution; more particularly, it might prompt a re-examination of the use of certain types of teaching aids, (especially flash cards, whiteboard), as they were somehow used in the present research.

This study was conducted with a small number of participants consisting of 15 in each group. They were all female. Furthermore, five sessions of training may not be enough for learners to use all the teaching aids appropriately all the time. This limitation needs to be taken into consideration with regard to the length of training in any further studies. Time limitations may enhance reading comprehension by promoting mindfulness in students. This study was conducted in the institutes with very limited resources. The researcher would be interesting to look at classroom with different levels of resource to...
determine what sort of relationship exists between the number of aids available and the use made of them. Teaching aids for teaching are a lot and the teacher cannot use all of them in the classroom. According to the theoretical concepts and practice procedures in this study, some other related research projects can be recommended:

The first one would be increasing the number of the participants of the research. It seems possible to go beyond the sample-population limitations of the study and to elicit information from a larger population. The future researchers are advised to take the time and replicate the study from this aspect. The second suggestion could be the inclusion of sex as a variable into the study and see the differences. Finally, the researcher did not consider different levels of proficiency of language learners in this study. Only intermediate learners participated in this research.

10. Conclusion

Based on the findings of the present study, it can be concluded that the use of teaching aids in teaching and learning has a positive result because treatment can help to improve the students learning. As the researcher can see, the experimental group benefited more from vocabulary learning than the control group. It is concluded that learning by use of teaching aids is more effective than learning without teaching aids. The positive effect of using teaching aids such as, flash cards, whiteboard, etc. became obvious after five sessions. The researcher states that schools and institutes can use teaching aids rather than learning methods in teaching reading. It is suggested to evaluate the planned use of teaching aids in schools by taking into account the aim of transforming educational environments into students learning environments.

REFERENCES


INCORPORATING PRINCIPLES OF CRITICAL PEDAGOGY IN AN ESP WRITING CLASSROOM: EXPLORING WRITING QUALITY AND LEARNERS' ATTITUDE

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ABSTRACT

THIS STUDY EMBARKED UPON INCORPORATING PRINCIPLES OF CRITICAL PEDAGOGY (CP) IN AN ESP WRITING CLASSROOM. IT AIMED TO EXPLORE ESP LEARNERS' QUALITY OF WRITING WHEN THEY INCORPORATE THE MAIN TENETS OF CP IN THEIR CLASSROOM. MOREOVER, THIS PAPER Sought ESP LEARNERS' PERCEPTION OF A WRITING COURSE WITH A CRITICAL LITERACY (CL) ORIENTATION. TO COMPLY WITH THE OBJECTIVE, THE STUDY ADOPTED ADA'S (1988) MODEL OF CL, AND TANG AND JOHN'S (1999) CATEGORIES OF TEXTUAL ENTITIES TO PROBE HOW A CL APPROACH TO WRITING DEVELOPMENT MAY CONTRIBUTE TO THE BUSINESS STUDENTS' QUALITY OF WRITING. STUDENTS' DIALOGUE JOURNALS (DJ) WERE EXAMINED QUALITATIVELY TO UNVEIL THE POSSIBLE CHANGES IN THEIR MODES OF WRITING. THE RESULTS REVEALED THAT DJ ENDED UP CHANGING IN THE QUALITY OF ESP LEARNERS' WRITING. MORE PRECISELY, STUDENTS COULD GO BEYOND A DESCRIPTIVE AND PERSONAL WRITING. THEY DEVELOPED THE QUALITY OF WRITING TO BE MORE CRITICAL. LARGELY, THE PARTICIPANTS EXPRESSED POSITIVE ATTITUDES IN THE WRITING COURSE WITH THE CL ORIENTATION.

KEYWORDS: ESP WRITING, CRITICAL PEDAGOGY, REFLECTIVE DIALOGUE JOURNAL, CRITICAL LITERACY, BUSINESS STUDENTS

Introduction

Writing pedagogy has been considered as an important skill in the EFL/ESL setting. During the last decade many new trends have been encroached in the educational context with the hope to make...
writing interesting to learners. A number of studies have indicated that language should provide learners with an opportunity to express their thoughts and to understand a variety of different ideas. Within EFL/ESL educational system, there have been abundant researches on writing pedagogy, emphasizing the paradigm shift of product to process oriented approach in writing. This process oriented toward writing has paved the way for a constructive maneuver of teachers who intervene at various stages of producing a piece of writing to orient learners toward more fluent writing. This paradigm shift was in line with the theoretical ties and practicalities that move from traditional method to the post method era. Each method underscored one aspect of language learning due to its theoretical principle. More precisely, language learning transferred from translation, memorization, discovery learning, role-play, task based learning to the post-method era that accentuated the importance of critical thinking, empowerment, developing students' voice, and CL.

CL deeply rooted in CP focuses on the sociopolitical aspect of language teaching. It aims at helping learners go beyond writing and turn to be more transformative intellectual (Kumaradevelue, 2003). Probably, the main goal of education is to develop learners' critical thinking abilities and help them act independently. Canagarajah (1999) insinuates writing as one of the main research zone in CP. He believes that the main tenets in CP are to develop learners' critical awareness and to enable them read and write critically. He maintains that empowered writers are able to voice effectively themselves in writing. In other words, they can write to transform and to be dynamics in their writing.

Developing students' voice has been reiterated in the literature in the process-oriented approach. A number of authors (Crumley, 1998; Ebrahimi Dinani, 2014; Flecha, 2000; Freire, 1997; Ghahremani-Ghajar & Mirhosseini, 2005) argued the advantage of dialogue journal writing (DJW) as a springboard for a process oriented writing classroom in order to develop students' voice. The reason behind the importance of developing the voice of learners is the fact that it gives a sense of daring and power to resist and stand against the social conditions, which might be imposed upon them. Moreover, it leads them to be autonomous and pave the way for reaching the fully humanity. This is what Freire (1970) call problem posing instruction (PPI) as opposed to banking model of education. Barjesteh and Birjandi (2015) argued that Freire placed them together in order to create their effect in education. They maintained that Freire questioned the theoretical framework of banking model by PPI. Freire enumerates conscientization, Praxis, and dialogue as the main thematic elements in PPI. Barjesteh and Birjandi maintain that PPI and CT are like "body and the flesh. Once learners are able to critically analyze the problematic issue of their social life" (p. 1019), they are able to be a "transformative intellectual", a term adopted by Giroux (1988).

A number of authors shed light on the significance of DJW. They claimed that one way within the framework of CP that might help learners develop critical literacy is writing reflective journals. Mirhosseini (2009) called for introduction of DJW into EFL education. He concludes that DJW is an educational practice that provides teacher and learners with a an opportunity to practice writing. He maintains that it creates the possibilities for EFL literacy practice through which learners engage with linguistic and communicative challenge. Marefat (2002) incorporates diaries in an EFL writing classroom. She concludes that diary is too important to ignore. Through diaries, students have a chance to use the language for communicating with their teachers. Likewise, Shin (2006) describes ways in which both native and non-native learners could meet the particular needs of ESL writers through journal writing.

In addition, Abednia, Hovassapian, and Ghanbari (2013) explore the in-service teachers' attitudes regarding the contributes and challenges of DJW. They found that DJW have a great potential to help their subject become aware of their implicit beliefs about ELT and improve their reasoning and self-expression skills. Barjesteh, Alipour, and Vaseghi (2013) believe that incorporating the main tenets of CP and the corresponding teaching strategies into a curriculum can improve EFL learners' ability to think critically. In doing so, they suggested to incorporate the strategies of critical language pedagogy in an EFL context where EFL learners are needed "to know, comprehend, apply, analyze, synthesis ,and evaluate can lead to both understanding and being able to apply appropriately" (p. 340).
To date, few studies have been incorporated the principles of CP in an ESP classroom in general, and writing in particular. The purpose of this study is to fill the gap by exploring the effect of classroom practice through the theoretical aspect of CP and its practicality with the help of dialogue journals. More precisely, this paper seeks the dynamicity of an ESP writing classroom through the lens of CL that deeply rooted in Freirean ideology.

In order to comply with the objective of the present study, the following research questions were formulated.

1. Does implementing the principles of CP affect the quality of students' writing?
2. What are ESP learners' perception of a writing course with a CL orientation?

2. Methodology

2.1 Participants

Twenty-four graduate male students who were taking general English course at Kale private English institution attended in this study as the participants. Twenty of the students were majoring in food industrial engineering and five were majoring in mechanical engineering. The students had diverse general English background. Based on the data obtained from an oral interview in the first session of the course, eighteen of the students had participated in an English institute for 2 years. They claimed that they were able to communicate English fairly well. The rest had learned English on their own and could convey meaning inaccurately. However, all of the participants had passed writing activities in the textbooks as the prerequisite for the present course. Students' ages ranged from 25 to 40. They were randomly divided in two classes, one held on Saturday at 4-5:30 and another on Tuesday at 4-5:30. The same teacher taught both classes.

2.2 Instrumentation

In this study, classroom observation, DJW, and students' writing assignments were used to collect data. An observation checklist, focusing on Freire's values of CP comprised of 10 statements of the principles of a critical classroom was developed. A three-point Likert scale in which the scores ranged from 3 to 1, corresponding to fully applied (3) and not applied (1) was used to display the value of the statements.

Students' DJWs were used as one of the most important instruments. Throughout the semester, the participants were encouraged to freely express their concerns about any issues regarding teaching and learning practice, as well as personal issues via email on a weekly basis.

Since critical thinking skills are highly required in activities centered around the language use, students' writing assignments were used as a central pedagogical tool. Specifically, the data were used to discover how classroom practices worked or did not work, and whether the quality of students' writing moved towards criticality and creativity as the result of implementing the principles of critical pedagogy.

2.3 Procedures

In order to comply with the objectives of this study, adopting a critical pedagogical approach in the writing of students, no specific writing book was selected due to its contradiction of the philosophy of CP. To develop a dialogical interaction among students, they were encouraged to participate in designing and running the course. In doing so, Freirean pedagogy model, identified by Shor (1993), provided directions in determining classroom practices and interactions. This model included 10 values namely, 1) participatory, 2) situated, 3) critical, 4) democratic, 5) dialogic, 6) desocialization, 7) multicultural, 8) research oriented, 9) activist, and 10) affective.
Through the process of synthesizing the values, the researcher came up with two major principles that inform the practices of critical pedagogy in the study. The principles were as follows: (a) Creating equitable and productive power relations, (b) helping students to become critical thinkers. The first principle comprised students' participation in their learning process, students initiating negotiations of the requirements, teacher encouraging students to express their opposing points of view to other students and to the teacher, and teacher helping students to practice and exercise critical thinking. The second principle was carried out by encouraging the students to develop their critical sense in the process of taking their own positions with reference to what they write. It was assumed that by encouraging students to discuss social and personal problems in journal writing and also to construct their identities as critical and independent thinkers and writers, the teacher would effectively pursue the goal of helping students to move towards critical thinking.

Given that none of the students taking the course was likely to experience a critical pedagogical approach before, the first thing to do in the class was to explain what CP and how it would operate. In terms of journal writing, the students were briefed on how to write journals on reflected topics. The topics were negotiated among the students. Those obtained majority vote were selected. Since the teacher attempted to place all participants taste, a variety of topics such as adoption, satellite, embezzlement, government help (Yaraneh in Persian) were selected. In case the students had problems in coming up with ideas, the teacher drew a mind map on the board and everybody was invited to brainstorm and share ideas. Students were required to surf the net and write their opinion about the voted topics through a critical lens. They were asked to relate the tropics to their daily life concerns and problematizing them. They were told that their writings would not be corrected grammatically. They were also allowed to use Persian words when needed. The researchers read and responded to the journal entries every week and put comments on the points students made, answered their questions, and asked questions that guided them to a more critical view.

Adopting writing as a process orientation, the teacher enforced a policy that required a revision process as a vital aspect of learning writing. Throughout the revision process, students were given chances to work with their peers for each writing assignment. Then, they handed in the second draft of each writing assignment for the final revision. The writings were negotiated in class in terms of content and organization. Each session DJW was extracted randomly displayed by a video project to be analyzed by the course members.

To encourage students to construct their identities as critical and independent thinkers and writers, three particular writing assignments were inserted among those routine ones. Since it is believed that the analysis of various aspects of a textual rhetoric would enable students to exercise critical thinking skills, the students were to write two pieces of analysis paper. Reflecting on Auerbach's (1999) claim that learning language needs to be accompanied with critical analysis of social realities of which students are a part. The students were supposed to analyze a social issue through writing that was noted by the course members. As the second and the last assignment, the students were to choose an article on their own and analyze it by focusing on the author's reasoning, assumption and the developmental process of the argument. To encourage students to exercise critical thinking skills, they were provided with guidelines for each writing assignment that could be referred to when carrying out the assignments. In the process of assessing and negotiating the two writings, the emphasis was on the content of the texts, as much as on the organization and language use. After the intervention, students' DJWs were collected to probe students improvement as far as the quality of writing is concerned. In so doing, Ada' (1988) model were selected to screen students quality of writing over the period of study.

2. Results and Discussion

Two hindered-nine journal entries were selected throughout the course and subjected to analysis so as to examine recurring themes and to probe the quality of the participants' writing. To answer the first
research question, the analysis of students' journal writing was one way that provided evidence of how DJW contributed to empowerment and to critical thinking and ended up to change in the quality of students' writings. To do this analysis, first, Freire's values of CP was utilized to conduct an analysis on students' extract. Then, in the second stage, students' journals was examined based on the four modes in Ada's (1988) model to detect the changes in the extent of the presence of the four thinking modes, descriptive, personal interpretive, critical, and creative in the three temporal sequences.

Furthermore, the analysis of students' writing assignments was another way to show how classroom practices affected students' writing quality. In doing so, the particular writing assignments namely, analyzing a picture task, and article analysis were examined by locating Tang and John's (1999) categories of textual identities in order to detect the ways in which students positioned themselves on relation to readers of their texts.

In order to answer the first research question, Ada's (1988) four thinking modes in the students' journals were investigated to evident the increased critical thinking over the period of the study.

All students, except one, who never showed any interest in journal writing, either emailed or handed out their journals in a period of 12 weeks throughout the semester. To be able to divide this period into equal temporal sequences, the researcher divided the weeks into 4 sequences of 3 sessions. The proportion of descriptive, personal interpretive, critical, and creative entries was considered as an indicator of the characteristics of students' writing in each of the temporal sequences and also as an illustration of students' writing in each of the temporal sequences and also as an illustration of the changes in the quality of the entries from the beginning to the end of the semester.

Table 1 shows a clear decrease in the numbers of descriptive, personal interpretive entries an increase in the number of critical and creative ones as the students continued writing. In the first temporal sequence, 45 out of 50 (90%) of the whole entries were rather descriptive or personal interpretive. In the second sequence, this number decreased to 40 out of 62. In other words, only 64.04% of the entries were descriptive or personal interpretive. This decrease continued so that in the third and fourth sequence only 33.4% and 30% of the entries were descriptive or personal interpretive respective, and the rest (66.60% and 70%) were critical and creative journals.

Table 1

<table>
<thead>
<tr>
<th>Sequence/mode</th>
<th>Descriptive</th>
<th>Personal Interpretive</th>
<th>Critical</th>
<th>Creative</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st three weeks</td>
<td>30</td>
<td>15</td>
<td>2</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>60%</td>
<td>30%</td>
<td>4%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>2nd three weeks</td>
<td>27</td>
<td>13</td>
<td>10</td>
<td>12</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>43.5%</td>
<td>20.9%</td>
<td>16.12%</td>
<td>19.33%</td>
<td></td>
</tr>
<tr>
<td>3rd three weeks</td>
<td>13</td>
<td>11</td>
<td>27</td>
<td>21</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>18.05%</td>
<td>15.27%</td>
<td>37.5%</td>
<td>29.16%</td>
<td></td>
</tr>
<tr>
<td>4th three weeks</td>
<td>9</td>
<td>12</td>
<td>21</td>
<td>28</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>12.85%</td>
<td>17.14%</td>
<td>30%</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td>51</td>
<td>60</td>
<td>64</td>
<td>254</td>
</tr>
</tbody>
</table>
The changes in the proportion of entries with different modes showed a clear transformation in students' view of writing. This transformation could be attributed to the critical awareness. It could be fostered by the democratic space created by the DJW opportunity. Considering the change in writing modes, it is desirable to conclude that DJW as one of the requirements practiced in a critical pedagogical approach does provide learners with a potentially valuable opportunity to move beyond uncritical descriptive writing and towards critical and creative mode of writing. Figure 1 demonstrates the distribution of writing mode in 4 temporal sequence.

