DEVELOPING STRATEGY USE AND LANGUAGE PERFORMANCE THROUGH IMPLICIT STRATEGY TRAINING

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ABSTRACT

More studies advocate explicit strategy training and a few studies agree that training strategies should be integrated in language learning. The present study reports on the implementation of an implicit strategy training for metacognitive strategies in the context of English as a Foreign Language (EFL) setting in Indonesia. In the study which involved 37 senior high school students, strategies were measured using a questionnaire based on a seven-point Likert scale comprising of metacognitive strategies for the four language skills: listening, speaking, reading and writing. To find out the effect of implicit learning strategy training on students’ learning strategy use, a paired sample t-test was used to compare the data taken from the students’ learning strategy questionnaire. An English proficiency test was also administered for the purpose of the identification of the students’ proficiency in English before and after the treatment, and to correlate them with the use of metacognitive strategies. The findings indicate that there was a trend towards students using metacognitive strategies of the four language skills more frequently after the training, and the use of metacognitive strategies in writing was significantly correlated to students’ writing performance. The study suggests that language learners could improve their language performance through the improvement of strategy use in implicit strategy training.

Contribution/Originality: This study is one of very few that have investigated the implementation of implicit strategy training for metacognitive strategies in the context of EFL learning. The paper’s primary contribution is that the students used metacognitive strategies of the four language skills more frequently after implicit strategy training.

1. INTRODUCTION

Research has provided much evidence that language learners benefit from the use of learning strategies for different language skills (Madhumathi et al., 2014). The role of listening strategies has been reported in a study by Bidabadi and Yamat (2013) while the role of reading strategies has been explored in a study by Ghafoournia (2014). Their findings show that the use of learning strategies was correlated with listening and reading skills. A study of the role of speaking strategies was also conducted by Liyanage et al. (2012). The result shows that Chinese EFL learners reported more use of metacognitive strategies for speaking and listening. Bai et al. (2014) identified the role of writing strategies in language learning and showed that the use of writing strategies were correlated with the
learners’ writing skills. While the role of learning strategies in learning different language skills has been well documented, studies on how language learners should be trained in order for them to employ effective strategies in learning a foreign language are not much reported.

Different educational settings have been designed to identify how strategy training for language learners should be implemented in order for the learners to use learning strategies that are believed to be effective for them in order to acquire the targeted language. Different types of tasks have been used to train language learners to learn different language skills. The tasks in strategy training suggested in language learning can be grouped under two main designs. Strategy training may be implemented in either implicit or explicit classroom instruction. The terms explicit and implicit in language education may refer to different things, i.e. memory, knowledge, learning or instruction (Hulstijn, 2005). The terms explicit and implicit in the present study refer to instruction and they refer to whether or not learners receive information about the strategies underlying their learning activities.

In language instruction, Lichtman (2013) elaborated two types of the language instruction. In an implicit language instruction, students learn to use the target language unconsciously and learn the target forms in context. They are also encouraged to use the target language freely with minimal interruption from their teacher. In implicit instruction they are spontaneously provided with a communication-oriented activity and do not need to be able to articulate a description of their language knowledge. In an explicit instruction, on the hand, students learn to use linguistic rules as a predetermined and planned activity, and learn the target language in isolation. They use the target language by practicing a controlled activity after practicing using the rules. Explicit instruction is planned as a teaching activity separated from language learning, while implicit instruction is spontaneous.

