The Relationship between Self–efficacy Beliefs and Self–regulated Learning Strategies in Korean EFL Learners*

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Cho, Young Ah & Kim, Youngsu. (2019). The relationship between self–efficacy beliefs and self–regulated learning strategies in Korean EFL learners. *The Linguistic Association of Korea Journal, 27*(3), 53–74. The present study analyzes learners’ self–efficacy beliefs and self–regulated learning strategy use in an L2 English learning context, mainly focusing on Korean high school students. One–hundred and seventy–three participants were assigned to high–, medium–, and low–proficiency groups. Three instruments were administered, a background questionnaire, the Questionnaire of English Self–Efficacy, and the Questionnaire of English Self–Regulated Learning Strategies. The results reveal that there were significant differences among groups in terms of self–efficacy beliefs for listening, speaking, reading, and writing, showing that high–proficiency learners held a higher sense of self–efficacy than medium– and low–proficiency learners. The study also indicates that there were significant differences among groups when looking at self–regulated learning strategy use. Successful learners employed more self–regulatory skills than others. Additionally, a positive correlation was found between self–efficacy and self–regulation. Based on the results, pedagogical implications are suggested.

**Key words:** self–efficacy beliefs, self–regulated learning strategies, proficiency levels, Korean high school students, L2 context

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1. Introduction

There have been increasing attempts to identify universal human traits that influence learning processes and achievement (Brown, 2007). Since there was a significant shift from teacher-centeredness to learner-centeredness in the field of second language acquisition (SLA), empirical studies have investigated learners’ individual variables with more interest, focusing on how diverse learning environments affect them (Carson & Loghini, 2002; Nosratinia, Saveiy, & Zaker, 2014). Grounded in this understanding, it is important to consider the concept of agency, which is described as one’s ability to take intentional action. In addition, it is a vital component in identifying the characteristics of language learners’ progress (Brown & Lee, 2015).

Over the last few decades, many researchers have tried to understand learners’ behaviors and performance and how learner’s agency affects their motivation, sense of autonomy, identity, self-efficacy beliefs, and also their ability to self-regulate their own learning. In particular, previous studies have reported a positive association between self-efficacy beliefs and self-regulation and called for more in-depth investigations into linking these two constructs (Ghonsooly & Ghanizadeh, 2013, Su, Zheng, Liang, & Tsai, 2018; Wang & Bai, 2017).

Self-efficacy beliefs refer to learners’ judgement of their own capabilities in being able to accomplish a specific task with the skills they possess (Bandura, 1986). Self-regulation is defined as a process in which learners use strategies to manage and control their own learning, including cognitive, metacognitive, behavioral, motivational, and environmental factors (Zimmerman, 2008). Empirical researchers have suggested that self-efficacy beliefs and self-regulation are vital predictors of academic achievement and language learning outcomes. Learners with a higher level of self-efficacy tend to employ more self-regulated learning strategies, and learners with greater self-regulatory skills are, likewise, more self-efficacious (Matthews, 2010; Zimmerman & Martinez-Pons, 1990).

Learners’ self-efficacy beliefs are malleable and vary within various learning
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contexts; thus, it is quite necessary to closely examine specific linguistic aspects in learning English, that is, listening, speaking, reading, and writing (Klassen, 2006; Wang, Schwab, Fenn, & Chang, 2013). In addition, learners' self-regulated learning strategy use patterns need to be more deeply analyzed as well, partly because learners' self-regulatory skills can be nurtured by teachers' support and also appropriate intervention (Brown & Lee, 2015). Even though a large number of studies have investigated the relationships among self-efficacy beliefs, self-regulated learning strategies, and performance in various academic settings (Boekaerts & Cascallar, 2006; Kim, Wang, Ahn, & Bong, 2015; Pape & Wang, 2003), few studies have been conducted to examine the mutual relationship between self-efficacy beliefs and self-regulated learning strategies in second language (L2) learning (Kim et al., 2015; Wang, et al., 2013). Moreover, little research has been investigated these two variables based on learners' English proficiency levels, particularly Korean high school students. Therefore, compared to diverse learners' perceived self-efficacy beliefs and self-regulated learning strategy use in learning English, the findings of the study can suggest the implications and effective methods for EFL instruction. Based on that, the present study addresses the following research questions:

1. Are there any significant differences for L2 learners' self-efficacy beliefs dependant on their English proficiency levels?
2. Are there any significant differences for L2 learners' self-regulated learning strategy use dependant on their English proficiency levels?

