Introduction

Among varieties of newly practiced techniques, Task-based instruction is proved to be an effective method in language learning. Based on Nunan (2004, p. 4) “a pedagogical task is a piece of classroom work that involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is focused on mobilizing their grammatical knowledge in order to express meaning, and in which the intention is to convey meaning rather than to manipulate form”.

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According to Branden (2016), task-based instruction principles are in harmony with the aim of communicative language teaching and theoretically relates to second language acquisition (SLA) regarding enhancing communicative use of language among learners. One of the earliest, but still helpful curricular applications of TBLT to appear in the literature is the Bangalore project. In this project, as Nunan (2004) writes, three principal task types are recognized: information gap, opinion gap, and reasoning gap. The first two types are focus of the present study.

**Information-gap task:**

This type of task involves division of information and giving each part to a learner or a group. The task includes the transfer of information from a person or a situation to a newer one. One example of information-gap activity is pair work in which each member has a part of information and tries to convey it verbally to the other (Prabhu, 1987).

**Opinion-gap task:**

According to Nunan (2004), using and communication of learners’ real information, attitudes, feelings in response to a given situation is the crucial feature of this type of task. Story completion, arguments to justify one’s opinion, and group discussions based on factual information and personal attitudes are examples of the information-gap tasks. It should be considered that there is no objective procedure for demonstrating the outcomes as right or wrong, and no reason to expect the same outcome from different individuals or on different occasions.

**Reasoning-gap task:**

It involves deriving some new information from given information through processes of inference, deduction, practical reasoning, or a perception of relationships or patterns. One example is working out a teacher’s timetable on the basis of giving class timetables.

Another is deciding what course of action is best (for example cheapest or quickest) for a given purpose and within given constraints. The activity necessarily involves comprehending and conveying information, as an information-gap activity, but the information to be conveyed is not identical with that initially comprehended. There is a piece of reasoning which connects the two” (Nunan, 2004, p. 57).

Regarding the effectiveness of task-based language instruction in teaching different language skills and sub-skills, as demonstrated by empirical results of many research studies, and considering the importance of reading skill in language learning, the present study aimed to focus on the process of reading comprehension. Emphasizing the role of reading in learning, Rajabi (2009) contends that reading helps us get information from technologically provided scientific findings in a variety of fields in written form. Reading comprehension can be defined as understanding written material that is read, or the process of constructing meaning from written material. Grab & Stoller (2002) describes reading ability as the capability “to draw meaning from the printed page and interpret this information appropriately” (p. 9). Accordingly, Othman (2010) recognizes literal understanding and inference as the main goals of reading.

Current views of reading skill (such as Alyousef, 2005; Anderson 1999, as cited in Ertan, Razi, & Mart, 2009) define it as an “interactive” process between an active reader and a passage that ultimately leads to building of meaning. Presley believes that readers, in order to understand the text, should pass different related stages of understanding letters, sounds, words, and sentences using a hierarchy of skills (2002).

In the process of (language) learning, learners use some skills and strategies; when they have the knowledge and think about these strategies, it is said that they have metacognition. The term metacognition literally means cognition about cognition, or in simple terms, thinking about thinking. John Flavell (1979), renowned for being among the users of the term metacognition for the first time, defines it as knowledge about cognition and control of cognition. He recognizes self knowledge, task completion knowledge and strategy knowledge as components of metacognition. In order to complete his view of metacognition, Flavell (2004) adds the new...
dimension of control to his definition to describe it as “any knowledge or cognitive activity that takes as its object, or regulates, any aspect of any cognitive activity” (p. 275).

Thinking about the learning process, planning for learning, monitoring the learning task, and evaluating how well one has learned are functions of metacognition that are carried out using knowledge of cognitive processes (Chamot & Kupper, 1989; Wenden, 1998). Based on Lee (2010) factors such as age, gender, proficiency level, motivation, learning style and task requirement can contribute to the selection and use of metacognitive strategies. There are plenty of studies conducted to investigate each of these variables in relation to different components of language and/or learners’ strategy use. Investigating task-based reading contribution to the reading comprehension development of the Iranian EFL learners, Golchin and Kheirabadi (2013) confirm the enhancement of reading comprehension ability through the application of task-based reading activities. In another study, Kolaei, Yarahmadi, and Maghsoudi (2013) find that task-based approach and traditional reading method are both effective in improving reading comprehension of Iranian EFL learners.

A comparative study by Shabani and Ghasemi (2014) investigates the effectiveness of TBLT and content-based language teaching (CBLT); the findings of the study acknowledge superiority of TBLT over CBLT in teaching reading comprehension to Iranian ESP learners. In addition to previously mentioned results, Chalak (2015) investigates the effectiveness of interactive tasks in his study and states that, employing interactive tasks in English classes can promote the EFL learners’ reading comprehension ability.