(Figure 1. The distribution of writing mode in 4 temporal sequence)

In order to seek ESP learners' perception of the writing course with CL orientation, a content analysis was run in journal entries. Despite some discordance, many course members expressed positive attitude in their written overview. At first 3 weeks of the course. However, ninety percent of students, who were not able to communicate their idea due to the lack experience, gradually indicated their interest in expressing their voices in the class discussion. This opposed Freire's (1972) perspective of the culture of silence. What follows are the direct quotes of participants' journals:

- At first, it was hard to me but now I think it is so useful for our future.
- I think this method was so helpful to me and my classmates, and thanks to my professor who is so energetic.
- Writing journal helps me to understand more with reviewing and taking a good conclusion. It helps me improve my English, increase my motivation.
- DJW enhance creativity and critical thinking among students, I like it, thank you very much.
- I understand this class is very different from the past. Your class is not based on memorization. At first I thought it was a hard work, but after writing several reflective journal, I found it is easy and interesting for me. I hope to read some books to set information.

What was obvious from the sample of extract is that students were able to criticize and develop creativity in their reflective journal as from the second and the third week. They were able to connect the topics discussed to their real world situation. They were able to write freely about their experiences and beliefs documented the practice of Freire's to values in the class because in the context of educational system being able to break the culture of silence is a substantive advancement. In fact, the analyses of student responses demystify the point that CP provides learners with an opportunity to involve in their learning process. The research findings were in line with Ghahremani and Mirhosseini (2009). They argue...
that” writing dialogue journals as a language education activity an EFL pedagogy may empower learners and provide them with opportunities to express their voice”(p. 286). Their study also revealed that DJW "let to gains in critical self reflective EFL writing ability"(p. 286).

Students' journal entries were analyzed in search of clues to the empowering role of DJW. The analyses revealed that students' consistently took the opportunity to speak out. In their journals, students expressed their dissatisfactions. They offered suggestions for change and reasoned their ideas. Students' responses to interview questions strongly supported this empowering role of journal writing.

In addition, it was explored that students moved from the descriptive writing toward critical and creative modes as they continued writing journals. These findings were obtained in search of Ada's (1988) four thinking modes as indicators of students' progress in critical thinking. The analysis revealed that more than 69% of entries were written in critical or creative modes during the 3rd and the 4th sequence of the semester. The results support the findings of Clark (1992) and Marefat (2001).

3. Conclusion

The present study aimed at exploring the dynamicity of ESP writing classroom through the lens of CP. The results of this study indicated the changes in students' perception of themselves as writers. Specifically, the results unveil the course members' development to go beyond descriptive and personal writing as the course proceeded. In fact, it ended up to the students' development to make a more critical and creative classroom. The results supported the conclusion drawn from the findings of the first research question indicated that implementing the principles of CP can help learners develop the quality of their writing to be more critical. Although students' linguistic knowledge was the critical skill that the analysis can be done, their weakness in EGP did not prevent them from writing critically. They were able to voice their idea through writing. The analysis of student DJW made the researchers confident that most of the course members had positive attitude in their writing by expressing their satisfaction with the whole course in terms of dialogical interaction, cooperation, empowerment relation between teacher and student, student centeredness, and expressing students' voice through writing.

The results of the present study have implication for teachers and material development to find the value of critical thinking in their writing classroom and course books. Implementing the principles of CP can be a springboard for hearing authentic student voice through journal writing.

REFERENCES


THE EFFECTS OF LEVELS OF SPIRITUAL INTELLIGENCE ON THE PERFORMANCE OF EFL LEARNERS READING COMPREHENSION

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ABSTRACT

SPIRITUAL INTELLIGENCE (SI) RELATES TO INDIVIDUAL'S CAPACITY TO ARTICULATE AND CHARACTERIZE SPIRITUAL RESOURCES, PRINCIPLES, AND CHARACTERISTICS TO ENHANCE AND PROGRESS ROUTINE PERFORMANCES. THIS CAPACITY HELPS HUMAN BEINGS TO SEEK AND ASK FINAL QUESTIONS ABOUT THE LIFE MEANING AND PROVIDES A CLEAR CONNECTION BETWEEN EVERY HUMAN AND THE WORLD IN WHICH THEY LIVE. ONE OF THE IMPORTANT PROCESSES IN HUMANS' LIFE IS LEARNING A SECOND OR FOREIGN LANGUAGE THAT COMPRISER FOUR BASIC SKILLS. IN THIS REGARD, THIS RESEARCH WAS ACCOMPLISHED TO DISCOVER THE PROBABLE LINK BETWEEN SI AND READING COMPREHENSION (RC) PERFORMANCE AND SPECIFICALLY THE PROBABLE SIGNIFICANT DIFFERENCE OF HIGH AND LOW LEVELS OF SI ON EFL LEARNERS' RC. THE QUANTITATIVE DESIGN (PRE-TEST, TREATMENT, AND POST-TEST) WAS APPLIED FOR THIS STUDY. FIFTEEN LEARNERS WERE CHOSEN AS THE EXPERIMENTAL GROUP (HIGH SPIRITUAL LEVEL) AND FIFTEEN LEARNERS WERE SELECTED AS THE CONTROL GROUP (LOW SPIRITUAL LEVEL) OF THE STUDY. THE ANALYSES OF DATA SHOWED THAT (A) THERE WAS NO STATISTICALLY SIGNIFICANT RELATIONSHIP BETWEEN THE PERFORMANCE OF HIGH AND LOW SI GROUPS ON THEIR RC AND (B) THERE WAS NO STATISTICALLY MEANINGFUL DIFFERENCE BETWEEN THE PERFORMANCE OF THE HIGH AND LOW GROUPS ON THEIR RC IN THE POST-TEST.

KEYWORD: INTELLIGENCE, SPIRITUAL INTELLIGENCE, READING, READING COMPREHENSION PERFORMANCE

1. Introduction

Intelligence is a prominent part of psychology, which leads differences among learners and it also plays a prominent role in learning a second or foreign language. Gardner (1983) defined intelligence as the capability to distinguish and retain information as knowledge for applying to itself or other instances of knowledge or information. Intelligence is described as a bio-psychological ability that can be affected by motivational, cultural and experiential factors (Gardner, 1993). Based on Gardner's theory (1983), intelligence includes nine types which they are called as multiple intelligences: spatial, naturalist, interpersonal, intrapersonal, logical-mathematical, musical-rhythmic, bodily-kinesthetic, linguistic and spiritual.

Spiritual intelligence (SI) is a kind of intelligence which aids to determine and solve spiritual and existential problems. Emmons (1999) stated that SI is a means to realize and organize abilities and skills to
use spirituality. Additionally, Emmons (2000) defined SI as using the adaptive information to solve everyday problems and goals attainment easily. As Zohar and Marshal (2000) defined SI as a kind of intelligence that helps us to be able in covering our desire and capability for meaning, mental picture, value and eventually it leads to foster one's self-reflection.

Different empirical studies indicated the importance of SI in language teaching and learning processes. Aghaei and Langroudi (2015) studied the relationship between teachers' SI and their motivation of teaching and their (teachers' SI and their motivation) effects on Iranian EFL learners' achievement. The participants were 120 EFL students and 10 teachers at Fars, Farashband high schools who were involved in the research. The results indicated that there was a significant connection between teachers' SI and their motivation of teaching. Also, there was a significant connection between teacher motivation and student accomplishment. Students' achievement is another component in this research which was linked to learners' performance in school. In this study, it could be concluded that teachers' SI did not effect on students' achievement.

Aghaei, Behjat and Rostampour (2014) conducted a study to investigate the link between Iranian high school female learners' SI, language ability and self-esteem. The selected samples of this research were 60 female learners from Hazrate Masome High School in Farashband, Iran who were passing their third grade. They filled out two questionnaires of self-esteem and spiritual intelligence and a test of language ability which was adopted from the U.S Language Proficiency Examination. The data analysis showed that there was a link between language ability and self-esteem. In addition, through performing independent sample t-test it was found that there was a significant relationship between SI and language ability. In conclusion, the findings revealed the existence of link between the three investigated variables. At the same time the finding suggested SI had a positive correlation with self-esteem and language ability.

Azizi and Zamaniyan (2013) studied on the relationship between SI and the strategies of learning vocabulary among EFL students. In this paper, SI was elaborated. In the next part, vocabulary learning strategies was explained. In this article, the subjects were 120 EFL junior and senior undergraduate students whose majors were English language teaching, English translation and English literature. The selected samples of the study were 45 male 75 female. The research instruments in the study comprised two survey questionnaires, namely, SI questionnaire and Schmitt's vocabulary learning strategy questionnaire. The results showed that high SI helped the learners to experience an effective learning of English resulted in the learning to apply beneficial methods for all activities in their daily life. High SI demonstrates that a student can have logical thinking and make the best use of his or her mind and thoughts. SI determines an effective stage of brain for neural changes that integrate the acquired facts and information in brain.

However, it is considered SI as one type of intelligences and it increases the ability to provide solution for difficulties and achieve the capability to experience an enhanced state of awareness (Emmons, 1999), it has not been paid attention as similar as other kinds of intelligences. This type of intelligence may have a significant and positive role in whole aspects of education. In addition, SI is associated with faith and it should be drawn attention in Islamic countries and contexts as Iran.

The current study attempts to study the link between SI and the performance of EFL learners on their reading comprehension (RC) performance and also it tries to find the difference between Levels of EFL learners in the SI on their RC performance. According to this research, it was likely that tutors feel and comprehend the significance of SI in teaching and find ways to enhance RC performance.

2. Literature Review
2.1. Definitions of Intelligence and its Types

One significant aspect of human cognition is intelligence. Stenberg (1997) defined intelligence as a collection of the notions of knowledge and mental processes and the role of context and culture. Gardner (1993) asserted that intelligence is as an “intellectual phenomenon and not emotional or moral and leads to one’s attempts in doing or achieving goals” (p. 15). Simonton (2003) declares that intelligence is viewed as a cognitive ability that assists individuals to conform and enhance in a special context and find themselves in this cognitive ability including memory and issues such as solving problems.

Gardner (1983) initially introduced multiple intelligences in seven intelligences: Linguistic, Logical/Mathematical, Spatial, Musical, Interpersonal, Intrapersonal, and Bodily-Kinesthetic. Afterward, Gardner (1999) included Naturalistic intelligence and proposed the probable existence of existential intelligence, however he believed that spiritual intelligence does not exist. He believed that his eight intelligences are as abilities or talents, but it is assumed that quantitative or verbal abilities are referred to as talents. He argued that there is no hierarchy of ability.

Zohar and Marshal (2000) named existential intelligence as spiritual intelligence (SI).

2.2. Spiritual Intelligence

Emmons (1999) defined SI as a series of skills that resort to spiritual resources. He states that SI is as the adaptive application of spiritual evidence to assist routine problem-solving activities and achieving objectives (Emmons, 2000). As stated by Wolman (2001), SI is as the human ability and capability to inquire crucial questions regarding the significance of life, and at the same time to observe the perfect link between every one of us and the world where we live. Zohar and Marshal (2000) defined SI as the intelligence by means of which the issues of meaning and usefulness are addressed and solved, and our activities and lives can be placed in a broader, powerful, important situation, and through intelligence we can judge that one way of action or one route of life is more significant than the other. This description also asserts and suggests a link exists between SI and the more extensive and bigger whole. As stated by King (2009), SI is defined as an intelligence that arranges the combination of knowledge and effective application of spiritual and supernatural dimensions of life which are dealt with “personal existence, increased meaning, knowing superior universe” (p. 21).

2.3. The Components of Spiritual Intelligence

Emmons (2000, p. 59) suggests five elements for SI: (a) capacity to use spiritual resources to find solution to problems, (b) skill to come into discriminating condition of awareness, (c) capability to advance routine activities and links with a sense of the sacred, (d) ability to transcend the material and physical, and (e) capability to be honest. Nevertheless, in reaction to the criticism from Mayer (2000) who claims that honest behavior is appropriate more to personality and ethics of intelligence, Emmons (2000) drops (e) the capability to be honest. Based on Vaughan’s (2002) view, SI is dealt with the innermost life of spirit and mind and its link with the existence in the world. He proposed a model that SI includes three components: a) the capability to produce meaning according profound perception of the queries related to existence b) a consciousness of and the skill to apply various stages of awareness in problem-solving actions; and c) a consciousness of the interrelationship of all humans to one another and to the transcendent.

3. Methodology

3.1. Participants

The sample from the target population of the present research was 30 sophomore undergraduate learners in two intact classes from IAU of Iran- South Tehran Branch majoring in translation. They were all advanced EFL learners located in Tehran and were originally from Iran. The learners were classified in 2
groups. They had at least 5 years-experience in language learning. Their age range was 18-50. The researcher explained the procedures of this research and invited them to participate in this study. All of the participants were native Farsi speakers.

3.2. Instruments

The first instrument to tap participants' level of English language proficiency level was an Oxford Placement Test (2001). OPT used to homogenize the participants in the study. The test consisted of reading, vocabulary and grammar sections. The test comprised of 60 questions in two parts. The first part comprised of 40 multiple choice items in 4 sub-parts based on grammar and reading skill. For questions 41 to 50, the learners were required read two cloze passages and select the correct option. Questions 51 to 60 tapped learners' vocabulary format. The second instrument was the spiritual intelligence questionnaire was constructed by Abdollahzadeh, Keshmiri & Arab Ahmadi (2009). Abdolahzadeh's questionnaire consisted of 29 five-likert scale items in the range from strongly agree to strongly disagree, from 5 to 1. The learners were asked to score from 5 to 1 based on their ideas. The scores were ranged from 29 to145 in this questionnaire and they were divided into five levels as very high, high, average, low and very low. The scores were different from male and female learners. Female learners were ranged from very low (93 to down) to very high (137 to up) and male learners were ranged from very low (85 to down) to very high (135 to up).This questionnaire was performed on 280 learners in Payame Noor University (PNU) in Behshahr and the reliability coefficient was determined. The reliability coefficient of this questionnaire was 0/87 that was based on Alfa Cronbach that indicates high and acceptable reliability coefficient. This questionnaire was valid because it has been performed several times in different contexts. The Third instrument was five reading texts were selected from TOEFL Actual Tests book (2011). The topics and content of readings gear to spiritual intelligence. The difficulty level of the texts was same and difficulty level formula was examined. More specifically, the texts were selected due to the compatibility under investigation of texts to the topic. The topics were about the process of production of children's books, the different early European languages, the story about folk song, the learning process of first language in babies, and the developing of cities in the world. Each of these reading texts had 10 multiple choice items that the learners had to answer these questions after reading the texts. The last instrument was 2 reading texts were chosen from TOEFL Actual Test (2011) book as the pre- and post-tests. 20 multiple choice items were selected as comprehension tests. Both pre-test and post-test had the same level of difficulty; the level of those texts was constructed to be intermediate. Two tests were done for comparing the performance of the participants in RC with high and low SI. The pre-test was given before presenting instructions to the participants it was put to determine whether groups are comparable before the program and the post-test was given after presenting instructions. The post-test was then compared with the pre-test. These two tests were given to all participants.

3.3. Data Collection Procedure

Before the administration of the questionnaires and the test, the researcher briefed the participants on the goal and process of the research so as to provide a methodical and clear illustration of the instruction. Then, the research instruments (OPT and SI questionnaire) were administered in one classroom session and the sample learners answered OPT and SI questionnaire. In the second session, the participants took part in a pre-test reading comprehension to decide on the current level of the sample before giving treatment. For examining the levels of SI on the RC performance, five TOEFL reading texts were selected from TOEFL Actual Test (2011) book. The treatment process was done in five sessions. At last, a post-test RC was administered to compare the findings of pre- and post- tests. To do analysis on the data, package of SPSS (version 19) was applied which is a statistical analysis software. Pearson correlation was applied to show the correlation between SI and RC performance. An independent $t$-test was another procedure for data collection. It was used to determine the possible difference between high and low levels of Spiritual Intelligence on EFL learners regarding to their performance in reading comprehension.
4. Results

In order to answer the first research question, Pearson correlation was used.

Table 4.1. Descriptive Statistics of Pearson Correlation

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>17.33</td>
<td>1.58</td>
<td>15</td>
</tr>
<tr>
<td>High</td>
<td>17.73</td>
<td>1.66</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 4.1 indicates the descriptive statistics of the RC scores of high and low groups. The mean scores of the low and high groups are 17.33 and 17.73, respectively.

Table 4.2 indicates the correlation between the two groups. The sig value (2-tailed) reveals that there is no correlation between the two groups as p=.89 is greater than the required .05. In this regard, it could be stated that there is no correlation between the performances of high and low SI groups in their RC performance.