2. Literature Review

2.1. Self-efficacy Beliefs in L2 Learning

Bandura (1995) defined self-efficacy as “the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations” (p. 2). There are four major sources which create and consolidate a sense of self-efficacy: mastery or enactive experience,
vicarious experience, social persuasion, and somatic and emotional states (Bandura, 1997). Mastery or enactive experience refers to learners' past experiences of success or failure, while vicarious experience can develop when a person observes others' successes through continuous effort. Social persuasion is realistic verbal persuasion which is seen to exercise greater effort in performing tasks, and somatic and emotional states refer to evaluating an individual's capabilities, such as emotional proclivities and physical states.

In terms of determining sources for learners' self-efficacy levels, Wang and Pape (2007) added the following variables: past experience and attitudes toward language learning, task difficulty, social persuasion, and social and cultural environment. Zuo and Wang (2014) explained that there are seven major factors that influence learners' self-efficacy beliefs: past performance, peers' and advisors' influence, social persuasion, emotional and physiological states, self-awareness of English proficiency, familiarity with and the difficulty level of the task, and interest (p. 1).

Kim et al. (2015) investigated Korean college student's self-efficacy beliefs towards English learning by using a latent profile analysis. The outcomes of the study showed that learners with a higher sense of self-efficacy, likewise, had a higher level of English proficiency; additionally, the female participants showed more self-efficacy than the males on the medium and high self-efficacy profiles. The study also suggested that students in the high and medium self-efficacy profiles spent more time studying English than those in the low self-efficacy group. Nosratinia et al. (2014) explored the relationship among EFL college students' self-efficacy, metacognitive awareness, and language learning strategies. The findings indicated that learners with higher levels of metacognitive awareness used more learning strategies, adding that a positive relationship was found between learning strategies use and self-efficacy. Kirmizi (2015) examined the effects of self-concept, self-efficacy, and self-regulation on Turkish EFL college students' academic achievement and self-evaluation. The outcomes revealed that high-proficiency learners had higher concepts of themselves, their own self-efficacy, and self-regulation while self-efficacy turned out to be the most effective factor in determining academic success.
2.2. Self-regulated Learning Strategies in L2 Learning

Self-regulation has been known as one of the most important variables in identifying learners' differences. Additionally, self-regulatory capacities are significantly related to learners' success in language acquisition (Ching, 2002; Dörnyei & Ryan, 2015). Zimmerman (1990) mentioned that self-regulated learning strategies are the “actions and processes directed at acquisition of information or skills that involve agency, purpose, and instrumentality perceptions by learners” (p. 5).

Bandura (1986) mentioned that there are three vital processes to be self-regulated: self-observation, self-judgement, and self-reaction. Schunk and Zimmerman (1997) explained that observation, imitation, self-control, and self-regulation as four levels in developing self-regulated learning. Zimmerman (2002) classified self-regulated processes into three cyclical phases: forethought, performance, and self-reflection phases. The forethought phase refers to processes which precede efforts taken to learn, and it consists of task analysis and self-motivation. The performance phase refers to processes where learners pay attention to a task to enhance their outcomes, and it entails self-control and self-observation. The self-reflection phase refers to processes related to self-observation, containing self-judgement and self-evaluation.

Empirical studies on self-regulated learning have been examined with various components, such as motivation, language proficiency, learners' beliefs, and learners' self-concept. For instance, Wang et al. (2013) examined the self-efficacy, self-regulated learning strategies, and English performance of Chinese and German EFL learners. The findings revealed that Chinese students reported a low sense of self-efficacy compared to German ones while there was no difference between the two groups in terms of use of self-regulated learning strategies. Mahmoodi, Kalantari, & Ghaslani (2014), focusing on Iranian EFL learners, investigated the relation between motivation and self-regulated learning, as well as between self-regulated learning and overall performance. The outcomes indicated that there was a significant relationship between motivation and self-regulated learning skills while no significant relationship existed between self-regulated learning and language performance.
Su et al. (2018) tried to find out the relationship between Chinese college students’ online self-regulation and their self-efficacy in an EFL context. The results confirmed that there was a correlation between these two variables, adding that self-evaluation was the most influential factor in terms of self-efficacy for English listening, speaking, and reading, whereas learners’ environment structuring was the greater factor regarding self-efficacy for speaking and writing. The findings also indicated that the goal setting was a significant predictor with respect to self-efficacy for writing.