1.1. Strategy Training in Language Learning

Even though the implementation of explicit and implicit instruction in language learning is relatively familiar, the implementation of the two types of instruction in the context of strategy training is not yet well known. Different from language instruction, strategy training focuses on acquiring the skill of using learning strategies in order to learn the target language effectively. In implicit strategy training, students are trained to use learning strategies with an absence of conscious efforts to learn the rules of the learning strategies, while in explicit strategy training, students are trained to use learning strategies consciously to apply the strategies to acquire the target language (Robinson, 1997). A study by Rahimi and Noroozisiam (2013) which involved university students in Iran developed an explicit strategy training for teaching writing. In their training the students were taught sociocultural strategies and the result of the experimental class was then compared with the result of the class which was not taught the sociocultural strategies. Another study which was explicitly designed for a writing class was conducted by De Silva and Graham (2015). A study by Goh and Taib (2006) trained the learners to use learning strategies in listening by implementing an explicit instruction. In a reading class Aghaie and Zhang (2012) and Pei (2014) conducted studies to implement an explicit training in a reading class. Naughton (2006) and Lam (2010) preferred to train language learners to use strategy training in explicitly in a speaking class.

In implementing explicit strategy training, the different studies used different models. One of the well-known models of strategy training is the Cognitive Academic Language Learning Approach (CALLA). This model, which was introduced by Chamot and O’Malley (1987) was meant to prepare students to be successful in studying content areas where English is the medium of instruction (see also O’Malley (1988)). Another model is styles-and-strategies-based instruction (SSBI), which was developed by Cohen and Weaver (2005). The objective of training learning strategies through SBSI is to provide students with an opportunity to understand what they can learn in the target language and how they can learn the language (p. 5). Both the CALLA and SSBI models are meant to explicitly train students to use learning strategies which have been prepared in the implementation of strategy training. A less popular model which is meant for explicit strategy training was formulated by Grenfell & Harris (Chamot, 2004).
Explicit strategy training can be implemented in different ways. Hulstijn (2005) states that there are two possible patterns of explicit instruction, namely deductive and inductive learning. In deductive learning rules are presented before examples are provided, while in inductive learning examples are given before rules are presented. Deductive and inductive instruction is commonly implemented in teaching the grammar of a foreign language (Benitez-Correa et al., 2019). Since in deductive and inductive learning the correct rule is always given at some point, both are part of explicit instruction. In explicit learning language learners consciously search for or apply rules to the stimulus domain (Robinson, 1997). When the rules or related intention are not incorporated in the treatment, the treatment is an implicit training (Norris and Ortega, 2000). Related to learning strategy training, if language learning strategies are not discussed before or after the treatment in the strategy training, the training is an implicit one.

More studies advocate explicit strategy training and fewer studies agree that training strategies should be integrated in language learning. Empirical evidence has been provided that explicit strategy training increased the use of the target strategies (Chen, 2010; Lam, 2010). Explicit training was also successful in encouraging language learners to engage in classroom activities (Naughton, 2006; Gunning and Oxford, 2014) and in improving language performance (Spörer et al., 2009). Many studies have been conducted to identify an increase in the use of learning strategies after the implementation of explicit strategy training, but in these studies the explicit trainings were not contrasted to implicit ones. The effectiveness of explicit strategy training has been reported in some studies but reports on the implementation of implicit strategy training is hard to find. The present study explores how language learners benefit from the implementation of implicit strategy training in learning English as a foreign language.

1.2. Implementation of Implicit Strategy Training

It seems hard to train all learning strategies of the four language skills at the same time. In the current study only the strategies which have been approved to be effective in learning English in the context of EFL setting in Indonesia were selected to be the target strategies in the implementation of the implicit training (Setiyadi et al., 2016). In their study, it was revealed that metacognitive strategies were significantly correlated with students' language performance. Therefore, the selected learning strategies to be trained were taken from the classification which has been explored in the context of EFL learning in Indonesia (Setiyadi, 2014). The metacognitive strategies were developed from previous studies (O'Malley et al., 1985; Oxford, 1990a;1990b; Wenden, 1991). They include strategies of listening, speaking, reading and writing.