Table 4.2. Pearson Correlation of HSI and LSI

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>High</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.036</td>
<td>.899</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>High</td>
<td>Pearson Correlation</td>
<td>.036</td>
<td>1</td>
<td>.899</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

The second question of this study tries to investigate the possible difference between levels of SI on EFL learners RC. To see the possible variance between the two groups with regard to RC Shapiro-Wilk test of normality was used and the data turned out to be normal as the sig value for the normality test was greater than the .05. Table 4.3 shows the descriptive statistics of the low and high groups’ performance on RC before the intervention. The mean scores of the low and high groups are 16.00 and 16.33 before the start of the intervention. To see if the difference between the groups is statistically significant, an independent sample t-test was run.

Table 4.3. Descriptive Statistics of pre-test

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading_pre test</td>
<td>High</td>
<td>15</td>
<td>16.33</td>
<td>1.49</td>
</tr>
</tbody>
</table>
Table 4.4 indicates the findings of independent sample t-test of high and low groups in the pre-test. The p value (.529) in the sig (2-tailed) is greater than .05, so it could be stated that there is no statistically significant difference between the performance of the high and low groups in the pre-test.

**Table 4.4. Independent Samples t-Test of pre-test**

<table>
<thead>
<tr>
<th>Levene's Test (2-tailed)</th>
<th>t-test for Equality of Means</th>
<th>F</th>
<th>Sig.</th>
<th>t</th>
<th>df</th>
<th>Sig.</th>
<th>Mean</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances assumed</td>
<td>.000</td>
<td>1.000</td>
<td>.638</td>
<td>28</td>
<td>.529</td>
<td>.33333</td>
<td>.52251</td>
<td>-</td>
<td>1.40364</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.638</td>
<td>27.760</td>
<td>.529</td>
<td>.33333</td>
<td>.52251</td>
<td>-</td>
<td>1.40406</td>
<td>.73740</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.5 presents the descriptive statistics of learners’ performance in post-test of RC. As it can be seen in this table, the mean scores of the learners after they received instruction in high group is 17.73 and in low group is 17.33. To see whether the difference between the mean scores of the two groups is statistically significant and meaningful, an independent-sample t-test was conducted on the scores of learners in their post-test.

**Table 4.5. Descriptive Statistics of post-test**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Post</td>
<td>High</td>
<td>15</td>
<td>17.73</td>
<td>1.66</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>15</td>
<td>17.33</td>
<td>1.58</td>
</tr>
</tbody>
</table>

The following table (table 4.6) illustrates the results of the independent-sample t-test carried out on the learners’ scores for post-test of RC. As table 4.6 indicates, the sig value (2-tailed) for equal variances is .507 which is greater than the required cut-off of .05. Therefore, it could be said that there is not
statistically significant difference between the performances of high and low groups in RC after they were given instruction. It means the reading instruction made no meaningful difference in the performance of the low and high SI groups of the research.

Table 4.6. Independent Samples t-Test of post-test

<table>
<thead>
<tr>
<th>Levene's Test</th>
<th>t-test for Equality of Means</th>
<th>Variances</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.001</td>
<td>.973</td>
</tr>
<tr>
<td>Reading Posttest</td>
<td>.673</td>
<td>27.934</td>
</tr>
</tbody>
</table>

5. Discussion

The main purpose of this research was to examine the probable relationships between SI and RC performance and specifically the probable significant difference of high and low level SI on EFL learners' RC. The findings of this research revealed that there was no statistically significant relationship between the performance of high and low SI groups in their RC comprehension and also there was no statistically meaningful difference between the performance of the high and low groups in the pre-test. Although, the findings of this study did not show the significant relationship and also the differences of SI on RC performance, different empirical studies showed the significant relationship on the different aspects of learning such as motivation and self-esteem.

The results of this research were not consistent with Aghaei and Langroudi's (2015) study. They studied about the relationship between teachers' SI and their motivation of teaching and their (teachers' SI and their motivation) impacts on Iranian EFL learners' achievement. The subjects were 120 EFL students and 10 teachers at Fars, Farashband high schools took part in the research. The results indicated that there was a significant relationship between teachers' SI and their motivation of teaching.

In addition, Aghaei, Behjat and Rostampour (2014) conducted a study to investigate the interrelationship between Iranian high school female learners' SI, language proficiency and self-esteem. The subjects of this research comprised 60 female learners from Hazrat Masome High School in Farashband, of Iran who were in third grade of high school. They filled out two questionnaires of SI and self-esteem, and took part in a language proficiency test adopted from the U.S Language Proficiency Examination. The results of independent sample t-test and correlation revealed that a significant correlation existed between SI and language proficiency. At the same time, the findings suggested that SI has a positive correlation with self-esteem and language ability. The results of this study were inconsistent with the findings of the present research.
Based on the results of this study that showed the lack of the significant relationship between two variables were not in line with Azizi and Zamaniyan's (2013) study. Their study was based on a relationship between SI and the strategies of learning vocabulary among EFL students. Their study indicated that a significant correlation exist between all SI subscales and social or metacognitive strategies.

Also the findings of the lack of the relationship between two variables were not in line with Boudraf's study (2012). Her study was about the multiple intelligences and reading comprehension performance. Her study revealed that a significant relationship existed between multiple intelligences as SI and reading comprehension performance.

Ahmadi and Kajbaf's (2008) studied on the relationship between SI with different educational fields. They couldn't find any significant relationship between spiritual attitudes with different educational fields. The findings of their research were consistent with the current research.

6. Conclusion

Spiritual intelligence is a unique intelligence which is used for solving problems and deep understanding, and issues which are related to life and values. SI encourages individuals to find out relations and unity. This research was an attempt to examine the probable link between SI and RC performance and specifically the probable significant difference of high and low level SI on EFL learners' RC. For analyzing the first research questions about the possible significant relationship between levels of SI and RC comprehension, Pearson correlation was selected and for second research question that was about the significant difference between levels of SI on EFL learners RC performances, independent sample t-test was utilized. After analyzing the findings of this study, the researcher concluded two significant results. Accordingly, the first one was that the researcher could not find a significant relationship between levels of SI and RC comprehension. The second result was that the researcher could not find the meaningful difference between levels of SI on EFL learners RC performances.

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THE EFFECTS OF RECAST, DIRECT AND METALINGUISTIC CORRECTIVE FEEDBACK ON ELEMENTARY EFL LEARNERS’ GRAMMAR LEARNING

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ABSTRACT

This study investigated the effects of recast, direct and metalinguistic corrective feedback (CF) on elementary EFL learners’ grammar learning. To this end, 80 elementary EFL learners were selected from four intact classes at Safir English Institute, Mahshahr, Iran. Before the treatment, pre-tests including multiple-choice (MC) and grammaticality judgment (GJ) tests were administered to the participants in order to ensure that the participants did not have a prior knowledge of the target structures (i.e., third person singular form and prepositions of time). Afterwards, each class was assigned to one group (i.e., recast, direct, metalinguistic, and control). After a four-week treatment, two post-tests (i.e., MC and GJ) were administered to examine the effects of CF types on the participants’ grammar learning. The results of one-way ANCOVA revealed that different types of CF had significant effects on elementary EFL learners’ grammar learning. Moreover, the results of Fisher’s least significant difference (LSD) post hoc tests revealed that metalinguistic CF was more effective than recast and direct CFs. Implications of the findings and suggestions for future research are also discussed.

KEYWORDS: CORRECTIVE FEEDBACK, DIRECT FEEDBACK, METALINGUISTIC FEEDBACK, RECAST FEEDBACK, EFL LEARNERS, GRAMMAR LEARNING

1. Introduction

In the last two decades, a growing body of research has been conducted on the effects of corrective feedback (CF) on second language (L2) and foreign language learning. CF refers to “the feedback that learners receive on the linguistic errors they make in their oral or written production in a second language” (Sheen & Ellis, 2011, p. 593). Nassaji and Swain (2000) proposed that CF is necessary for learners to refuse the wrong hypotheses for specific item and it is helpful for impeding special types of overgeneralization which can affect the interlanguage of L2 learners.

Lyster and Ranta (1997) have classified CF into six types: recast, direct (explicit), elicitation, metalinguistic, clarification request, and repetition. Recast is a “reformulation of the learner’s erroneous utterance that corrects all or part of the learner’s utterance and is embedded in the continuing discourse” (Sheen, 2011, p. 2). Recasts can be partial or whole (only a part or the whole utterance is reformulated, respectively). Another CF commonly used by teachers is direct or explicit feedback. Direct feedback is defined as “any feedback that overtly states that a learner’s output was not part of the language-to-be-
“learned” (Carroll & Swain, 1993, p. 361). Lyster and Ranta (1997) also argued that direct feedback is used when it is clearly expressed that an error has been made and the correct form is provided for learners. In providing the target-like reformulation, direct error correction reduces the need for the learner to produce a modified response (Lyster & Ranta, 1997). Metalinguistic feedback is another type of CF which is referred to the comments, information, or questions related to the well-formedness of the student’s utterance, without explicitly providing the correct form (Lyster & Ranta, 1997). By referring directly to the existence of an error, metalinguistic feedback provides the language learner with negative evidence regarding the target form (Rezaei & Derakhshan, 2011). Previous studies (e.g., Al Ajam, 2015; Daneshvar & Rahimi, 2014; Rassaei & Moinzadeh, 2011) have found significant effect of CF on EFL/ESL learners’ grammar learning.

Rassaei and Moinzadeh (2011) explored the impact of explicit corrective comments on 134 Iranian EFL students’ grammar learning. It was found that CF with metalinguistic explanations were effective in improving students’ accuracy in using target structures in both immediate and delayed post-tests. Daneshvar and Rahimi (2014) further examined the effect of two types of written CF, direct focused and recast, on the Iranian EFL learners’ writing grammatical accuracy. The participants of the study were 90 intermediate students who were divided into three groups: two experimental groups, which received either direct focused or recast feedback, and control group who received no feedback. The results of the study revealed that the two experimental groups outperformed the control group in improving the grammatical accuracy of their writing tasks. Moreover, it was found that recast was more effective than direct feedback in improving the EFL learners’ writing accuracy. Recently, Al Ajami (2015) investigated the effect of written CF on Arab students’ accurate use of English propositions. The participants were assigned to an experimental who received written feedback on the accurate use of prepositions and a control group who received general comment on their overall writing performance. The results showed that the treatment given to the experimental group was effective in helping the students to use the mentioned English propositions accurately.

According to the aforementioned studies, CFs can have a positive effect on grammar learning. However, none of the previous studies have considered the effects of three types of CF (i.e., recast, direct and metalinguistic) on EFL/ESL learners’ grammar learning. To fill in this gap, the present study aimed to examine whether providing learners with different types of CF (i.e., recast, direct and metalinguistic) have any significant effects on Iranian Elementary EFL learners’ grammar learning. Therefore, the following research questions were addressed in this study:

Q1. Do different types of corrective feedback (i.e., recast, direct and metalinguistic) lead to the enhancement of elementary EFL learners’ grammar learning?

Q2. If different types of corrective feedback (i.e., recast, direct and metalinguistic) lead to the enhancement of elementary EFL learners’ grammar learning, which one will be more effective?

2. Methods

2.1 Participants

The participants were 80 elementary level EFL learners in four intact classes at Safir English institutes in Mahshahr, Iran. The participants had been placed in elementary level based on their scores on Oxford Quick Placement Test (Oxford University Press, 2001) held by the institute prior to the instruction. Their age ranged from 18 to 25. All of the participants were native speakers of Persian. Each class was assigned to one instructional condition: recast group (n = 21), direct group (n = 20), metalinguistic group (n = 19), and control group (n = 20). Out of 80 learners participating in this study, 37 were males and 43 were females.

2.2 Instruments
2.2.2 Pre-test and Post-tests

Two tests including the target structures (i.e., third person-s and preposition of time) were administered to the participants. The purpose of this test was to make certain that the learners did not have prior knowledge of third person-s and preposition of time. At first, two tests including Multiple Choice Test (MCT) of 25 items and Timed Grammatical Judgment Test (TGJT) of 25 items was developed. At the end of the study, that is, after a four-week treatment, a post-test was administered in order to measure the participants’ grammatical knowledge gained and also investigate the effectiveness of CF techniques in the four groups.

2.3 Procedures

This study was conducted at the Safir English Institute in Mahshahr, Iran. Four English classes from this institute were selected. These four classes met twice a week and each session lasted 1.45 hours. The selection of the third person-s and preposition of time was made on the basis of a number of reasons: 1) Students had many problems with these two target structures. 2) These two target structures are very salient and useful. 3) The use of these two target structures are easy in class tasks.

Based on the design of this research, four equal classes whose homogeneity was established through Oxford American English Test were randomly assigned to three experimental and one control group. These four groups were: G1) Grammar instruction with recasts. G2) Grammar instruction with Direct. G3) Grammar instruction with metalinguistic. G4) Grammar instruction without CF on form. The only difference between the experimental groups was that different types of CF were adopted for the participants’ errors in different groups. In the first week, the participants received timed GJ test and MC test as pre-tests. During the course which consisted of 20 sessions, the participants received the instruction, third person-s and preposition of time as target structures. American English File was the basic text book. The control group received no CF on the target features. Then, at end of the treatment, all the participants received the post-test.

2.5 Data Analysis

To determine whether the CF has any impact on students’ grammar learning, the collected data were analyzed using One-way ANCOVA to show whether there were significant differences among the groups. In order to answer the second research question and locate where the differences lie, Fisher’s Least Significant Difference (LSD) post hoc tests were performed.

3. Results

The first research question investigated that whether different types of corrective feedback (i.e., recast, direct and metalinguistic) lead to the enhancement of elementary EFL learners’ grammar learning. After checking the assumptions necessary for computing ANCOVA, it was found that the assumptions, including linearity, homogeneity of regression of slopes, and reliability of covariate were met. Afterwards, the scores on the pre-test and post-test of GJ test for the experimental groups and the control group were analyzed through one-way ANCOVA.

Table 1. Descriptive Statistics of the Scores of on the GJ Post-test

<table>
<thead>
<tr>
<th>Input Group</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Feedback</td>
<td>10.25</td>
<td>2.02</td>
<td>20</td>
</tr>
<tr>
<td>Recast</td>
<td>10.40</td>
<td>2.40</td>
<td>21</td>
</tr>
</tbody>
</table>
As Table 1 depicts, the mean scores of the participants in the experimental groups (Direct Feedback: \( M = 10.25, SD = 2.02 \); Recast: \( M = 10.40, SD = 2.40 \); Metalinguistic Feedback: \( M = 10.35, SD = 2.38 \)) group was higher than those in the control group (\( M = 8.15, SD = 2.89 \)). Moreover, Levene’s test showed the equality of error variance between the groups (\( p = .338 > 0.05 \)). It implies that the groups were homogeneous before the treatment (see Table 2).

Table 2. Levene’s Test of Equality of Error Variances

<table>
<thead>
<tr>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.14</td>
<td>3</td>
<td>76</td>
<td>.338</td>
</tr>
</tbody>
</table>

A one-way ANCOVA was carried out to examine if there was a significant difference between the posttest scores of the four groups while the pretest scores were held constant (see Table 3).

Table 3. Results of ANCOVA of GJ Post-test Scores

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial ( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>281.04</td>
<td>4</td>
<td>70.26</td>
<td>21.56</td>
<td>.00</td>
<td>.535</td>
</tr>
<tr>
<td></td>
<td>299.80</td>
<td>1</td>
<td>299.80</td>
<td>92.02</td>
<td>.00</td>
<td>.551</td>
</tr>
<tr>
<td>GJ Pretest</td>
<td>209.30</td>
<td>1</td>
<td>209.30</td>
<td>64.24</td>
<td>.00</td>
<td>.461</td>
</tr>
<tr>
<td>Feedback Type</td>
<td>132.40</td>
<td>3</td>
<td>44.13</td>
<td>13.54</td>
<td>.00</td>
<td>.351</td>
</tr>
<tr>
<td>Error</td>
<td>244.34</td>
<td>75</td>
<td>3.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8189.0</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>525.38</td>
<td>79</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 3, a significant difference between the two groups on the posttest scores of the GJ test was found, \( F(3, 75) = 13.547, p < .05 \), partial \( \eta^2 = 0.351 \). There was a significant difference between the students’ performance on the pre- and post-tests. The value of Partial \( \eta^2 \) is .351 which is a large effect size according to Cohen (1988). It means that 35 percent of the variance of the GJ tests is explained by the treatment. Table 4 displays that the mean scores of the participants in the Direct Feedback (\( M = 10.74, SD = 2.36 \)) and Metalinguistic Feedback (\( M = 10.75, SD = 2.31 \)) groups were higher than those in the control group (\( M = 9.40, SD = 2.41 \)) in the MC post-test.