3. Methods

3.1. Participants

A total of 173 students – 77 males and 96 females – participated in the current study. They were all 10th grade Korean students in Jeollanamdo Province, and their ages ranged from 15 to 17 (M=15.90, SD=.399). The number of years they studied English ranged from 6 to 12 years. As a measure of the participants’ general English proficiency levels, their scores from the National United Achievement Tests (NUAT) were used. Based on the mean scores (83.53 out of 100) and standard deviation (9.423) on the NUAT, the participants were placed into three groups: a high-proficiency group (HG) for those with scores over 92 points, a medium-proficiency group (MG) with scores between 91–80 points, and a low-proficiency group (LG) with scores below 79. The result of an ANOVA showed that there existed a significant difference among groups in terms of their English proficiency levels (see Table 1).

| Group | \(N\) | Male | Female | M     | SD   | F    | Sig   | ES   |
|-------|------|------|--------|-------|------|------|-------|------|
| HG    | 43   | 18   | 25     | 95.77 | 2.590| 426.526| .000  | .833 |
| MG    | 66   | 31   | 35     | 85.06 | 3.318|       |       |      |
| LG    | 64   | 28   | 36     | 73.73 | 4.945|       |       |      |
| Total | 173  | 77   | 96     | 83.53 | 9.423|       |       |      |

\(p<.05, \text{ES=} \text{Effect Size}\)
3.2. Instruments

Three instruments were employed in the study: a background questionnaire, the Questionnaire of English Self–Efficacy (QESE), and the Questionnaire of English Self–Regulated Learning Strategies (OESRLS). Firstly, the background questionnaire was made up of four closed-ended question items, asking about gender, age, the number of years studying English, and the scores on the NUAT.

The second instrument was the Questionnaire of English Self–Efficacy (QESE), which was intended to measure learners' self-efficacy beliefs regarding the four language skills, listening, speaking, reading, and writing; it was originally developed by Wang et al. (2013). The QESE consists of a total of 32 items that ask learners to make judgments regarding their capabilities on the linguistic skills. A total of 28 items from the QESE were slightly adapted and modified in the current study to fit Korean learners' learning context: listening (7 items), speaking (7 items), reading (7 items), and writing (7 items). The internal consistency reliability for the QESE was .944 with a greater fidelity. All question-items were translated into Korean, and the scale was measured on a 5-point Likert scale, ranged from 1 (I cannot do it at all) to 5 (I can do it very well).

The last instrument was the Questionnaire of English Self–Regulated Learning Strategies (OESRLS) which was devised by Wang, Hu, Zhang, Chang and Xu (2012). Initially, the OESRLS scale included 11 categories with 65 items. A total of 42 items with 8 categories in the OESRLS was used in the current study: self-evaluation (4 items), organization and transformation (11 items), seeking social assistance (3 items), persistence when faced with challenge (4 items), record keeping and monitoring (2 items), goal setting and planning (4 items), review of records (2 items), and interpretation guessing (12 items). The internal consistency reliability for the OESRLS was .912 with a greater fidelity. All question-items were translated into Korean, and the results were measured on a 5-point Likert scale, ranged from 1 (I never used it) to 5 (I always used it).
3.3. Procedure and Data Analysis

The data were collected during regular English class sessions. First of all, learners received the three questionnaires: the background questionnaire, the QESE, and the OESRLS. Before completing the questionnaires, the participants were directed to sincerely respond to the question-items based on their perceptions toward English learning and their learning experiences and behaviors. It took approximately 20 minutes to complete the questionnaires.