The classroom instructions for the implicit learning strategy training in the current study were designed by following the format of the SSBI. The SSBI is chosen to be developed since the model is appropriate to train students’ metacognitive awareness. Since the approach of SSBI emphasizes both explicit and implicit integration of language learning and use strategies in the language classroom, the researcher assumes that the implicit learning strategy training can be designed by modifying the components of SSBI. The implicit training was conducted by eliciting the students to do various kinds of tasks during the training session by considering students’ different styles. The modification is meant to change the role of the teacher to become a facilitator, not a trainer. All activities in the class are done in order to enable language learners to learn to use the trained the metacognitive strategies in the four language skills naturally. By identifying the strengths of the strategy, training of metacognitive strategies in language teaching reported in the present study, language teachers may consider making their learners accustomed to using metacognitive strategies when, at the same time, they learn English as a foreign language.

The purpose of the present study is to investigate the effect of the implicit strategy training in improving the use of metacognitive strategies and the improvement of language performance. The following two research questions are addressed:
1. Which metacognitive strategies of the four language skills improves significantly through the implicit strategy training?

2. What skill benefits more through the improvement of the trained strategies?

2. METHODOLOGY

A seven-point scale questionnaire comprised of metacognitive strategies of the four language skills was developed for the perceptual variable of strategy use. The instrument was a self-report questionnaire written in the students' native language and translated in English. The participants were asked to choose one of the choices by marking one of the seven responses ranging from never (1) to always (7). The data were analysed to measure the internal consistency of scales by using an item-to-scale coefficient. The analysis was done to obtain an indicator of the scales, while the validity of the items of the questionnaire were assessed by correlating the items with their constructs.

The sample of the present study was 35 second grade students in Senior High School in Indonesia, and their ages ranged between 17 and 18. They learned English four hours a week at school based on the national curriculum. The medium for instruction is Indonesian as the national language. They did not speak English as a means of communication in daily life and their English was at beginners’ level. An English proficiency test was administered for the purpose of the identification of students’ proficiency in English before and after the treatment. This test consists of listening, speaking, reading and writing. Students’ learning achievement was their gain between the post test and the pre test of the four language skills. In order to have more reliable scores two raters were involved in assessing students’ language performance.

Students’ strategy use was measured before the treatment as a pre test and after the treatment as a post test. To find out the effect of implicit learning strategy training on students’ learning strategy use, a paired sample t-test was used to compare the data taken from the students’ learning strategy questionnaire and administered to the students before and after the treatment. The pre test was conducted one week before the treatment and the post test was conducted one month after the students were trained in order to naturally identify the effect of the training. Correlation analyses were also conducted to identify how the use of metacognitive strategies and language performance were correlated before and after the treatment.

Since this study was conducted in the Indonesian context, the selection of strategies on the need for instruction were the metacognitive strategies, which successful learners have been reported as using (Setiyadi et al., 2016). The metacognitive strategies trained included: a) self-planning; b) self-directing; c) self-correcting; and d) self-managing (Setiyadi, 2014). To determine whether the strategies have relationships with language performance before and after the experiment period, correlation analyses were undertaken.

3. RESULT

Table 1 provides empirical evidence that Cronbach-Alpha coefficients of internal consistency for the four scales of metacognitive strategies were internally consistent. The Cronbach Alphas show good reliability. In general, the items were considered valid since each item had a high correlation with its construct see Table 2. Examination of skewness and kurtosis values of the scales were also measured. As indicated in Table 3, all the observed variables were normally distributed since the values of skewness and kurtosis of the items fell within the range of -2 and +2. Therefore, all of the criteria of the constructs of the questionnaire used in the present study were met to run the analysis.
A paired sample t-test was run to compare the participants’ pre test and post test scores of the strategy use of the four scales. Table 4 showed that one scale which was significantly different in a positive direction between the scores of students’ strategy use of pre test and post test was the use of metacognitive strategies of writing.

The empirical data provided on Table 5 shows the correlations between the strategy use and learning achievement. Before the treatment no metacognitive strategy use was significantly correlated with the language performance in the four language skills, but after the treatment the use of metacognitive strategies of speaking and writing was significantly correlated with the students’ language performance, as indicated in Table 5.