Table 4. Descriptive Statistics of the Scores on the MC Post-test
<table>
<thead>
<tr>
<th>Input Group</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Feedback</td>
<td>10.74</td>
<td>2.36</td>
<td>20</td>
</tr>
<tr>
<td>Recast</td>
<td>9.00</td>
<td>2.49</td>
<td>21</td>
</tr>
<tr>
<td>Metalinguistic</td>
<td>10.75</td>
<td>2.31</td>
<td>19</td>
</tr>
<tr>
<td>Control</td>
<td>9.40</td>
<td>2.41</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>9.98</td>
<td>2.48</td>
<td>20</td>
</tr>
</tbody>
</table>

Moreover, Levene’s test showed the equality of error variance between the groups \( (p = .191 > 0.05) \). It implies that the groups were homogeneous before the treatment (see Table 5).

Table 5. Levene’s Test of Equality of Error Variances

<table>
<thead>
<tr>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.62</td>
<td>3</td>
<td>76</td>
<td>.191</td>
</tr>
</tbody>
</table>

A one-way ANCOVA was carried out to examine if there was a significant difference between the post-test scores of the groups while the pre-test scores were held constant (see Table 6).

Table 6. Results of ANCOVA of MC Post-test Scores

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial ( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>269.39</td>
<td>4</td>
<td>67.34</td>
<td>23.32</td>
<td>.00</td>
<td>.554</td>
</tr>
<tr>
<td>MC Pretest</td>
<td>219.74</td>
<td>1</td>
<td>219.74</td>
<td>76.10</td>
<td>.00</td>
<td>.504</td>
</tr>
<tr>
<td>Feedback Type</td>
<td>98.859</td>
<td>3</td>
<td>32.95</td>
<td>11.41</td>
<td>.00</td>
<td>.313</td>
</tr>
<tr>
<td>Error</td>
<td>216.56</td>
<td>75</td>
<td>2.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8446.0</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>485.95</td>
<td>79</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 6, a significant difference between the two experimental groups on the post-test scores of the MCG test was found, \( F (3, 75) = 11.412, p < .05 \), partial \( \eta^2 = .313 \). There was a significant difference between the students’ performance on the pre- and post-tests. The value of Partial Eta Squared is .313 which is a large effect size according to Cohen (1988). It means that 31 percent of the variance of the MCG tests is explained by the treatment. In order to answer the second research question and locate where the differences lie, Fisher’s Least Significant Difference (LSD) post hoc tests were performed (See Table 7).

Table 7. Fisher’s LSD Post Hoc Tests for the GJ Post-tests
As Table 7 illustrates, the mean scores of direct feedback group was significantly higher than the control group ($MD = 2.383, p < .05$). Moreover, the recast group outperformed the control group ($MD = 2.073, p < .05$). However, the results showed that the metalinguistic group outperformed the direct feedback ($MD = 1.375, p < .05$), recast ($MD = 1.686, p < .05$), and control group ($MD = 3.759, p < .05$). It implies that, in the GJ test, metalinguistic feedback was the best feedback type.

Table 8. Fisher’s LSD Post Hoc Tests for the MC Post-tests

<table>
<thead>
<tr>
<th>(I) Feedback Type</th>
<th>(J) Feedback Type</th>
<th>Mean Difference (I-J)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Feedback</td>
<td>Recast</td>
<td>.310</td>
<td>.590</td>
</tr>
<tr>
<td></td>
<td>Metalinguistic</td>
<td>-1.375*</td>
<td>.023</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.383*</td>
<td>.000</td>
</tr>
<tr>
<td>Recast</td>
<td>Direct Feedback</td>
<td>-.310</td>
<td>.590</td>
</tr>
<tr>
<td></td>
<td>Metalinguistic</td>
<td>-1.686*</td>
<td>.007</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.073*</td>
<td>.001</td>
</tr>
<tr>
<td>Metalinguistic</td>
<td>Direct Feedback</td>
<td>1.375*</td>
<td>.023</td>
</tr>
<tr>
<td></td>
<td>Recast</td>
<td>1.686*</td>
<td>.007</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>3.759*</td>
<td>.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(I) Feedback Type</th>
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<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Feedback</td>
<td>Recast</td>
<td>1.783*</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>Metalinguistic</td>
<td>-.588</td>
<td>.281</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.101*</td>
<td>.000</td>
</tr>
<tr>
<td>Recast</td>
<td>Direct Feedback</td>
<td>-1.783*</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>Metalinguistic</td>
<td>-2.370*</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>.318</td>
<td>.560</td>
</tr>
<tr>
<td>Metalinguistic</td>
<td>Direct Feedback</td>
<td>.588</td>
<td>.281</td>
</tr>
<tr>
<td></td>
<td>Recast</td>
<td>2.370*</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.689*</td>
<td>.000</td>
</tr>
</tbody>
</table>
As Table 8 shows, the mean scores of direct feedback group was significantly higher than the recast (MD= 1.783, \( p < .05 \)) and control group (MD = 2.101, \( p < .05 \)). Moreover, the results showed that the metalinguistic group outperformed the recast (MD = 2.370, \( p < .05 \)), and control group (MD = 2.689, \( p < .05 \)). However, no significant difference was found between the direct feedback and the metalinguistic groups (MD = 0.588, \( p > .05 \)). It implies that, in the MC test, metalinguistic feedback and direct feedback groups were better than recast and the control groups.

4. Discussion and Conclusion

In this section, the findings of the two research questions are discussed. It was found that the mean scores of three experimental groups were significantly higher than the mean scores of the control group. The results implied that the provision of CF could be effective in removing erroneous structures from the learners’ grammar learning. These findings are consistent with the findings of previous studies done by Al Ajam (2015), Daneshvar and Rahimi (2014), Lyster and Ranta (1997), and Rassaei and Moinzadeh (2011) which confirmed the significant effect of CF on learners’ grammar. There are two reasons which could be presented to explain the experimental groups’ significant progress in grammar learning. First, using CF can alert learners about their current language skills and help them to narrow or close the gap between their actual ability and the desired performance. Second, the more feedback learners receive of their performance the better they understand what they need to do to correct their mistakes.

The findings also revealed that while learners benefited from three types of CF, the metalinguistic feedback and direct feedback outperformed the recast in MC post-test, and the metalinguistic feedback outperformed the recast and the direct groups in GJ post-test. The results of this study also support the previously mentioned studies (e.g., Lyster & Ranta, 1997; Sheen, 2007) which had confirmed that explicit types of CF such as metalinguistic feedback are more effective than implicit types of CF such as recasts in promoting L2 development and are thus more effective in grammar learning. Hence, it can be concluded that metalinguistic CF can be used for not only revising students’ grammar but also for instructional purposes. Employing, metalinguistic feedback led to a significantly fewer errors in grammar and helped learners to become aware of their own errors and monitor themselves. The student become more independent learner and develops autonomy. Moreover, it can be argued that since metalinguistic feedback is more noticeable and salient in indicating the source of error or the mismatch between learners’ errant utterances and target-like form, it is more effective than recasts. Another justification is that the learners notice direct and metalinguistic feedback more than recasts and it can help them to error correction which was effective in the production of accurate revisions. Mackey (1999) claimed that explicit CF such as metalinguistic feedback facilitates L2 learners with their acquisition of English question formations. Yet, another explanation is that explicit CF (e.g., metalinguistic) is effective on grammar learning. Another reason is that the metalinguistic feedback usually includes information on parts of speech such as preposition, verb, and relative pronoun for the purpose of explaining a learners’ area of weakness and provide information on these areas. Elementary students, as the participants of this study, usually have serious problems in grammar learning. Still another explanation for metalinguistic feedback leading to higher gains is that it might have provided students with a rich, elaborate environment in which the richness of explanation and contextual cues might have led to more efficient learning and hence better storage of information.

Although the present study provides some useful insights into the effect of different types of feedback on grammar learning, it nonetheless has several limitations. The first limitation is that in order to make the study more manageable, the researchers had to limit the study to only third person-s and prepositions of time. Possibly more generalizations would be achieved by taking into account other grammatical structures. Second, the participants were elementary level EFL learners. Future studies should include participants of different language proficiency levels (e.g., intermediate or advanced). Finally, only immediate effects of CF on grammar learning were investigated in this study. In order to better examine the role of CF in EFL grammar learning, long term effects should also be examined.
REFERENCES
ABSTRACT

THE PRESENT STUDY INVESTIGATED THE IMPACT OF TEXTUAL INPUT ENHANCEMENT AND EXPLICIT RULE PRESENTATION ON 60 IRANIAN INTERMEDIATE EFL LEARNERS’ INTAKE OF NOUN MAKING SUFFIXES TAKING INTO ACCOUNT ANY MEDIATING ROLE GENDER MIGHT PLAY IN THIS REGARD. TWO GENERAL ENGLISH CLASSES IN ISLAMIC AZAD UNIVERSITY OF ANZALI WERE RANDOMLY ASSIGNED TO: 1) A TEXTUAL INPUT ENHANCEMENT (TIE) GROUP, 2) A TIE PLUS EXPLICIT RULE PRESENTATION (RP) GROUP. ALL PARTICIPANTS WERE GIVEN 10 READING TEXTS AND COMPREHENSION QUESTIONS TO COMPLETE. FOR PARTICIPANTS IN GROUPS 1 AND 2 THE INPUT WAS TEXTUALLY ENHANCED THROUGH BOLD FACING AND UNDERLINING. PARTICIPANTS IN GROUP TWO, IN ADDITION, RECEIVED METALINGUISTIC EXPLANATIONS CONCERNING NOUN MAKING SUFFIXES. INTAKE OF NOUN MAKING SUFFIXES WAS MEASURED THROUGH PERFORMANCE ON A MULTIPLE-CHOICE RECOGNITION TEST. THE RESULTS OF TWO-WAY ANOVA INDICATED NO STATISTICALLY SIGNIFICANT EFFECT FOR INSTRUCTION TYPE AS WELL AS GENDER. THE STUDY CONCLUDED WITH SOME PEDAGOGICAL IMPLICATIONS.

KEYWORDS: TEXTUAL INPUT ENHANCEMENT, EXPLICIT RULE PRESENTATION, NOUN MAKING SUFFIXES

1. Introduction

The role of second language (L2) grammar instruction was downplayed in the late 1970s with the rising role of Communicative Language Teaching (CLT) (Nassaji & Fotos, 2004), which implies, in Ur’s (2011) terms, a lowering of the importance of grammatical accuracy as compared to communicative effectiveness. Although there are arguments in terms of the unhelpful role of grammar teaching, recent research, as Nassaji and Fotos (2004) put, has proved that in order for learners to attain high levels of accuracy, there is a need for formal instruction of grammar. This has caused the re-emergence of grammar teaching. Consequently, the debate on the methods of teaching grammar is one of the most controversial issues in SLA (Song & Suh, 2008).

SLA research over the past decade has investigated the types of instruction that are most effective for developing second or foreign language in L2 classrooms (Doughty & Williams, 1998). One belief in SLA
theory is that input is at the root of language learning and attention to the input determines language internalization (Rosa & O’Neill, 1999). Believing in the critical role of attention in language learning, a vast majority of SLA research has focused on investigating the methods or types of tasks that help learners to notice a particular linguistic form (Song & Suh, 2008). Likewise, Schmidt (1990, 1993, 1994, 1995) discusses conscious attention to form, or what he calls “noticing”, as a necessary condition for changing input to intake and language learning.

Sharwood Smith (1981, 1991, 1993) suggests that the term ‘input enhancement’ (first known as ‘consciousness-raising’) is another way of discussing the role of grammar in second language teaching. Input enhancement was defined as the process by which language input becomes salient to learners (Sharwood Smith, 1991). In other words, input enhancement can be used to draw learners’ attention to the target forms by using special techniques such as, **bold facing**, **italicizing** and **CAPITALIZING**. The study conducted here focuses on learners’ knowledge of the noun-making suffixes in English. The goal of this study was to determine whether the implementation of Input Enhancement (IE) would draw learners’ attention to a target form and make them produce English noun-making suffixes correctly.

Many learners come to language classes with fairly fixed expectations as to what they will do there. These expectations may derive from previous classroom experience of language learning. They may also derive from experience of classrooms in general where (traditionally, at least) teaching is of the transmission kind mentioned above. On the other hand, their expectations that teaching will be grammar-focused may stem from frustration experienced at trying to pick up a second language in a non-classroom setting, such as through self-study, or through immersion in the target language culture. Such students may have enrolled in language classes specifically to ensure that the learning experience is made more efficient and systematic. The teacher who ignores this expectation by encouraging learners simply to experience language is likely to frustrate and alienate them.

2. Literature Review

2.1 Textual Input Enhancement and Consciousness-Raising (C-R)

In 1991, Sharwood Smith suggested another term, which is ‘input enhancement’, as another way of discussion on the role of grammar in second language teaching. Sharwood Smith (1991) defines input enhancement as "the process by which language input becomes salient to learners". In other words, input enhancement could be an approach to second language teaching, and refers to a deliberate attempt to make the target form in this input enhanced by visually altering its appearance in the text. Sharwood Smith (1991;1993) suggests many techniques which may be used in order to make input salient, such as color coding, boldfacing, using error flags, stress, ‘intonation and gestures’, as well as pointing out and explaining construction using metalinguistic terminology.

In spite of the fact that including appropriate vocabularies in speech or writing is still of utmost importance, teaching grammar has continually been considered as a significant element in the field of second or foreign language teaching (S/FLT). In order to investigate the effectiveness of consciousness-raising in grammar learning, a number of studies have been carried out. Fotos and Ellis (1991) compared the effects of direct consciousness-raising by means of grammar explanation and of indirect consciousness-raising by means of a task on Japanese learners’ ability to judge the grammaticality of sentences involving dative alternation. They found that both methods of consciousness-raising resulted in significant gains in understanding the target structure (Rashtchi, Nourozi Khiabani & Roumiani, 2012). Sharwood Smith (1981) proposed the term ‘consciousness raising’ (C-R), which refers to increasing or raising learners’ conscious awareness of particular linguistic structures, altered by input; hence, ‘all input is intake’.

2.2 Input Enhancement as Focus on Form
According to Long and Robinson (1998), FonF refers to how focal attentional resources are allocated, and the intended outcome of FonF is what Schmidt calls noticing. In his seminal article, Long (1991) made an important distinction between focus on form and focus on forms. Focus on forms refers to the traditional way of teaching linguistic elements such as structures, notions, and lexical items where language is treated primarily as an object to be studied and practiced. This differs from focus on form in which the central focus is on meaning. In his initial formulation, Long articulates that FonF overtly draws students’ attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on meaning or communication. Here, he identifies two essential characteristics inherent in FonF: (1) Attention to form occurs in lessons where the primary focus is on meaning or communication, and (2) attention to form arises incidentally in response to a communicative need.

Recently, however, the term focus on form has been stretched to accommodate more practical needs. In the reconceptualized version of FonF, three defining characteristics are mentioned: (1) the need for learner engagement with meaning to precede attention to the code; (2) the importance of analyzing learners’ linguistic needs to identify the forms that require treatment; and (3) the need for the treatment to be brief and unobtrusive (Doughty & Williams, 1998). While (1) and (3) are in line with Long’s original definition, (2) is not, for it advocates a planned or proactive approach rather than an incidental attention to form and the current study bears more relevance to proactive or planned FonF, in which the linguistic feature is typically selected before the treatment.

2.3 Explicit Rule Presentation

Following Sanz and Morgan-Short (2004), form-focused instruction can involve providing learners with explicit information before or during exposure to L2 input, by means of either grammatical explanation or negative evidence in the form of corrective feedback (CF). Much research has investigated the role of explicit grammatical explanation or rule presentation in SLA, generally finding it beneficial (Alanen, 1995; Carroll & Swain, 1993; de Graaf, 1997; DeKeyser, 1995; N. Ellis, 1993; Nagata, 1993; Nagata & Swisher, 1995; Robinson, 1996, 1997; Rosa & Leow, 2004).

As far as CF is concerned, in both cognitive psychology and SLA, feedback has been directly linked to the process of hypothesis formation and testing, which has been shown to facilitate restructuring and system learning (e.g., Rosa & Leow, 2004; Rosa & O’Neill, 1999). Furthermore, Russell and Spada’s (2006) meta-analysis synthesizes the research on CF to date, finding overall support for the effectiveness of explicit corrective feedback for L2 acquisition of morphosyntax, as does Ellis, Loewen, and Erlam’s (2006) review of studies. This finding suggests that even if negative evidence is not crucial for acquisition of some features of L2 grammar, it does facilitate SLA by speeding up the process of acquisition, as does explicit grammatical explanation or rule presentation.