The background questionnaire was calculated by an analysis of frequency, descriptive statistics, and an ANOVA. The QESE and the OESRLS were measured by Cronbach's alpha, descriptive statistics, and a MANOVA. To exactly verify if any significant differences existed among groups, post-hoc pairwise comparisons were used for the QESE and the OESRLS. In addition, Pearson correlation coefficients were used in order to examine whether there was a significant correlation between self-efficacy beliefs and self-regulated learning strategies. All data were analyzed using SPSS 20.0.

4. Results and Discussion

4.1. English Self-efficacy Beliefs by Proficiency Levels

The first research question dealt with whether there was any significant difference in terms of self-efficacy beliefs depending on learners' proficiency levels. Table 2 exhibits the outcomes for the descriptive statistics on the QESE. The results indicated that the mean scores of the factor, self-efficacy for speaking, were the highest (M=3.542), followed by the writing factor (M=3.526), the reading factor (M=3.468), and then the listening factor (M=3.330). As for learners' proficiency levels, the learners in the HG (M=3.855) showed greater self-efficacy beliefs in English learning than those in the MG and LG (M=3.436 and M=3.237, respectively). It can be interpreted that successful language learners showed a higher sense of self-efficacy beliefs. This result is in line with the findings of previous studies (Kim et al., 2015:...
Magogwe & Oliver, 2007) which mentioned that good learners scored the highest mean scores, followed by fair and poor learners in terms of their levels of self-efficacy beliefs.

### Table 2 Descriptive Statistics on the OESE

| Categories | Group       | M   | SD  | Rank |
|------------|-------------|-----|-----|------|
| self-efficacy for listening | HG (N=43)   | 3.631 | .509 | 1   |
|           | MG (N=66)   | 3.266 | .557 | 2   |
|           | LG (N=64)   | 3.192 | .544 | 3   |
| sub-total (N=173) | 3.330 | .566 | 4   |
| self-efficacy for speaking | HG (N=43)   | 3.940 | .511 | 1   |
|           | MG (N=66)   | 3.491 | .597 | 2   |
|           | LG (N=64)   | 3.326 | .614 | 3   |
| sub-total (N=173) | 3.542 | .628 | 1   |
| self-efficacy for reading | HG (N=43)   | 3.880 | .419 | 1   |
|           | MG (N=66)   | 3.437 | .546 | 2   |
|           | LG (N=64)   | 3.223 | .598 | 3   |
| sub-total (N=173) | 3.468 | .593 | 3   |
| self-efficacy for writing | HG (N=43)   | 3.967 | .461 | 1   |
|           | MG (N=66)   | 3.548 | .552 | 2   |
|           | LG (N=64)   | 3.208 | .551 | 3   |
| sub-total (N=173) | 3.526 | .603 | 2   |

**Total**

|          | HG (N=43)   | 3.855 | .392 | 1   |
|          | MG (N=66)   | 3.436 | .463 | 2   |
|          | LG (N=64)   | 3.237 | .482 | 3   |
| total (N=173) | 3.466 | .511 |      |

In order to investigate if there was a significant difference within groups, a MANOVA was applied, and outcomes are suggested in Tables 3 and 4. Significant differences were found within groups (Sig.=.000), showing a larger effect size (ES=.151).

### Table 3 MANOVA Results on the OESE

| Effect          | Value    | F    | Hypothesis | df | df' | Sig   | ES  |
|-----------------|----------|------|------------|----|-----|-------|-----|
| Intercept       | Wilks’ Lambda | .017 | 2467.444 | 4  | 167 | .000  | .983|
| Group           | Wilks’ Lambda | .721 | 7.435    | 8  | 334 | .000  | .151|

* p<.05, ES= Effect Size
Specifically, the findings demonstrated that there were statistically significant differences in all the self-efficacy sources, namely listening (Sig.=.000), speaking (Sig.=.000), reading (Sig.=.000), and writing (Sig.=.000). In terms of effect size, the self-efficacy for writing factor had a larger effect size (ES=.237), and the listening factor showed the smallest one (ES=.098). Since high-proficiency learners seemed to perceive themselves as capable of mastering the four language skills compared to low- and medium-proficiency learners, this study may propose that it is quite necessary to recognize the heterogeneity of learners in terms of perceived self-efficacy beliefs. As Matthews (2010) put forward, efficacious learners are likely to take more responsibility, exert more effort, and pursue mastery in their own learning processes while learners with low degrees of self-efficacy would perceive themselves to be less successful learners and would passively participate in performing tasks.