ElMekawy (2014), emphasizes the benefits of metacognitive strategy training on EFL learners’ reading comprehension skills. In addition, the other study by Henter (2012) certified the positive role of metacognitive reading strategy training on reading comprehension.

Considering the importance of metacognitive strategies in the context of language teaching and learning, and the effectiveness of TBLT on reading comprehension, the current study was conducted to shed light on possible ties among task types and metacognitive strategies as well as reading performance. Therefore, to address the issue, the following questions were made:

**Research Questions**

- a) Does implementing 'Information-gap' tasks have any significant effect on EFL learners' reading performance?
- b) Does implementing 'Opinion-gap' tasks have any significant effect on EFL learners' reading performance?
- c) Is there any significant difference between the reading performance of EFL learners when implementing 'Information-gap' or 'Opinion-gap' tasks?
- d) Does implementing 'Information-gap' tasks have any significant effect on the metacognitive strategies use by EFL learners?
- e) Does implementing 'Opinion-gap' tasks have any significant effect on the metacognitive strategies use by EFL learners?
- f) Is there any significant difference between the metacognitive strategies use by EFL learners when implementing 'Information-gap' or 'Opinion-gap' tasks?

**Method**

**Participants**

Four classes comprising a total number of 100 advanced EFL learners from a language school in Iran were selected (each class 25 students). The mean age of the participants was 26, ranging from 28 to 35. In order to have homogeneous groups in terms of proficiency level, a version of the TOEFL PBT (2007) was administered and 75 students whose scores fell within the range of ±1 SD mean were selected to take part in this study.
Instruments

Materials

Information-gap Tasks: Whereby the participants were required to do the reading comprehension tasks based on suggestions made by Nunan (2004). One treatment group worked on this type of task for fourteen sessions. Participants were required to summarize the text in a paragraph or in a verbal form to the peers, provide a tabular form from the information in the reading passage, answer questions based on information from the reading text and so on.

Opinion-gap Tasks: Whereby the participants were required to express their personal preference, feeling, or attitude in response to reading texts according to factual criteria in either verbal or written form. Opinion-gap tasks were developed based on suggestions made by Nunan (2004).

Assessment Instruments

Language Proficiency Test:

TOEFL (Version 2007) was administered to make sure that participants were homogenous with respect to their language proficiency. The reliability of the test had already been estimated through a pilot study as ($r = .81$).

Independent reading Test:

Pre-test and post-test that were used in this study were taken from Select Reading book, advanced level (Lee & Gunderson, 2011).

Metacognitive Strategies Use Questionnaire (MSUQ):

The 40-item questionnaire devised by Purpura (1999) used in this study has three sub-headings as: Goal-setting Processes (5 items), Planning Processes (8 items), Assessment Processes (27 items). This questionnaire is based on 5-point Likert scale format with options: 1 (never true of me), 2 (sometimes), 3 (often), 4 (usually), and 5 (always true of me).

Procedure

To conduct this quasi-experimental study, 75 learners, whose scores were one standard deviation above and below the mean, were chosen among the total 100 ones through the TOEFL PBT test. Seventy five learners were divided into three 25-member groups as participants of this study. This was followed by conducting a reading exam for participants in three groups. This exam was chosen from standardized tests of the Select Reading book. Reading test aimed at certifying that all the participants were homogeneous with respect to their reading ability and answering the research questions. Then, Purpura's Metacognitive Strategy Use Questionnaire (1999) was administered to the three groups to make sure of their homogeneity regarding the degree to which they used these strategies prior to the treatment. Afterwards, one group was exposed to information-gap tasks, in which learners were required to summarize the text in a paragraph or in a verbal form to the peers, provide a tabular form from the information in the reading passage and answer questions based on information from the reading text and so on. The second group was encouraged to practice with opinion-gap tasks, whereby the participants were required to express their personal preferences, feelings, or attitudes in response to reading texts according to factual criteria in either verbal or written form.

In designing and implementing reading tasks, methodological principles of TBLT were considered. The utmost care and attention was given to the selection of the themes of reading tasks to establish maximum negotiation among participants. After a short description of the instructor about doing treatment tasks, the instructional sessions started with reading tasks. During the treatment, the teacher supervised and provided the necessary and similar feedback to both groups.

The third group was the control group, for which no particular task was practiced, rather the teacher used the conventional course book to teach reading skills. Having practiced in the treatment period, which lasted for 14 sessions, the participants all took a reading posttest on content parallel with those of the pretest, followed by the administration of MSU questionnaire. It is worth mentioning that the reading tests (post-test and pre-test)
were both in multiple-choice format and completely objective scoring (out of 50) was used.