2.4 Research Questions

The following questions were posed to fulfill the purpose of the study:

- Does type of instructions (TIE or TIE+RP) have any effect on Iranian EFL learners’ intake of noun making suffixes?
- Does gender have any effect on Iranian EFL learners' intake of noun making suffixes?
- Does interaction between type of instruction (TIE or TIE/RP) and gender have any effect on Iranian EFL learners' intake of noun making suffixes?

3. Methodology

3.1 Design of the study
The present study employed an experimental design with pretest, treatment, and posttest design. The participants completed the pretest and were randomly assigned to two groups. The treatment groups were (1) the TIE group, (2) the TIE/RP group. The participants in the treatment groups completed a treatment task according to their group designation. The post-test was administered one day after the last treatment session.

3.2 Participants

The participants of the present study were 103 intermediate learners in Islamic Azad University of Anzali, registered in General English course. All classes were coeducational and the participants ranged in age between 19 and 40. The participants had a brief previous contact with noun-making suffixes, but had not yet developed full mastery of the form and meaning of these constructions. In order to make sure that the participants were all at the same level of proficiency, Oxford Placement Test (OPT) was administered. Consequently, 84 homogenous participants at intermediate level were selected to proceed with the next stage. To further make sure about the homogeneity of the 84 participants with regard to their knowledge of noun-making suffixes, they sat the pretest of the study. The result gave out 60 homogeneous learners, who were randomly assigned to two equal treatment groups, namely the TIE group (16 males and 14 females) and the TIE/RP group (12 males and 18 females).

3.3. Instrumentation

3.3.2. Proficiency test

Oxford Placement Test (OPT) was used to evaluate students' knowledge of the language. The test includes 50 multiple-choice questions, which determine students' knowledge of key grammar and vocabulary from elementary to intermediate levels, a reading text with 10 graded comprehension questions and an optional writing task that estimates students' ability to produce the language.

3.3.3. Reading texts

Ten reading comprehension passages from the book Reading Skillfully 2 (Mirhasani & Rahmani, 2005) were selected. The texts included noun making suffixes highlighted via bold facing and underlining.

3.3.4. Multiple-choice recognition tests

To check the students' intake of noun making suffixes in both pre and posttests multiple-choice grammatically judgment tests were used. The reason for using these tests was that studies such as Leow (1997) and Overstreet (1998) have confirmed that this kind of test is effective in exploring the impact of TIE on intake. Two sets of multiple-choice recognition tests were developed, one for the pretest and one for the posttest; each version had 30 questions. Each question was scored 1, therefore the total mark was 30; also 30 minutes was allocated to this test. The content validity of the tests was confirmed by two TEFL experts and based on the received feedback, some questions were revised and ambiguities were removed.

3.4. Procedure

This study was conducted in 10 sessions during the fall semester of 2014. In order to achieve the purpose of the study and to collect requisite data, several stages were followed.

To begin with, Oxford Placement Test (OPT) was administered to determine the language proficiency level of 103 participants. The test screened out 84 homogenous participants at intermediate level. Once these learners sat the pretest, the number reduced to 60 who were randomly assigned to two treatment groups.

In the next session, these learners received instruction on ten lessons from the book Reading Skillfully 2 in ten sessions. Group one received textual input enhancement including bolding and underlining of noun-
making suffixes and group two received more explanation about suffixes with a focus on noun-making suffixes. Then a discussion was held about the content of that lesson and some exercises were done. What is more, in the process of reading, the students were exposed to passages and ideas of others that were interesting and could have helped them express their own as well. As the final stage of data collection procedure, the posttest was administered to both groups.

3.5. Data analysis

To answer the research questions regarding the difference between two different interventions, Two-way ANOVA was run.

4. Results

To examine the research hypotheses, a Two-way ANOVA was run. The Descriptive Statistics of posttest for all groups are presented in Table 4.1.

Table 4.1
Descriptive Statistics for Scores on Posttest

<table>
<thead>
<tr>
<th>Group</th>
<th>Gender</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>17.87</td>
<td>1.642</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>TIE</td>
<td>Female</td>
<td>16.00</td>
<td>1.512</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>16.93</td>
<td>1.818</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>17.93</td>
<td>2.576</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>TIE/RP</td>
<td>Female</td>
<td>17.67</td>
<td>3.155</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>17.80</td>
<td>2.833</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>17.90</td>
<td>2.123</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Female</td>
<td>16.83</td>
<td>2.574</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>17.37</td>
<td>2.400</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

As Table 4.1 shows, the total mean value of recognition test for TIE group was 16.93 and for the TIE/RP group, it was 17.80. It is clear that there were not sizeable differences in the scores of the two different groups. In line with the above conjecture, the result of Tow-way ANOVA (Table 4.2) revealed that there was no statistically significant difference at .05 probability level in intake of noun making suffixes across two groups ($F = 2.089, p = .154 > .05$). This result indicates that type of instructions (TIE or TIE+RP) had not any effect on Iranian EFL learners' intake of noun making suffixes.

Table 4.2
Two-way ANOVA for Score on Posttest

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta</th>
<th>Square</th>
</tr>
</thead>
</table>

Downloaded from mjltm.org at 12:48 +0430 on Tuesday May 12th 2020
<table>
<thead>
<tr>
<th>Group</th>
<th>11.267</th>
<th>1</th>
<th>11.27</th>
<th>2.089</th>
<th>.154</th>
<th>.036</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>17.067</td>
<td>1</td>
<td>17.07</td>
<td>3.165</td>
<td>.081</td>
<td>.053</td>
</tr>
<tr>
<td>Group*Gender</td>
<td>9.6</td>
<td>1</td>
<td>9.60</td>
<td>1.780</td>
<td>.188</td>
<td>.031</td>
</tr>
<tr>
<td>Error</td>
<td>302</td>
<td>56</td>
<td>5.39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>total</td>
<td>18436</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There are two additional but important pieces of information in this table. First, the effect of gender is non-significant, $F= 3.165, P= .08 > .05$. This means that males and females did not differ in terms of intake of noun making suffixes. Second, there is no interaction between the group and gender variables, $F= 1.780, P= .18 > .05$. This indicates that there was not significant difference in the effect of type of instructions on intake of noun making suffixes for males and females. These pieces of information are diagrammatically represented in Figure 4.1.

![Estimated Marginal Means of Posttest](image)

**Figure 4.1.** Line graph for mean scores on posttest across two groups

Figure 4.1 indicates differences in the mean scores of the groups receiving different types of instructions (TIE or TIE/RP). As it is obvious from the line graph, there appears to be a difference in females' scores of two different groups and also in males and females' scores of TIE group, but the difference is only a few points, about 2 points. This finding points to the fact that gender had not any effect on participants’ intake of noun making suffixes.

5. Discussion and Conclusion

The purpose of this study was to examine whether textual input enhancement per se and combined with explicit rule presentation trigger learners' intake of noun-making suffixes differently and whether gender have any mediating role in this regard.

The end results supported and showed that learners who were given the text with enhanced input as well as those who received explanations about the functioning of those structures beside the input being
enhanced showed gains from pretest to posttest though the difference did not reach significance. This finding is in line with Daugty (1991), Jourdenais et al. (1995), Lee (2007) and Cho (2010) who reported positive effects of TIE on learning noun making suffixes.

The results of the analysis indicated that TIE/RP group outperformed TIE only group in terms of accuracy although the difference between the two groups was not statistically significant. The difference between TIE and TIE/RP groups can be considered rather logical regarding the fact that in TIE/RP group the participants were given more explanation about the working of suffixes and their functions, during which time the participants attempted to grasp a better understanding of these suffixes.

In line with our findings, a number of studies (e.g., Carroll & Swain, 1993; DeKeyser, 1994; Fotos, 1993; Lightbown & Spada, 1990; Master, 1994; Scott, 1990; Spada & Lightbown, 1993; White et al., 1991) have confirmed that giving learners metalinguistic explanations can make the input salient and raise their consciousness with regard to the construction needed to get the meaning across. The results of the present study also confirms the claim made by some researchers (e.g., Harley, 1998; Schmidt, 1993) that learners often do not notice forms in the input in spite of repeated exposure, claiming that explicit instruction can benefit learners in acquiring moderately difficult grammatical rules. For DeKeyser (2003) benefit of explicit instruction can be its ability in triggering the incidental noticing of form-meaning connections within subsequent input.

However the result of the present study contrasts with some studies that reported no facilitative effects of TIE (Izumi, 2000; 2002; Leow et al., 2003; Overstreet, 2002; Wong, 2003). Some researchers such as Alanen (1995) and Leow (1997, 2001) reject the positive effect of TIE on the intake of target forms.

The result emanating from the investigation of the third research hypothesis of the study, though not rejected, and a second glance at Figure 4.1 indicates that a change in type of instruction does not make remarkable difference for male participants as far as the intake of noun-making suffixes is concerned, however when it comes to female learners, these different interventions seem to exert different influences on the degree to which they internalized these constructions. More specifically, the female participants' gain was more considerable when they received metalinguistic explanation of the suffixes beside textually enhanced input although this difference did not reach statistical significance. Further studies might be required before one can make strong claims with regard to the effect of interaction between gender and instruction type on the intake of noun-making suffixes.

Based on the results of the present study some pedagogical implications can be made. First, language instructors might feel more justified while using TIE/RP instruction to target moderately difficult linguistic patterns when the instruction per se does not lead to immediate acquisition. Taking into consideration the grammar pedagogy, the present study may offer some evidence that TIE alone can be an effective focus-on-form technique, at least for the English noun making suffixes. The results can provide further insight into how learners utilize attentional resources when they are faced with textual input enhancement as a type of focus-on-form instructional intervention.

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CRITICAL THINKING: A REVIEW OF THE APPROACHES AND MODELS

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ABSTRACT
IN EDUCATIONAL SETTINGS, CRITICAL THINKING (CT) IS JUDGED TO BE A CRUCIAL CONCEPT. RESEARCHERS EMPHASIZE THE IMPORTANCE OF DEVELOPING STUDENTS’ CT BELIEVING THAT ONE MAJOR GOAL OF EDUCATION IS TO TRAIN LEARNERS TO BE CAPABLE OF CREATING NEW THOUGHTS. AS SUCH, THIS PAPER REVIEWS THE MAJOR AREAS OF CT AND ITS DEFINITIONS, THE MAIN APPROACHES TO CT INCLUDING THE PHILOSOPHICAL APPROACH, THE COGNITIVE PSYCHOLOGICAL APPROACH, AND THE EDUCATIONAL APPROACH, WITH TWO FAMOUS MODELS WITHIN THIS PERSPECTIVE, NAMELY, BLOOM’S TAXONOMY, AND ANDERSON AND KRATHWOHL’S TAXONOMY. THE CONCLUSIONS HIGHLIGHT THE IMPORTANCE OF CT AS WELL AS THE NECESSITY OF DEVELOPING THE RELEVANT SKILLS AMONG ALL EDUCATIONAL PRACTITIONERS.

KEY WORDS: CRITICAL THINKING, MODELS, APPROACHES, INSTRUCTION

1. Introduction
Numerous researchers have emphasized the significance of CT for students and the importance of considering it as one of the major required educational outcomes (Angel, Duffey, & Belyea, 2000, Boland, 2005; Brooks & Shepherd, 1990; Daly, 1998; Del Bueno, 1992; Di Vito-Thomas, 2000; Ford & Profetto-McGrath, 1994; Miller & Malcolm, 1990, Profetto-McGrath, Bulmer, Day, Yonge, 2004). In fact, one of the major objectives of educational systems in various countries is developing and flourishing CT (Shabani, 1999) without which the acquired knowledge and literacy amounts to a “hodgepodge of concepts and facts” (Tieso, 2003, p 118.)

Despite the emphasis on the development of CT, it seems like an unachievable goal of education (Case, 2005). Paul (1995) stated that the “fundamental problems in schooling today are fragmentation and lower order learning. Atomized lists dominate curricula, atomized teaching dominated instruction, and atomized recall dominates learning. What is missing is coherence, connection, and depth of understanding” (p. 273). However, this is not sufficient. As Paul (1992) stated, “although there are circumstances in everyday life where lower-order rote learning is sufficient, those circumstances are diminishing rapidly in number” (p. 4).
There are various ways to teach CT as well as embed it in the curriculum. Educationalists (Bowel & Kemp, 2005; Brunt, 2005; Bullen, 1998; Piaw, 2010; Renaud & Murray, 2008; Stapleton, 2011; Thompsona, Martin, Richardsc, & Branson, 2003) believed that curriculum elements (goal, content, learning methods and evaluating approaches) have an inevitable role in CT development, enhancement and disposition. An effective curriculum attempts to “establish good links between assessment, learning and personal development by allowing students some elements of choice, [and] encouraging self-assessment and reflection” (Council of Higher Education, 2001, p 114). A strong curriculum would involve placing explicit value “on the reflexivity between creativity and critical thinking demonstrated by the students” (Belluigi, 2009, p. 717).

Since, as Thompson (2011) stated, the development of CT skills cannot be completely achieved through individual subjects, courses or faculties, “it is imperative to use a cross-curricular approach to foster CT among students at all levels” (p. 4). Ramsay (2009) supported infusing CT with reading and writing across disciplines. For decades, CT was successfully embedded in reading and writing across the post-secondary curriculum in a university first year course certifying the premise that reading and writing were interrelated. It was believed that both processes were the manifestations of how students analyze, evaluate, and communicate information. “Therefore it is imperative that first year college students constantly practice the meta-cognitive processes of reading and writing texts from various genres and discourse types from an array of disciplines” (Ramsay, 2009, p. 377).

2. Definitions of CT and its Significance

In educational settings, CT is judged to be a crucial concept since it helps students “to connect knowledge as they use information from many different sources and experiences to gain broader perspectives and deeper understanding” (Kanik, 2010, p. 20). Critical thinkers raise seminal questions, verbalize them clearly, gather and assess pertinent information, use influential ideas, reflect liberally, and communicate effectively with others (Duron, Limbach, & Waugh, 2006).

CT has always been a topic of much dispute because it does not unfold itself easily to a clear-cut definition (Castle, 2009; Raymond & Profetto-McGrath, 2005). A glance through the literature reveals that the concept has been defined inconsistently and even the existing definitions tap various aspects of CT. For example, following Delphi method, Facione (1990) conducted a research through a panel of 46 experts and defined CT as “a purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, and conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based” (p. 2). Facione (2010) noted that CT is a kind of goal-based activity and judgment focused on the processes applied during thinking while developing numerous contents, themes, questions, and subjects. It includes interpretation, analysis, evaluation, explanation, self-regulation and inference skills. CT is a "lifelong learning process" (Brookfield, 2002, p. 159) that "lays the foundation for further intellectual development" when taught to young children (Halpern, 2003, p. 11).

On the other hand, Scheffer and Rubenfeld (2000) described it as “a component of professional accountability in which students practice the cognitive skills of analyzing, applying standards, discriminating, information seeking, logical reasoning, predicting, and transforming knowledge” (p. 25). Paul (1992) also conceived CT as “the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action” (p. 38).

Recognizing central concerns and assumptions in an argument, identifying essential interactions and associations, making sound inferences and correcting corollaries from the received data, inferring correct and acceptable conclusions from information, interpreting the conclusions analytically on the basis of the data given and offering numerous answers and solutions to the encountered problems, are among the
abilities flourished by CT (Pascarella & Terenzini, 1992). As Halpern (1998) put it, “verbal-reasoning skills, argument-analysis skills, thinking skills such as hypothesis testing, thinking in terms of likelihood and uncertainty, decision making and problems-solving skills” are developed and enhanced through CT (p. 22).

Although CT is very crucial, it cannot stand alone without true dispositions. In fact, CT is something more than a mere “use of the right cognitive skill in an appropriate context” (Kanik, 2010, p. 20). True and effective presentation of CT depends on the suitable dispositions. As Kanik (2010) stated, “a person might possess critical thinking skills, but tends not to use them, which indicates that the individual possesses little critical thinking disposition” (p. 21).

Therefore, the display of CT depends on particular attitudes, special dispositions, and certain traits of mind all indispensable to the drastic and effective use of CT skills and abilities in real life conditions. Ennis (1991) called these attitudes and dispositions as ‘a spirit of inquiry’, and offered some dispositions such as being open-minded, seeing the entire situation, being reflective, being able to stick to the main points and not swaying a lot, staying pertinent to real life issues, looking for numerous alternatives and substituent chances, and making sound judgment based on evidence.