### Table 1. Questionnaire scales and internal consistency coefficients.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Number of items</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metacognitive strategies of Listening</td>
<td>5</td>
<td>.81</td>
</tr>
<tr>
<td>Metacognitive strategies of Speaking</td>
<td>6</td>
<td>.87</td>
</tr>
<tr>
<td>Metacognitive strategies of Reading</td>
<td>6</td>
<td>.80</td>
</tr>
<tr>
<td>Metacognitive strategies of Writing</td>
<td>4</td>
<td>.81</td>
</tr>
<tr>
<td>All Metacognitive strategies</td>
<td>21</td>
<td>.83</td>
</tr>
</tbody>
</table>

### Table 2. Validity of each item with the constructs.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Item Nos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metacognitive strategies of Listening</td>
<td>70,733, 70,873, 70,673, 50,811, 50,852</td>
</tr>
<tr>
<td>Metacognitive strategies of Speaking</td>
<td>70,851, 70,757, 70,676, 40,799, 50,789, 60,771</td>
</tr>
<tr>
<td>Metacognitive strategies of Reading</td>
<td>70,782, 70,777, 70,776, 40,731, 50,789, 60,773</td>
</tr>
<tr>
<td>Metacognitive strategies of Writing</td>
<td>70,859, 70,787, 70,810, 40,821</td>
</tr>
</tbody>
</table>

### Table 3. Normality of the variables.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metacognitive strategies of Listening</td>
<td>3.19</td>
<td>.62</td>
<td>-.625</td>
<td>-.232</td>
</tr>
<tr>
<td>Metacognitive strategies of Speaking</td>
<td>3.25</td>
<td>.71</td>
<td>-.571</td>
<td>.365</td>
</tr>
<tr>
<td>Metacognitive strategies of Reading</td>
<td>3.88</td>
<td>.55</td>
<td>-.254</td>
<td>.492</td>
</tr>
<tr>
<td>Metacognitive strategies of Writing</td>
<td>4.95</td>
<td>.72</td>
<td>-.246</td>
<td>-.237</td>
</tr>
</tbody>
</table>

### Table 4. Gain of strategy use in the training.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Mean</th>
<th>SD</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metacognitive strategies of Listening</td>
<td>.93</td>
<td>.15</td>
<td>.054</td>
</tr>
<tr>
<td>Metacognitive strategies of Speaking</td>
<td>1.58</td>
<td>.30</td>
<td>.057</td>
</tr>
<tr>
<td>Metacognitive strategies of Reading</td>
<td>1.25</td>
<td>.17</td>
<td>.072</td>
</tr>
<tr>
<td>Metacognitive strategies of Writing</td>
<td>1.81</td>
<td>.32</td>
<td>.007</td>
</tr>
</tbody>
</table>

### Table 5. Correlation among strategy use and language skills.

<table>
<thead>
<tr>
<th>Language Skills</th>
<th>Listening skill</th>
<th>Speaking skill</th>
<th>Reading skill</th>
<th>Writing skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy use before training</td>
<td>.18</td>
<td>.28</td>
<td>.24</td>
<td>.29</td>
</tr>
<tr>
<td>Strategy use after training</td>
<td>.27</td>
<td>.39</td>
<td>.33</td>
<td>.51**</td>
</tr>
</tbody>
</table>