Data Analysis

Given the nature of the study, target variables and the nature of the data, first normality assumptions were checked which led to the following parametric statistics. To test the hypotheses, one way ANOVAs were run to compare the performance of the groups with respect to reading and metacognitive strategy use. This study considered metacognitive strategies as a unitary construct since as Phakiti (2006) said, based on a study conducted by Purpura “the nature of metacognitive strategy use was a unidimensional construct consisting of a single set of assessment processes (e.g., goal setting, planning, monitoring, self-evaluating and self-testing)” (p. 57). Therefore, the obtained results through MSUQ which consists of three sets of strategies (planning, monitoring, evaluating) support the uniform feature of the constructs.

Results

Investigation of the Research Questions One, Two and Three

Considering the fact that he first three research questions targeted at reading performance, the three groups on the posttest of reading were investigated as below:

A one-way analysis of variances was run to compare the three groups' means on the posttest of reading in order to investigate the first three research questions. As displayed in Table 1, the opinion-gap (M = 36.25, SD = 5.07) had the highest mean on the posttest of reading. This was followed by information-gap (M = 34.55, SD = 6.62) and control (M = 28.15, SD = 4.85) groups.

Table 1. Descriptive Statistics, Posttest of Reading by Groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open-gap</td>
<td>20</td>
<td>36.25</td>
<td>5.075</td>
<td>1.122</td>
<td>31.98</td>
<td>37.72</td>
<td></td>
<td>25</td>
<td>40</td>
</tr>
<tr>
<td>Info-gap</td>
<td>20</td>
<td>34.55</td>
<td>6.620</td>
<td>1.455</td>
<td>29.64</td>
<td>35.86</td>
<td></td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Control</td>
<td>20</td>
<td>28.15</td>
<td>4.856</td>
<td>0.972</td>
<td>24.16</td>
<td>28.14</td>
<td></td>
<td>19</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>32.98</td>
<td>5.517</td>
<td>0.848</td>
<td>28.59</td>
<td>33.90</td>
<td></td>
<td>19</td>
<td>40</td>
</tr>
</tbody>
</table>

Based on the results displayed in Table 2 (F(2, 57) = 12.90, P <.05, representing a large effect size), it can be concluded that there were significant differences among the means of the three groups on the posttest of reading.

Table 2. One-way ANOVA, Posttest of Reading by Groups

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>755.733</td>
<td>2</td>
<td>377.867</td>
<td>12.906</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1668.850</td>
<td>57</td>
<td>29.278</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2424.583</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The F-value of 12.90 indicated significant differences among the three groups’ means on the posttest of reading. Accordingly, the post-hoc Scheffe’s tests was run to compare the groups two by two in order to investigate the research questions. Based on the results displayed in Table 3, it can be concluded that:

A: The information-gap group (M = 34.55) significantly outperformed the control (M = 28.15) group on the posttest of reading (MD = 6.60, p < .05).

B: The opinion-gap group (M = 36.25) significantly outperformed the control (M = 28.15) group on the posttest of reading (MD = 8.20, p < .05).
C: There was not any significant difference between the information-gap (M = 34.55) and opinion-gap (M = 36.25) groups on the posttest of reading performances (MD = 1.60, p > .05).

As displayed in Table 5, the opinion-gap (M = 126.15, SD = 9.39) had the highest mean on the posttest of MSU. This was followed by information-gap (M = 117.48, SD = 5.96) and control (M = 108.20, SD = 8.22) groups.

Investigation of Research Questions Four, Five and Six

The second three research questions which targeted at comparing the three groups on the posttest of metacognitive strategy use (MSU) were investigated as below:

A one-way analysis of variances was run to compare the three groups’ means on the posttest of MSU in order to investigate the second three research questions. Before discussing the results it should be mentioned that the assumption of homogeneity of variances was met (Levene's F (2, 57) = 2.41, P > .05) (Table 4).

Based on the results displayed in Table 6 (F (2, 57) = 23.89, P < .05, representing a large effect size), it can be concluded that there were significant differences among the means of the three groups on the posttest of MSU.