Furthermore, Jones et al. (1995) stated that a critical thinker needs to possess specific dispositions to facilitate CT such as thinking autonomously and independently, being fair-minded, rejecting egocentrism and socio-centrism, increasing intellectual modesty and appending judgment, developing intellectual audacity and courage, evolving intellectual moral faith or honesty, developing intellectual determination, developing confidence in logic and intellect as well as reasoning, investigating and paying due attention to both thought and feeling simultaneously, being inquisitive and curious, being systematized and planned, being interested in thinking, being flexible and tolerant, being creative in finding solutions, perusing self-understanding of a condition and the way to reach to goals, and finding ways to cooperate with others.

Dispositions are essential parts of CT without which CT cannot bloom or emerged completely. As Paul (1995) declared, “without being open minded and considerate of other people and perspectives critical thinking does not exceed egocentric and socio-centric thinking” (p. 24). Facione (1990) reported two dimensions for CT affective dispositions. The first dimension that is considered as the approaches to life and living in general, and the second dimension represents the approaches to specific issues, questions or problems. It is important to bear in mind that “these two types of affective dimensions are considered as the permanent traits of critical thinkers at times when they are using one of the cognitive skills as well as at times when they are not employing a cognitive critical thinking skill” (Kanik, 2010, p. 24). However, it is not necessary for an individual to master them all to be considered as a critical thinker. The following table presents the critical dispositions according to Facione (1990, p. 13):

| Table 1. Critical Thinking Dispositions and Abilities (Facione, 1990) |
| Dispositions |
| I. Approaches to life and living in general |
| _ Inquisitiveness with regard to a wide range of issues |
| _ Concern to become and remain generally well-informed |
| _ Alertness to opportunities to use CT |
| _ Trust in the processes of reasoned inquiry |
Self-confidence in one’s own ability to reason
Open-mindedness regarding divergent world views
Flexibility in considering alternatives and opinions
Understanding of the opinions of other people
Fair-mindedness in appraising reasoning
Honesty in facing one’s own biases, prejudices, stereo-types, egocentric or sociocentric tendencies
Prudence in suspending, making or altering judgments
Willingness to reconsider and revise views where honest reflection suggests that change is warranted

II. Approaches to specific issues, questions or problems
Clarity in stating the question or concern
Orderliness in working with complexity
Diligence in seeking relevant information
Reasonableness in selecting and applying criteria
Care in focusing attention on the concern at hand
Persistence though difficulties are encountered
Precision to the degree permitted by the subject and the circumstance

Source: Facione (1990, p. 13)

It should be mentioned that CT is a term that is much used interchangeably with problem-solving, decision-making and creative thinking. However, these technical terms are not exactly perceived as synonyms. They are rather complementary elements or features of general cognitive processes proposed by researchers (Beyer, 1990; O’Hare, & McGuinness, 2009). That is why some theoreticians use the concept ‘higher-order thinking’ as an umbrella term to encompass problem solving, CT, creative thinking, and decision making (Lewis & Smith, 1993). Regarding their stand, they suggested the following definition: “Higher-order thinking occurs when a person takes new information and information stored in memory and interrelates and/or rearranges and extends this information to achieve a purpose or find possible answers in perplexing situations” (Lewis & Smith, 1993, p. 136).

Despite increasing research on the concept of CT, there are still many areas of uncertainty and disagreement regarding the concept. In fact, CT is a multifaceted construct, not easily restricted to a particular or fixed definition. That is why cognitive scientists, philosophers, psychologists, and educational researchers continue to pursue their ideas of CT based in various research traditions (Ennis, 1991; Facione, 1984; Halpern, 2010; Johnson, 2000; McPeck, 1981; Paul, 1995; Resnick, 1987; Tishman, Jay, & Perkins, 1993).
3. CT from Three Theoretical Perspectives

Sorting all views in general perspectives, CT can be viewed from three different perspectives: philosophy, psychology and education. Each of these three separate academic strands offers a different view and idea to defining CT reflecting respective concerns.

3.1. The Philosophical Approach

From philosophical point of view, CT is a logical norm of good and reasonable thinking, the rational aspect of human thought, and the intellectual assets and traits needed to approach the world in a rational and logical way (Paul, 1995).

The main focus of philosophical approach is “a hypothetical ideal critical thinker” (Lai & Viering 2012). In this school of thought, the ideal thinker’s qualities and characteristics are emphasized instead of his actions or behaviours. Standard thought and qualities are emphasized in this philosophical strand and training a good critical thinker means moving and working toward this ideal. Sternberg (2010) also considers CT as the ability that allows people to act out under the best of circumstances and conditions. The definition of preoccupation with the ideal critical thinker is evident in the American Philosophical Association’s description of the ideal critical thinker:

The ideal critical thinker is habitually inquisitive, well-informed, trustful of reason, open-minded, flexible, fair-minded in evaluation, honest in facing personal biases, prudent in making judgments, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in the selection of criteria, focused in inquiry, and persistent in seeking results which are as precise as the subject and the circumstances of inquiry permit. (Cited in Facione, 2000, p. 9)

The philosophical approach highlights good judgment and reasoning as its formal rules and strongly relies upon logical criteria. Bailin (2002) focuses on the adherence to ideal criteria and optimum standards which is the central focus to all the main philosophical accounts of CT (e.g., Ennis, 1991; Van Gelder, 2005; Lipman 1991). He believes that CT has specific and particular qualities and standards of adequacy and accuracy.

Since this philosophical stand pays close attention to ideal thinker and people’s ideal capacity in reflection, it does not always correspond to reality (Sternberg, 1987) and may have less to contribute to discussions about how people actually think.

3.2. The Cognitive Psychological Approach

John Dewey in “How we think” provided a baseline of CT research from a psychological perspective. Dewey (1910) stated that CT skill encompasses “discrete processes of induction, deduction, judgment, the construction of meaning, abstraction and scientific thinking” (p. 14). Dewey (1933) named CT “reflective thinking” and defined it as “an active, persistent, and careful consideration of a belief or supposed form of knowledge in the light of the grounds which support it and the further conclusions to which it tends” (p. 9).

For the followers of this school and tradition subsequently, CT is basically an active process – one in which people are involved and are encouraged to think, raise questions themselves, and critically look at every issues without just receiving knowledge passively. By ‘persistent’, Dewey (1933) means highlighting the reflective process rather than the product and refuses type of thinking that just ‘jumps’ to a conclusion. He continued that what really matters are the reasons people would offer for believing in something or rejecting ideas or modifying their beliefs. Therefore, he emphasized the importance of active process of reasoning in CT.
In contrast to the philosophical view of CT, the cognitive psychological approach conceives CT by the types of actions or behaviours that critical thinkers actually can do. This strand enumerates a list of skills or procedures performed by critical thinkers. Psychologists tend to focus on the actuality of the issue and how people actually think rather than how they could or should think under ideal conditions (Lewis & Smith, 1993). As Sternberg (1987) puts it, CT is “the mental processes, strategies, and representations people use to solve problems, make decisions, and learn new concepts” (p. 3).

Cognitive-field psychologist (Glassner & Schwarz, 2007; Piaw, 2010; Renaud & Murray, 2008) postulated CT as being able to critically reflect on an issue and develop expertise, being able to accurately perceive the new situation and making appropriate decisions, being able to have constant dynamic interaction with the environment. Glaser (1941) also defined CT as “an attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one’s experiences, knowledge of the methods of logical inquiry and reasoning, and some skills of applying those methods” (p. 5).

CT is often perceived as “certain mental processes or procedural moves which can be improved through practice” (Bailin, 2002, p. 362). From the cognitive psychological perspective, CT is like “seeing both sides of an issue, being open to new evidence that disconfirms your ideas, reasoning dispassionately, demanding that claims be backed by evidence, deducing and inferring conclusions from available facts, solving problems, and so forth” (Willingham, 2007, p. 8).

3.3. The Educational Approach

Unlike the two above-mentioned perspectives on CT, educational approach is the result of practical experiences of the practitioners and is rooted in years of classroom experience and observations of student learning. In this section, two relevant famous models are briefly explained. The first one is Bloom’s taxonomy of educational objectives and the second one is Anderson and Krathwohl’s revised taxonomy.

3.3.1. Bloom’s Taxonomy

Bloom et al. (1956) developed a hierarchical framework for classifying different educational objectives. Bloom’s taxonomy comprises three overlapping domains: the cognitive, psychomotor, and affective. Each of these three domains entails a multi-layered structure from simple level to more complex ones.

- The cognitive domain or knowledge-based domain which consists of six levels, from knowledge to evaluation
- The affective domain or attitudinal-based domain which encompasses feelings, emotions and behaviour, i.e., attitude, or 'feel')
- The psychomotor domain or skills-based domain which reflects physical skills, i.e., skills, or 'do')

The learner should benefit from development of knowledge and intellect (cognitive domain); attitude and beliefs (affective domain); and the ability to put physical and bodily skills into effect - to act (psychomotor domain). See table 2.

Table 2. Thinking Domains in Bloom’s Taxonomy

<table>
<thead>
<tr>
<th>Cognitive Domain (Knowledge)</th>
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<tbody>
<tr>
<td>1. Knowledge</td>
</tr>
<tr>
<td>2. Comprehension</td>
</tr>
<tr>
<td>3. Application</td>
</tr>
</tbody>
</table>
4. Analysis
5. Synthesis
6. Evaluation

**Affective Domain (Attitude)**
1. Receiving
2. Responding
3. Valuing
4. Organization
5. Internalization of a value system

**Psychomotor or Domain (skills)**
1. Imitation
2. Manipulation
3. Developing precision
4. Articulation
5. Naturalization

*Source: Bloom et al. (1956, p. 56)*

Within the cognitive domain that emphasizes intellectual outcomes, Bloom outlined six levels of CT: knowledge, comprehension, application, analysis, synthesis, and evaluation with ‘comprehension’ at the bottom and ‘evaluation’ at the top; each of these is divided into subcategories.

This taxonomy is hierarchal starting from simple cognitive processes to more complex and sophisticated mental processes. The categories range from simple to complex and from concrete to abstract, therefore, moving to higher steps prerequisites the mastery of the previous step. As Kreitzer and Madaus (1994) put it, the structure of Bloom’s taxonomy is hierarchal because “each class of behaviour was presumed to include all the behaviours of the less complex classes” (p. 66). Therefore, the lowest level skills served as a stepping stone to more complex, higher-level skills.

Knowledge, Comprehension and Application, and their related tasks such as labeling and defining, were the first three levels of the Taxonomy which were located metaphorically at the bottom of the Taxonomy known as lower-level thinking skills. Analysis, Synthesis and Evaluation reflect more complex cognitive processes, and were classified in the three highest levels of the Taxonomy, known as ‘higher-order thinking skills.’ The first three levels of the Bloom’s taxonomy, i.e., lowest-level skills, could be completed by most individuals while the higher cognitive levels, i.e., higher-order thinking skills, since required additional, more abstract CT skills, can be accomplished by fewer individuals (Anderson, 2002). The three highest levels (analysis, synthesis, and evaluation) are frequently stated to represent CT (Kennedy, Fisher, & Ennis, 1991).
The affective domain includes the manner dealing with emotion, such as feelings, values, appreciation, enthusiasm, motivations, and attitudes. The five major categories are receiving, responding, valuing, organization, internalization of a value system.

The last domain, the psychomotor, includes physical movement and the use of the motor-skill areas. Development of these skills necessitates practice and training and is measured in terms of speed, precision, and techniques in execution. Seven major categories are listed in this domain: Perception (the ability to use sensory cues to guide motor activity), set (readiness to act), guided response (the early stages in learning a complex skill that includes imitation and trial and error), mechanism (an intermediate stage in learning a complex skill when learned responses become habitual and the movements can be performed with some confidence and proficiency), complex overt response (the skilful performance of motor acts that involve complex movement patterns), adaptation (skills are well developed and the individual can modify movement patterns to fit special requirements), and origination (creating new movement patterns to fit a particular situation or specific problem. Learning outcomes emphasize creativity based upon highly developed skills) (Randall, 2011).

3.3.2. Anderson and Krathwohl’s Taxonomy

Recent decades have given rise to numerous criticism of Bloom’s original taxonomy, concerning its applicability, practicality, contemporary language, and process conceptualization. A major and noteworthy limitation of Bloom’s taxonomy is its unidimensionality and simplifying the complex cognitive process from simple to complex behaviour. Shifting and moving to higher levels presumed the mastery of the previous step and the culmination in the previous cognitive skill. The categories were presumed not to overlap with each other. Therefore, it was amended in 2001 and this time "representatives of three groups: cognitive psychologists, curriculum theorists and instructional researchers, and testing and assessment specialists" were present (Anderson, & Krathwohl, 2001, p. xxviii).

Anderson and Krathwohl (2001) revised Bloom's original taxonomy by modifying the original taxonomy and combining both the cognitive process, and knowledge dimensions to reflect the needs of today's outcome-process oriented shift. The 2001 Taxonomy differs from the 1956 Taxonomy in the addition of a new emphasis on students' cognitive processes over students' skills or content. They took the recent psychological, philosophical and educational developments such as Constructivism, Metacognition and Self-Regulated Learning (SRL) into consideration and regarded learning as “a proactive activity, requiring self-initiated motivational and behavioural processes as well as metacognitive ones” (Zimmerman, 1998, p. 1).

While Bloom's original cognitive taxonomy is a one-dimensional one, the revised Taxonomy takes the form of a two-dimensional table separating the mental processes, the cognitive domain, from the content mastered, and the knowledge domain. One of the dimensions identifies the knowledge dimension (or the kind of knowledge to be learned) while the second identifies the cognitive process dimension (or the process used to learn). The cognitive domain is similar in theory and structure to the original 1956 taxonomy, with some realignment of skills and the use of verbs, not nouns as the titles of the hierarchical levels. The revision comprises a number of apparently minor yet actually quite significant changes:

3.3.2.1. Terminology Changes in Cognitive Dimension

The cognitive dimension underwent some major differences. Changes in terminology between the two versions are perhaps the most obvious differences. Though the number of categories remained unchanged, three categories were renamed; the order of the two top categories was interchanged. The
names of each category remain somehow the same with a modification of changing from noun to verb to fit and reflect the cognitive process.

In the revised taxonomy, the cognitive dimension exhibits a continuum of increasing cognitive complexity from lower-order thinking skills to higher-order thinking skills. The six hierarchal categories that encompass the cognitive dimensions are: remember, understand, apply, analyze, evaluate and create.

As the taxonomy reflects different forms of thinking and thinking is an active process, verbs were used rather than nouns. The subcategories of the six major categories were also replaced by verbs and some subcategories were reorganized. The knowledge category was renamed. Knowledge is an outcome or product of thinking, not a form of thinking. Consequently, the word knowledge was inappropriate to describe a category of thinking and it was replaced with the word remembering instead. Comprehension and synthesis were retitled to understanding and creating, respectively, in order to better reflect the nature of the thinking defined in each category. The definition and the changes of the revised cognitive dimensions are presented below:

- **Remembering**: Retrieving, recognizing, and recalling relevant knowledge from long-term memory;
- **Understanding**: Constructing meaning from oral, written, and graphic messages; through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining;
- **Applying**: Carrying out or using a procedure through executing, or implementing;
- **Analyzing**: Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing;
- **Evaluating**: Making judgments based on criteria and standards through checking and critiquing;
- **Creating**: Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing.

(Anderson & Krathwohl, 2001, pp. 67-68)

### 3.3.2.2. Structural Changes: Knowledge Dimension

The next difference between the two taxonomies is that of the structure. While Bloom’s taxonomy is one dimensional and linear, the revised taxonomy, with the addition of products, takes the form of a two-dimensional table knowledge dimension and cognitive dimension dealing with important aspects of knowing and thinking.

In knowledge dimension, four types of knowledge that learners may be expected to acquire are presented: factual, conceptual, procedural and metacognitive ranging from concrete to abstract; from simple to more complex.

- **Factual Knowledge** is knowledge that is basic to specific disciplines. This dimension refers to essential facts, terminology, details or elements students must know or be familiar with in order to understand a discipline or solve a problem in it.
- **Conceptual Knowledge** is knowledge of classifications, principles, generalizations, theories, models, or structures pertinent to a particular disciplinary area.
• **Procedural Knowledge** refers to information or knowledge that helps students to do something specific to a discipline, subject, and area of study. It also refers to methods of inquiry, very specific or finite skills, algorithms, techniques, and particular methodologies.

• **Metacognitive Knowledge** is the awareness of one’s own cognition and particular cognitive processes. It is strategic or reflective knowledge about how to go about solving problems, cognitive tasks, to include contextual and conditional knowledge and knowledge of self.