**Note:** *p < 0.005
*p < 0.01.

### 4. DISCUSSION

In general, there was a trend that the students used metacognitive strategies of the four language skills more frequently after the students were trained to use metacognitive strategies implicitly. It is understood that the students have learned how to use the strategies during the training and, in turn, they become accustomed to using the target strategies in learning English. In particular, the study provides empirical support for significant improvement of metacognitive strategies after the treatment for the other three language skills. It is interesting that the students benefit from the implicit training more in learning writing than in the other skills. The result is in line with the findings of a study by De Silva and Graham (2015) which experimented with explicit strategy training. In their study, the students in the experimental class were proved to use the strategies, especially planning.
and self monitoring, to a significantly increased degree. Self planning and self monitoring are two of the strategies classified under metacognitive strategies which were the strategies to be trained in the present study. A similar study by Khonamri and Almadi (2015), which was also utilized an explicit training, showed a remarkable improvement after utilizing explicit metacognitive strategy training in listening. Many other studies have also provided evidence that strategy training in learning a foreign language have affected either the use of the trained strategies or students’ language performance (Chen, 2010; Rahimi and Noroozisiam, 2013; Zhang and Seepho, 2013). A study by Kavani and Amjapidparvar (2018) has also proved that strategy training in language learning played an important role in increasing motivation and self regulated learning.

Most of the studies on strategy training were meant to identify the effectiveness of explicit strategy training, but the present study utilized an implicit training and identified what language skills benefit from the implicit training. This study revealed that the implicit strategy training was more powerful in training metacognitive strategies than the other language skills. Metacognitive strategies, which lead students to use strategies for self-direction, self-monitoring, self-evaluation and self-correction work more optimally in writing. The function of the metacognitive strategies is more powerful in writing since it is easier for language learners to direct their learning activities, monitor and evaluate their learning outcomes, and then correct their errors when they are learning writing, not the other three language skills. Language learners easily become more autonomous learners in writing than they do in the other language skills.

In contrast to previous studies, the present study also identified the increase of language performance as the effect of improvement in strategy use. As shown in Table 5, the use of metacognitive strategies before the training were not significantly correlated with students’ writing skill, but after the training the use of metacognitive strategies was significantly correlated with students’ writing skill. It suggests that the students improved writing performance significantly after they used metacognitive strategies as the effect of the training. During the training they learned to use their learning strategies appropriately, especially metacognitive strategies in writing and, in turn, they learned their writing processes effectively, as indicated in Table 4. The present study also revealed that implicit strategy training, which seems to be ignored in most studies, could improve language performance through students’ effective use of strategy training. As Sarafianou and Gavriilidou (2015) suggest, most studies on strategy-based instruction have left a number of questions unanswered because of the tendency of most to focus on adults with relatively good language competence (e.g. Khonamri and Ahmadi 2015, Nakatani 2005, and De Silva and Graham 2015).

The notions developed from the present study lead language teachers to consider the Task-Based Model as the design to be used in employing implicit learning strategy training. In task-based instruction, basic pair work and group work are often used to increase student interaction and collaboration. Students tend to work together to write and edit a class newspaper, develop a television commercial, enact scenes from a play, or take part in other joint tasks. Oxford (2001) suggests more structured cooperative learning formats which can be used in task-based instruction. Task-based instruction is believed to be relevant to all levels of language proficiency, but the nature of the task should vary from one level to another. Tasks become increasingly complex at higher proficiency levels. The integrated-skill approach, as it is used as the basis in Task-based Model, exposes English language learners to authentic language and challenges them to interact naturally with the language. The natural interaction as it is required in the model is the basic principle of implicit learning.

5. CONCLUSION

The present study involved high school students in an EFL setting. The participants were not yet mature and had relatively limited language performance. The present study may suggest that the implicit training could be implemented through task based learning. Oxford (2001) suggested that task based instruction in strategy training may take place in the absence of conscious efforts to learn learning strategies, in contrast to explicit learning,
which may take place when learners consciously search for or apply rules of learning strategies (Robinson, 1997). Further research is needed on whether implicit strategy training will work better for younger language learners and for language learners with less language performance, while explicit strategy training will work better for older language learners and for language learners with better language performance.

**Funding:** The authors are grateful to their students who participated in this study. This work was financially supported by Lampung University, Indonesia under grant # 2842/ UN26.21/ PN/2019.

**Competing Interests:** The authors declare that they have no competing interests.

**Acknowledgement:** All authors contributed equally to the conception and design of the study.

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