Table 3. Multiple Comparisons; Post-Hoc Scheffe's Tests

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Group (I)</th>
<th>Group (J)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Diff.</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posttest Reading</td>
<td>Info-gap</td>
<td>Control</td>
<td>1.600</td>
<td>1.711</td>
<td>.64</td>
<td>-2.70</td>
<td>5.90</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>Info-gap</td>
<td>8.200*</td>
<td>1.711</td>
<td>.00</td>
<td>3.90</td>
<td>12.50</td>
</tr>
<tr>
<td></td>
<td>Info-gap</td>
<td>Control</td>
<td>6.600*</td>
<td>1.711</td>
<td>.00</td>
<td>2.30</td>
<td>10.90</td>
</tr>
</tbody>
</table>

Table 5. Descriptive Statistics, Posttest of MSU by Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open-gap</td>
<td>2</td>
<td>126.15</td>
<td>9.399</td>
<td>1.711</td>
<td>2.10</td>
<td>118.7</td>
<td>127.50</td>
</tr>
<tr>
<td>Info-gap</td>
<td>2</td>
<td>117.48</td>
<td>5.969</td>
<td>1.711</td>
<td>1.33</td>
<td>108.6</td>
<td>114.24</td>
</tr>
<tr>
<td>Control</td>
<td>2</td>
<td>108.20</td>
<td>8.227</td>
<td>1.711</td>
<td>1.84</td>
<td>102.1</td>
<td>109.85</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>117.27</td>
<td>10.651</td>
<td>1.711</td>
<td>1.37</td>
<td>110.7</td>
<td>116.27</td>
</tr>
</tbody>
</table>

Table 6. One-Way ANOVA, Posttest of MSU by Groups

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3052.233</td>
<td>2</td>
<td>1526.117</td>
<td>23.893</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3640.750</td>
<td>57</td>
<td>63.873</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6692.983</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
research questions. Based on the results displayed in Table 7, it can be concluded that;

A: There was not any significant difference between the information-gap (M = 117.48) and control (M = 108.20) groups on the posttest of MSU (MD = 5.45, p >.05).

B: The opinion-gap group (M = 126.15) significantly outperformed the control (M = 108.20) group on the posttest of MSU (MD = 17.10, p <.05).

C: The opinion-gap group (M = 126.15) significantly outperformed the information-gap group (M = 117.48) on the posttest of MSU (MD = 11.65, p <.05).

### Table 7. Multiple Comparisons; Post-Hoc Scheffe's Tests

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(I) Group</th>
<th>(J) Group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval Low</th>
<th>95% Confidence Interval Up</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posttest Reading</td>
<td>Opin-gap</td>
<td>Info-gap</td>
<td>11.650*</td>
<td>2.52</td>
<td>.00</td>
<td>5.30</td>
<td>18.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contro 1</td>
<td></td>
<td>17.100*</td>
<td>2.52</td>
<td>.00</td>
<td>10.75</td>
<td>23.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Info-gap</td>
<td>Contro 1</td>
<td>5.450</td>
<td>2.52</td>
<td>.10</td>
<td>-90</td>
<td>11.80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Discussion and Conclusion

With respect to MSU, opinion-gap tasks proved effective on advanced Iranian learners' metacognitive strategy use, and information-gap tasks, compared to the conventional reading method, did not prove effective on advanced Iranian learners' metacognitive strategy use. These findings are both in line with (regarding opinion-gap tasks) and in contrast to (regarding information-gap tasks) the findings of Chou (2016), whose study proves effective role of tasks on learners' metacognitive strategy use. On the one hand, these results may caused by the fact that there are many factors influencing strategy choice. According to the findings of Rahimi, Riazi and Safe (2008), the interaction of these factors highlights the complexity of MSU and necessitates taking them into account to obtain a clear comprehension about learner's strategy choice. On the other hand, it may attribute to the varied tasks they used, since task types have different cognitive demands on participants (Ellis, 2003). From this perspective, it can be considered that different task types may lead participants to have altered strategic behavior.

Teachers, learners and material developers could benefit from the obtained results of the present study. The teachers may start reflecting and investigating different underlying constructs for their set tasks in the classroom. This may in turn lead to the enhancement of and could be considered as one of the components of the reflective repertoire that teachers hold. As a result, they may decide to employ particular reading tasks in their classes more than before.

According to Ellis (2003, p. 32-33) it helps learners “become aware of, reflect on, and evaluate their own learning styles and strategies they use to learn” and “help them understand what kind of language learner they are”.

Meta cognitive awareness empowers learners to manage their own learning. Learners benefit from meta cognitive strategies to accomplish mentioned tasks as well as each and every pedagogical task in language classrooms. Anderson (2001) believes that learners’ empowerment is obtained through related and strong tasks. Providing a variety of tasks in textbooks serves to achieve learning objectives and creating motivation in language learning environments.
Material developers may consider task types more important than ever before, especially when it comes to the requirements and objectives of the courses and may likewise decide to consider more factors while constructing the syllabus. According to Ellis (2003), task designers should provide opportunities for the learners to pay attention to particular aspects of language in the context of a meaningful activity which is believed to promote second language acquisition. In this regard, particular tasks can be provided in pedagogical materials to make learners reflect on their learning processes which lead to the improvement of their metacognitive strategy use.

References

23. Rahimi, M., Riazi, A., & Seif, S. (2008). An investigation into the factors affecting the use of...