(Anderson, & Krathwohl, 2001)

The intersection of the knowledge and cognitive process categories form twenty-four separate cells. The knowledge dimension on the left side is composed of four levels that are defined as factual, conceptual, procedural, and metacognitive. The cognitive process dimension across the top of the grid consists of six levels that are defined as **remember, understand, apply, analyze, evaluate, and create.**

4. Conclusion

This paper highlighted the importance of CT as well as the necessity of developing it among all educational practitioners. In a community where all individuals are equipped with CT skills and have learned how to critically look at issues where questioning becomes a way of reflection, students will find the courage to question the validity of the sources of information and challenge knowledge and consequently pave the way for further developments.

CT literature reveals that there have been numerous definitions to define CT and that there was no consensus on one fixed definition. However, all the proposed definitions had some commonalities with each other such as CT is purposeful, reasonable, practical, judicious, reflective, responsible, and skillful thinking relying on criteria. Besides, there were also wide-ranging agreements that thinking critically requires specific dispositions such as risk-taking, being courageous, and willingness to be involved in discussions, being open-minded, having ambiguity tolerance and being flexible which Ennis (1991) calls a spirit of inquiry. CT is usually equated with problem-solving and creative thinking. Although these technical terms had some differences, literature revealed that there is consensus upon the idea that they are complementary elements of general cognitive processes.

CT was also looked at from different approaches, namely, philosophy, psychology and education each of which presented specific frameworks consisting of a comprehensive definition regarding CT, its aims and the process of fertilizing it in educational systems (Anderson & Krathwohl, 2001; Bailin, Case, Cooms, & Daniels, 1999; Ennis, 2004; Facione, 1990; Jones et al., 1995; Paul, 1995). These frameworks have served as an important goal of classroom instruction. To sum up, the contemporary objective is to have educators think for themselves (Lipman, 1995). For educationalists, CT is not a way to education but a prerequisite to it (Dixson, Kuhlhorst, & Reiff, 2006; Garrison, Anderson, & Archer, 2001).

REFERENCES


THE EFFECT OF PERSONAL SELF-REGULATED LEARNING STRATEGIES ON VOCABULARY LEARNING BY IMPULSIVE VS. REFLECTIVE EFL LEARNERS

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ABSTRACT


KEYWORDS: SELF-REGULATION STRATEGY, IMPULSIVE, REFLECTIVE VOCABULARY LEARNING

1.1 Introduction

The concept of learning a foreign language has commonly been misunderstood as just being able to speak in that language. In fact, learning a foreign language is not only a matter of speaking, but also a matter of reading, writing, and listening as well. Each of these skills has its own place and none of them
should be neglected. On the other hand, "learning is not something that happens to student; it is something that happens by students". (Zimmerman, 1989, P.19). The process of personal self-regulated learning requires that students monitor and adjust their learning strategies independent of the teacher and peers in that monitoring activities include checking content of study, judging learning difficulties, assessing progress and predicting learning outcomes (Chong, 2001).

The topic of how students become self-regulated learners has attracted researchers for decades. Initial attempts to measure self-regulated learning (SRL) using questionnaires and interviews were successful in demonstrating significant predictions of students’ academic outcomes.

There are multiple definitions of self-regulated learning. Self-regulated learning strategies can be defined in different ways by various scholars and researchers, but most of them are defined similarly, or with very little differences. For example, self-regulated learning strategies could be defined as techniques through which learners participate in the process of active learning and take responsibility for encouraging themselves to understand materials they deal with, to accomplish tasks, to monitor what they do, to assess their strengths and weaknesses, and to take corrective actions based on self-evaluation reports (Good & Brophy, 1995). This definition parallels Zimmerman’s (2000) definition of self-regulated learning that puts emphasis on the interaction of three major elements: (a) personal regulation strategies, which refer to goal setting, planning, transforming information, keeping records, controlling emotion etc., (b) behavioral self-regulation strategies that mainly takes into account the process of self-observation, self-evaluation, task analysis, questioning, self-feedback and modifying performance, and (c) environmental self-regulation strategies that mainly involve analyzing learning context, asking others for help, seeking information for different sources, and making adaptations in a way that optimizes performance.

Another important aspect which this study is going to deal with is the issue of Reflectivity/impulsivity of learners. Accordingly, definition of reflective and impulsive learners is necessary.

Reflectivity and impulsivity are defined as a conceptual tempo, or decision time variable, representing the time the subject takes to consider alternative solutions before committing to one of them in a situation with high response uncertainty. (Doughty & Williams, 1998).

Reflectivity/Impulsivity is the extent to which a person reflects on a solution to a problem for which several alternatives are possible. The impulsive learners reach decision and report them very quickly with little concern for accuracy; others are more concerned with accuracy and consequently take more time to reach a decision. Impulsive students answer responses quickly whereas those who are reflective think about their answers. Reflective students make fewer mistakes and are more analytical. The reflective learners spend extra time analyzing the structure of the problem and the details. Reflective learners perform better when learning required inductive reasoning. Reflective students are more likely to benefit more in learning, because they can use the knowledge base and rule system related to academic problems better than impulsive learners. In the case of simple tasks, impulsive students benefit more, while in cases of tasks demanding analytical purposeful problem-solving the reflective learners perform better than impulsive learners. (Doughty & Williams, 1998)

Therefore, the purpose of the present study is to scrutinize one of the potential sources of test bias namely impulsivity/reflectivity cognitive style of the learners which, as Kagan (1985)argues, to a great extent affects the way we form concepts, solve problems, think, select hypotheses, and process information. A further objective of the study is to investigate the effects on impulsivity/reflectivity on the learners’ performance in language proficiency tests, hoping that the result will enable testing researchers and test developers to control these factors more effectively through careful designing of appropriate test method.

1.2 Research Questions:
The research questions in this study are as follow:

1. Does personal self-regulate strategy instruction have any significant effect on impulsive EFL learners vocabulary learning?

2. Does personal self-regulate strategy instruction have any significant effect on reflective EFL learners vocabulary learning?

3. Is there any significant difference between impulsive and reflective learners vocabulary learning through self-regulation strategies?

2. Review of Related Literature

2.1 Theoretical Background of Study

Researchers in their studies have identified several self-regulatory processes that students can provoke, modify, and sustain, during attending to instruction, cognitively processing information, rehearsing and relating new learning to prior learning, believing that one is capable of learning, and establishing productive work and social environments. It indicates that increasing in self-regulation result in students’ learning and achievement.

Self-regulation involves a series of integrative and integrated processes, including goal setting, monitoring, action control, effective time management, self-motivation, among others. Consequently, learners know what they need in order to overcome the problems that might arise whenever they are in the learning process (Gahungu, 2007).

By self-regulation another important factor can influence on individual learning in which this study paid a short attention on it, it is self-instruction. In self instruction we often talk to ourselves. This speech is referred to as private speech and it seems has no effect on communicative function. Researchers realized that this private speech often served to help individuals perform their tasks. These researchers called this phenomenon as a self-instruction in which individuals are literally taught to “talk themselves” through a task. Self-instruction is used in many purposes. It may use in orienting, organizing, and structuring behavior too. Children use private speech either in their childhood which is psychologically can help them to overcome difficulties later in lifetime (Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004).

Self-instruction like other strategies have different components but as different theories of self-regulation exist, for our purposes in this section the research is going to mention to some components of self-regulated strategies which are essential in this study among others, as mentioned before in previous chapter, self regulated strategies are divided into three factors with their components as mentioned above: (Zimmerman, 1989)

There are three interdependent components of self-regulation: behavior, environment and self (Zimmerman, 1989). The three components are not weighted equally, and one or more of the components may function as the main factor at any given time. Schunk (2009) noted that students’ self-regulation is not describes only by personal factors. These factors are influenced by environmental and behavioral events too.

Behavioral Components of Self-Regulation

To be self-regulated, learners need to use three important processes: self-observation, self-judgment, and self-reaction (Bandura, 1986), which enable individuals to monitor and adjust their behaviors accordingly. These processes interact with each other (Zimmerman, 2001). Self-observation leads to self-evaluation, and the cognitive judgments resulting from self-evaluation lead to personal and behavioral self-reactions (Schunk, 2009). Self-observation refers to the intention to observe one’s own behavior.
Bandura (1986) suggested that when the time of the observation is close to the behavior, behaviors are affected by self-observation. Self-observation can increase motivation either, when learner realizes what he or she does, react and alter his or her behavior. Self-observation is important for self-regulation, but an evaluation of the observation also plays an important role.

Another one which is related to the self-observation is self-judgment. It refers to the comparison between one’s own performances with that of a standard or goal as Zimmerman noted in his studies (1989).

The main and important components of the self-judgment process are Personal standards, Valuation of the activity, and Attributions (Bandura, 1986) as defined below:

- **Personal standards:** are based on social comparisons.
- **Valuation of the activity:** is when people value the relevance of activities to them.
- **Attributions:** occur when people perceive success or failure to be the result of ability or effort.

Based on these judgments, they improve their behaviors according to these goals (Bandura, 1986). In order to encourage their performance, personal standards may be revised and rewards.

**Environmental Components of Self-Regulation**

Environment in learning context is important to acquire information for students. One’s control over the environment is essential for self-regulation to receive information from the environment.

Some findings show that students’ perceptions of the social environment of their classroom can cause the differences in students’ learning and achievement (Pintrich & Schunk, 2008; Patrick, Kaplan, & Ryan, 2011; Pintrich & Schunk, 2002). Second language learning research has shown there is interaction between learner characteristics and the language learning environment (Dörnyei, 2009). Turner and Waugh (2007, p. 128) highlight the contextual influences on students’ learning: "Within academic settings and events, each student may be thought of as a self-organizing system that acts and reacts to both external and internal informational signals. These processes may explain the unique, individual facets of students’ learning-related cognitions, emotions, motivations, and behaviors".

**Personal Components of self-regulation**

Some components of personal self-regulation that have an important role on students’ self-efficacy, intrinsic motivation, goal orientation and attribution are discussed in the following paragraphs.

**2.2 Empirical Background of Study**

Some findings show that students’ perceptions of the social environment of their classroom can cause the differences in students’ learning and achievement (Pintrich & Schunk, 2008; Patrick, Kaplan, & Ryan, 2011; Pintrich & Schunk, 2002). Second language learning research has shown there is interaction between learner characteristics and the language learning environment (Dörnyei, 2009). Turner and Waugh (2007, p. 128) highlight the contextual influences on students’ learning: "Within academic settings and events, each student may be thought of as a self-organizing system that acts and reacts to both external and internal informational signals. These processes may explain the unique, individual facets of students’ learning-related cognitions, emotions, motivations, and behaviors".

In recent years, the field of language teaching and learning is away from a focus on the teacher to that of the learner and their language learning processes (Dörnyei, 2005). However, the focus of language learning research in the last years has changed from using the ‘what’ or product to the ‘how’ or process of language learning. Dornyei and Skehan (2003) noted that researchers have emphasized on the process of language learning when they tried to investigate language learners’ self-regulation.
Perry (2002) in his studies used an approach to investigate student-teacher interactions that improve or prevent self-regulated learning, with classroom observations and interviews. The focus was on reading and writing activities. The observation focused on student-teacher interactions that support self-regulated learning, the students were given choices and opportunities to make decisions regarding their academic tasks. The findings established that these young learners were able to engage in self-regulated learning if they are allowed to make choices, control challenge, and evaluate themselves. This finding also implies that student-centered learning may support self-regulated learning. Perry’s research contributes to research on the social cognitive aspects of self-regulation as both the individual and social contexts are the focus in data collection and analysis.

Dörnyei (2005) noted that self-regulation in second language learning is a kind of “the degree to which individuals are active participants in their own learning” (p. 191). Pintrich’s (2000b, p. 453) definition of SRL in academic achievement, is more multifaceted, describing several of the construct’s characteristics and building blocks (i.e., phases):

... a general working definition of self-regulated learning is that it is an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and their contextual features in the environment. These self-regulatory activities can mediate the relationships between individuals and the context, and their overall achievement.

The definition of self-regulation in this study is drawn from the self-regulation in general academic achievement and second language learning. Self-regulated learning for second language learners refers to the process in which L2 learners use strategies to improve a specific English language skill by managing their language learning activities in order to achieve language learning goals (Oxford & Shchramm, 2007; Zimmerman, 2002b). For instance, second language learners apply cognitive strategies (methods for utilizing mental resources) to acquire special vocabulary and metacognitive strategies (knowledge which allows learners to control their cognition) to manage their learning environment (Oxford & Shchramm, 2007). In addition, the definition of self-regulation in language learning in this study also refers to the degree to which learners are dynamic participants in their own learning and includes factors such as personal, behavioral and environmental variables used by learners to promote their own language learning. In some recent studies some scholars such as Bergin et al. (2005) explored the link between uses of self-regulated learning strategies and academic achievement, and also contained that there is positive relationship of students’ use of strategies, such as metacognitive strategies and resource management strategies to academic achievement. Or this reason, those who frequently used the learning strategies were able to do tasks more successfully compared to those who rarely use the strategies. In such studies, it was reported that half of the variance in academic achievement was accounted for by the use of self-regulated learning strategies.

3. Methodology

3.1 Participants

All populations were 110 Iranian EFL learners at intermediate proficiency level at Pardis Language Institute of Tabriz and it was conducted in spring. The participants were selected through the homogeneity pretest in this study. They were attended in two classes during 8 sessions. After intervention period, both groups were tested through the posttest. This study took 3 months to accomplish the research.

In order to cope with the research question and provide reasonable answer to them,

80 male and female adult EFL learners out of 110-population aged above 15 are participated in a proficiency test. All participants were at intermediate level and they were studying at Pardis Language Institute in Tabriz. Then NELSON proficiency test was administrated to 80 females and males. Then
according to the result, students whose scores were within the range of one standard deviation above and one standard deviation below the mean were selected for this study. In the second phase of the study, 80 participants according to their performance were assigned into two groups, namely, the experimental and the control groups. Then, all selected participants were sit for a teacher-made vocabulary test as a pretest. After the pretest, as the result were calculated by t-test, each group of each category is classified into two classes personal self-regulated strategies classes- 40 participants in two groups of 20 in the control and 20 in the experimental group.

All participants were studying at the same institute with the same objects. The only difference between them was that the control group were not received any treatments and followed an ordinary program of the class during the sessions. The study was conducted in spring and the time which allocated for the treatment period for all participants was about two times for ten-week in which one hour would be devoted for each session.

3.2 Instrumentations

First of all, 80 participants were non-randomly chosen from whole 110 population to answer NELSON proficiency test. The test has two sections: 1) Reading skills; 2) Vocabulary skill, and. Before implementing the NELSON proficiency test in the study, the researcher piloted it with 30 students at the same institute to check its reliability and prove the standardization of the test.

Then other instruments which were used to conduct the above mentioned design for two experimental groups in personal self-regulated strategies group was written tests in order to check the vocabulary knowledge of the participants. Some number of vocabularies along with their textbook were given to the control and the experimental group, the only difference between them was that the control group did not receive any treatments and followed an ordinary program of the class during the sessions but the experimental groups was taught some useful strategies in learning vocabularies. . The above-mentioned devices would be used as both pre-tests and posttests.

3.3 Procedures

The total population used in this research were 110 students in Pardis Institute of Tabriz. These participants would be at intermediate level both male and female students. This selection would be according to their performance in a sample NELSON proficiency test. After all the selected participants were taken a NELSON proficiency test, based on their scores, 80 homogeneous students were selected whose scores are within the range of one standard deviation above and one standard deviation below the mean for this study. In the second phase of the study, 80 participants according to their performance assign into two groups, namely, the experimental and the control groups. The result of homogeneity test were calculated by t-test. Then, all selected participants were sit for a teacher-made vocabulary test as a pretest. Again, before administrating the test to participants, it would be piloted to 25 students with the same characteristics to standardize it. After the pretest, as the result would be calculated by t-test, each group of each category was classified into personal self-regulated strategies classes- 20 students in the experimental and moreover 20 students in the control group. Then before starting treatment the researcher used Eysenck’s Personality Questionnaire (1975) to assess the participants’ degree of the impulsivity and reflectivity. It included 30 items and in front of each item three answers including "YES", "NO" and "?" are presented. Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. Given only the test mean, variance, and the number of items, the KR-21 provides an estimated lower bound for the test reliability based on item homogeneity.

After treatment period, all the participants in both groups were attended in the posttest the same as pretest to see that if personal self-regulated strategies have any effect on vocabulary learning of EFL learners or not. Finally, the same questionnaire was given to all participants to evaluate the result that if the personal self-regulated strategies learning has any effect on impulsive and reflective learners or not.
3.4 Design

The design of the study was a quasi-experimental one with one experimental group and one control group and the measurement of treatment effects was carried out through a pre-test/post-test design. Moreover, the independent variable was different types of self-regulated strategies and the dependent is vocabulary learning of EFL learners’ impulsivity and reflectivity.

3.5 Data Analysis

For the purpose of the study, the collected data were analyzed using SPSS software program. Since scoring of vocabulary is highly objective, the multiple choice questions for the pre-test and the post-test were scored based on the BEST scale by two independent raters. To obtain a highly reliable result, the raters had several sessions to talk about the way of scoring the papers. Since the participants were supposed to answer any questions in each session, each question was scored separately, and then the inter-rater reliability for scoring was estimated using the Pearson product-moment correlation adjusted by the Spearman prophecy formula. These calculations were done in order to make sure the scoring was highly reliable.

Finally, because the study would have two groups, an independent sample t-test were run to compare the means and the variances of the control and experimental groups on the proficiency test and the mean scores of the experimental and control groups on the vocabulary pre-test and post test.

4. Data Analysis and Results

4.1 Data analysis

To investigate if the self-regulated strategies have any effect on vocabulary learning of impulsive vs. reflective or not, the research had to examine different ways of analyses. In this chapter all the data analyses which were reported based on both descriptive and statistical analysis. All the data were gathered through the NELSON proficiency test, the pretest and posttest of vocabulary test.

After collecting the data, all the data were fed into SPSS version 21 for analysis. To find if there were significant differences among two groups in terms of impulsive, reflective, an Independent Sample t-test were used.

This chapter presents these statistical tests and procedures, the results of data analysis, and the interpretation of the results.

4.2. Homogeneity of Groups

A homogeneity test administered before the treatment and a few students with extreme scores were excluded from the study based on the scores obtained from the test. To examine whether the groups were homogenous before the treatment, the independent T test was used. The results revealed no significant difference between the mean scores of the experimental group (M=22.2) and the control group (M=21.67) Therefore, the results showed that there is no significance difference between two groups proficiency level.

Table 4.1

Independent T test for compare NELSON test scores in 2 groups

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>mean</th>
<th>Std. Deviation</th>
<th>Min</th>
<th>Max</th>
<th>T test</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.3. Research Questions Analysis

The researcher conducted ANCOVA which is usually used in pretest-posttest designs in which we try to measure the effect of an independent variable on dependent variable. Pretest works as an intervening variable, and ANCOVA enables the researcher to eliminate the effect of the intervening variable or the pretest; this reduces the measurement error to a great extent. However, before conducting ANCOVA, some assumptions on the normal distribution of the scores, homogeneity of regression, and equivalence of the variances need to be met. Therefore, the mentioned tests were applied for research hypotheses.

**H 1: personal self regulate strategy instruction has effect on impulsive EFL learners vocabulary learning.**

To test the first hypothesis ANCOVA was conducted. As mentioned in the previous chapter, some assumptions should be met before applying ANCOVA. The first assumption regards the normal distribution of the data. One-Sample Kolmogrov-Smirnov Test was used for examining the normal distribution of the data. The results are given in Table 4.2.

**Table 4.2**

One-Sample Kolmogrov-Smirnov Test for normal distribution of the scores in pre test and post test1 in effect impulsive
As the results in Table 4.2 indicate, the significance level in both pretest and post test is higher than the p value of .05 ($p=.051 \& .102 > .05$) indicating normal distribution of the scores.

Moreover, Leven’s Test of Equality of Error variance for 2 groups was carried out to examine the equality of variances. The results are given in Table 4.3.

Table 4.3  
Levene’s Test of Equality of Error Variances for scores in post test in 2 groups in effect impulsive

<table>
<thead>
<tr>
<th></th>
<th>df1</th>
<th>df2</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>1</td>
<td>78</td>
<td>.277</td>
</tr>
</tbody>
</table>

As the results in Table 4.3 indicates, the equivalence of the variances across post test is confirmed ($F=1.199\ P=.277 > .05$) meeting the assumption of equal distribution of the scores between the 2 groups.

Finally, regression analysis was conducted in order to examine the slope of regression for the scores in post test which yielded the results given in Table 4.4.

Table 4.4  
Covariance to examine the slope of the regression for scores in post test in 2 groups in effect impulsive

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group * Pretest score</td>
<td>21.991</td>
<td>1</td>
<td>21.991</td>
<td>18.489</td>
<td>.065</td>
</tr>
<tr>
<td>Error</td>
<td>196.881</td>
<td>76</td>
<td>2.591</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As the results in Table 4.4 shows, examining the interaction of group×Pretest score in predicting the dependent variable or post test score indicated that the interaction effect is not meaningful ($f=18.48, \ p=.065 > .05$). In other words, there is not a meaningful interaction between the independent variable and the intervening variable, and ANCOVA can be conducted with the assumption of the homogeneity of the slopes.
Table 4.5

Analysis Covariance for compare the in post test scores in 2 groups in effect impulsive

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P value</th>
<th>Partial Eta Squared</th>
<th>Eta Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>group</td>
<td>151.813</td>
<td>1</td>
<td>151.813</td>
<td>53.408</td>
<td>.000</td>
<td>.510</td>
<td>1.000</td>
</tr>
<tr>
<td>Pre test</td>
<td>38.103</td>
<td>1</td>
<td>38.103</td>
<td>13.405</td>
<td>.063</td>
<td>.148</td>
<td>.951</td>
</tr>
<tr>
<td>Error</td>
<td>218.872</td>
<td>77</td>
<td>2.842</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As the results in Table 4.5 show, the group effect is significant (F =53.4, P< .05). Eta squared is .51 and the observed power is 1.00 meaning that the analysis is 100 percent correct in exploring the significant differences .

Moreover, as the results in Table 4.6 show, pretest scores have been controlled. In other words, the effect of pretest scores has been eliminated from post test1 scores, and the 2 groups are compared with each other based on the residual variances .

Table 4.6

Descriptive Statistics for scores 2 groups in pretest , post test and Final estimate (post test) after controlling pretest in effect impulsive

<table>
<thead>
<tr>
<th></th>
<th>Pre test</th>
<th>Post test</th>
<th>Post test Final estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Mean</td>
</tr>
<tr>
<td>Control</td>
<td>9.8250</td>
<td>2.04923</td>
<td>10.3750</td>
</tr>
<tr>
<td>Experimental</td>
<td>9.7250</td>
<td>2.47021</td>
<td>13.1000</td>
</tr>
</tbody>
</table>

As the results in Table 4.6 show, the mean pretest score for Control group is 9.82 and experimental group is 9.72. The mean immediate post test scores for Control group is 10.37 and experimental group is 13.10. The mean scores, after controlling the intervening variables is 10.36 for Control group and 13.11 for experimental group.

The means of post test scores, after controlling the intervening variable, indicate that the means of experimental group was significantly higher than control group (F = 53.40, P < .05).
**Fig 4.2.** Compare scores in Experimental and control groups in pretest, and post test after controlling pretest

H2: personal self-regulate strategy instruction has effect on reflective EFL learners vocabulary learning.

To test the second hypothesis ANCOVA was conducted. As mentioned in the previous chapter, some assumptions should be met before applying ANCOVA. The first assumption regards the normal distribution of the data. One-Sample Kolmogrov-Smirnov Test was used for examining the normal distribution of the data. The results are given in Table 4.7.

**Table 4.7**

One-Sample Kolmogrov-Smirnov Test for normal distribution of the scores in pre test and post test1 in effect reflective

<table>
<thead>
<tr>
<th></th>
<th>Pre Test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Z</td>
<td>0.405</td>
<td>0.425</td>
</tr>
<tr>
<td>P value</td>
<td>.101</td>
<td>.075</td>
</tr>
</tbody>
</table>

As the results in Table 4.7 indicate, the significance level in both pretest and post test is higher than the p value of .05 (p=.101 & .075> .05) indicating normal distribution of the scores.

Moreover, Leven's Test of Equality of Error variance for 2 groups was carried out to examine the equality of variances. The results are given in Table 4.8.

**Table 4.8**

Leven's Test of Equality of Error Variances for scores in post test 2 groups in effect reflective
As the results in Table 4.8 indicate, the equivalence of the variances across post test is confirmed (F = .527, P = .470 > .05) meeting the assumption of equal distribution of the scores between the 2 groups.

Finally, regression analysis was conducted in order to examine the slope of regression for the scores in post test which yielded the results given in Table 4.9.

Table 4.9

*Covariance to examine the slope of the regression for scores in post test in 2 groups in effect reflective*

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group * Pretest score</td>
<td>2.130</td>
<td>1</td>
<td>2.130</td>
<td>.648</td>
<td>.423</td>
</tr>
<tr>
<td>Error</td>
<td>249.692</td>
<td>76</td>
<td>3.285</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As the results in Table 4.9 show, examining the interaction of group × Pretest score in predicting the dependent variable or post test score indicated that the interaction effect is not meaningful (F = .648, p = .423 > .05). In other words, there is not a meaningful interaction between the independent variable and the intervening variable, and ANCOVA can be conducted with the assumption of the homogeneity of the slopes.

Table 4.10

*Analysis Covariance for compare the in post test scores in 2 groups in effect reflective*

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P value</th>
<th>Partial Squared</th>
<th>Eta Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>group</td>
<td>57.651</td>
<td>1</td>
<td>57.651</td>
<td>17.628</td>
<td>.000</td>
<td>.466</td>
<td>.986</td>
</tr>
<tr>
<td>Pre test</td>
<td>63.053</td>
<td>1</td>
<td>63.053</td>
<td>19.280</td>
<td>.053</td>
<td>.200</td>
<td>.991</td>
</tr>
<tr>
<td>Error</td>
<td>251.822</td>
<td>77</td>
<td>3.270</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As the results in Table 4.10 show, the group effect is significant (F = 17.62, P < .05). Eta squared is .46 and the observed power is .98 meaning that the analysis is 98 percent correct in exploring the significant differences.

Moreover, as the results in Table 4.11 show, pretest scores have been controlled. In other words, the effect of pretest scores has been eliminated from post test1 scores, and the 2 groups are compared with each other based on the residual variances.

Table 4.11
Descriptive Statistics for scores 2 groups in pretest, post test and Final estimate (post test) after controlling pretest in effect reflective

<table>
<thead>
<tr>
<th></th>
<th>Pre test</th>
<th>Post test</th>
<th>Post test Final estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Mean</td>
</tr>
<tr>
<td>Control</td>
<td>10.050</td>
<td>2.276</td>
<td>10.7500</td>
</tr>
<tr>
<td>Experimental</td>
<td>9.850</td>
<td>2.558</td>
<td>12.375</td>
</tr>
</tbody>
</table>

As the results in Table 4.11 show, the mean pretest score for the Control group is 10.05 and the experimental group is 9.85. The mean immediate post test scores for the Control group is 10.75 and the experimental group is 12.37. The mean scores, after controlling the intervening variables is 10.71 for the Control group and 12.41 for the experimental group.

The means of post test scores, after controlling the intervening variable, indicate that the means of the experimental group was significantly higher than the control group (F = 17.62, P < .05).

**H 3: there is significant difference between impulsive and reflective EFL learners vocabulary learning.**

To test the third hypothesis ANCOVA was conducted. As mentioned in the previous chapter, some assumptions should be met before applying ANCOVA. The first assumption regards the normal distribution of the data. One-Sample Kolmogrov-Smirnov Test was used for examining the normal distribution of the data. The results are given in Table 4.12.
Table 4.12

Independent T-test results for scores comparison of impulsive and reflective scores in post test

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Independent T test</th>
<th>df</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>impulsive</td>
<td>44</td>
<td>13.100</td>
<td>1.707</td>
<td>1.779</td>
<td>78</td>
<td>.048</td>
</tr>
<tr>
<td>post test 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reflective</td>
<td>36</td>
<td>12.375</td>
<td>1.931</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As the results in Table 4.12 show, in post test 1, the mean post test score for Impulsive is 13.1 and Reflective is 12.37. Therefore, there is significant difference between the mean scores of two items. As a result, it indicates that the means of Impulsive was significantly higher than Reflective.

Fig4.4. scores comparison of impulsive and reflective scores in post test

4.4. Discussion

The findings of the study revealed that the self-regulated strategies have an effect on vocabulary learning impulsive vs. reflective EFL learners.

To show such an effect, the researcher compared the results of the pretest and posttest in two groups, that is, the experimental and the control groups. The comparison of pre-test and post-tests mean scores revealed significant differences between the experimental and the control groups. The major findings of this study indicated the superiority of experimental group to control one. In other words, some useful self-regulated strategies resulted in better vocabulary learning.
As mentioned in previous chapters, according to Zimmerman, B. J., & Campillo, M. (2003) self-regulation involves a series of integrative and integrated micro processes, including different components such as goal setting, monitoring, action control, effective time management, self-motivation, etc. but students’ self-regulated learning strategies were discussed in this study in the context of the three properties of self-regulated learning strategies: behavior, environment and personal.

The findings of self-regulated learning strategies showed that the experimental group actively used strategies in three self-regulated learning categories, i.e. behavior, environment and self or personal regulation. Consequently, learners found out why they needed such strategies in order to overcome the problems in the learning process. In addition, students in the experimental group seemed to recognize how to regulate their learning through these components of self-regulated learning among other strategies of learning.

However, the control group used the same material as the experimental group but without the application and instruction on self-regulated strategies.

Zimmerman and Shunk (2001) also discussed how self-regulation leads to success in education when students establish their thoughts specially their behaviors in order to achieve a goal. That is, these students may have a goal for their reading and focusing on learning vocabularies, but they may not have any specific strategies to monitor and control their performance to achieve their goals.

Likewise, Zimmerman (1989) in his study mentioned that the regulation performance is critical and influential to other categories and strategies in which it can be a strong reason of students’ success and their high achieving. Therefore, it is important that students, especially those with low abilities, be taught how to set goals and monitor their performance to attain the desired learning outcomes.

The important point here in the study was to help learners to learn vocabularies impulsively and reflectively, but not only as an isolated word but also as learning vocabularies through self-regulation strategies, so it is worth mentioning that focusing on the given text and its contents can increase learners; vocabulary comprehension. Paris, Wasik and Turner (1996) explain that in pleasure reading and using strategies may only be an appreciation of the text. Nonetheless, focusing on the text comprehension can help students determine whether they adequately use such strategies to understand the text, or whether they need to reread some parts of the text.

In current study, learning vocabularies by using the self-regulation strategies indicated that some Iranian students appeared to focus only on single unknown words not constructing literal meaning of the text. If students are provided with positive and useful strategies, they may gain the benefits from exposure to English texts.

Moreover, the findings of self-regulated learning strategies highlight the need to teach students to regulate their learning and to develop learning vocabularies within the reading comprehension. That is, these students in the study, according to their result on pretest and posttest, appeared to be proactive in their learning. Nevertheless, during the three phases of self-regulated learning (i.e., behavior, environment and personal) as well as their sub-categories, the students’ use of self-regulated learning strategies was inconsistent but by comparing the result in pretest and posttest, learners who were in the experimental group gained self-regulated strategies well and learned how to regulate their learning not only in learning vocabularies but also on learning other language skills.

To sum up, it can be stated that employing useful strategies such as self-regulated strategies as discussed in the study, had a fruitful and rewarding effect on learning English vocabularies in L2 learning context.

5. Conclusion and Pedagogical Implications

5.1 Conclusion
Self-regulated learning strategies, as part of self-regulated learning, are defined by Zimmerman (1990, p. 180) as “actions and processes directed at acquisition of information or skills that involve agency, purpose, and instrumentality perceptions by learners”. Therefore, every individual attempts to self-regulate in some way, and there is no individual who is not self-regulated in learning process to some extent.

In relation to self-regulation strategies, its subcategories and learning vocabulary the following conclusion was made. The result revealed that learners improved their English vocabulary knowledge through self-regulated strategies. They could develop consciousness about the process of learning vocabulary and learned how to evaluate their learning which made learning task attractive; additionally, they could enhance their motivation during learning unknown vocabularies.

As it was discussed before, during the last 30 years, second language researchers such as O’Malley and Chamot (1990), Oxford (1990) and Schmitt (1997), have gathered an important amount of knowledge regarding language learning strategies, which were defined as conscious decisions and techniques used by learners to improve and facilitate their learning process. However, another way of learning management is by means of self-regulation. All different studies considered different components of self-regulation, but none of them focused on teaching specific strategies systematically and in detail at all.

Furthermore, the results indicated that self-regulated strategies helped students become more autonomous, strategic, and motivated in learning vocabularies so that they would apply useful self-regulated strategies in a variety of meaningful contexts at school, the social and situated nature of learning.

To concluded, the finding of the study demonstrated that vocabularies can be taught successfully in many different creative ways. The teacher can help them by giving useful strategies and instructions such as self-regulated strategies, according to the learning situation, raise students’ awareness of learning process and improve their knowledge of vocabularies by impulsive v. reflective.

**REFERENCE**