Next, to exactly verify where the differences laid, post-hoc pairwise comparisons were employed, and the results are illustrated in Table 5. With the following factors, self-efficacy for listening, speaking, and reading, the learners in the HG had significantly greater self-efficacy beliefs than those in the MG and LG while there was no significant difference between the latter two.
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| Categories                      | Group | MD (I−J) | Std. Error | Sig. |
|---------------------------------|-------|----------|------------|------|
| self-efficacy for listening     | HG    | .3650    | .10595     | .002 |
|                                 | LC    | .4393    | .10660     | .000 |
|                                 | MG    | .0743    | .09484     | 1.000|
|                                 | LG    | .4393    | .10660     | .000 |
| self-efficacy for speaking      | HG    | .4489    | .11438     | .000 |
|                                 | LC    | .6143    | .11509     | .000 |
|                                 | MG    | .1654    | .10239     | .324 |
|                                 | LG    | .1654    | .10239     | .324 |
| self-efficacy for reading       | HG    | .4432    | .10553     | .000 |
|                                 | LC    | .6572    | .10618     | .000 |
|                                 | MG    | .2140    | .09447     | .074 |
|                                 | LG    | .2140    | .09447     | .074 |
| self-efficacy for writing       | HG    | .4192    | .10397     | .000 |
|                                 | LC    | .7592    | .10461     | .000 |
|                                 | MG    | .3400    | .09307     | .001 |
|                                 | LG    | .3400    | .09307     | .001 |

With regard to the self-efficacy for writing factor, the HG learners rated the highest scores, followed by the MG, and then the LG ones, adding that there was a significant difference among groups. As for self-efficacy for writing, it can be said that learners had relatively fewer chances to take part in writing tasks compared to other language skills, and learners in the MG and LG were also more likely to perceive writing tasks as much more demanding.

It is generally known that efficacious learners can persist longer than low efficacious learners when confronted with difficult tasks (Anam & Stracke, 2016). Learners with a high sense of self-efficacy may control and organize their own learning processes more effectively when performing a given task, consequently yielding better learning achievements. On the other hand, learners with less self-efficacy may possess lower confidence and think of English learning as demanding and challenging work, which leads to unsuccessful outcomes.

Considering the relationship between a low sense of self-efficacy beliefs and low English performance, one possible reason for the result may be partially attributable to repetitive and discouraging outcomes that the low-proficiency learners might have experienced. Regarding this issue, as with Kim et al.’s (2015) findings, it is recommended that educators explore learners' perceptions...
of self-efficacy beliefs more closely, and based on what they observe, implement differential teaching approaches or programs that can help diverse groups to develop gradually and even enjoy learning more. Instructional practices for enhancing motivation and confidence might be possible through designing a course book which contains fruitful activities, pair work, reflective journaling, and sections for teachers to give feedback on the learners' performance. Accordingly, once learners have confidence to reach their desired goals, they will also hold more positive beliefs about language learning and be more motivated to continue doing tasks (Yang & Wang, 2015).

4.2. English Self-regulated Learning Strategies by Proficiency Levels

The second research question was about whether or not there were any significant differences in terms of self-regulated learning strategy use depending on learners’ proficiency levels. Table 6 illustrates the findings for the descriptive statistics on the OESRLS.

| Categories                        | Group   | M       | SD    | Rank |
|-----------------------------------|---------|---------|-------|------|
| self-evaluation                   | HG (N=43) | 4.052   | .539  | 1    |
|                                   | MG (N=66) | 3.765   | .623  | 2    |
|                                   | LG (N=64) | 3.547   | .638  | 3    |
| sub-total (N=173)                 |         | 3.756   | .636  | 3    |
| organization and transformation   | HG (N=43) | 3.674   | .522  | 1    |
|                                   | MG (N=66) | 3.475   | .414  | 2    |
|                                   | LG (N=64) | 3.372   | .491  | 3    |
| sub-total (N=173)                 |         | 3.487   | .483  | 6    |
| seeking social assistance         | HG (N=43) | 3.310   | .761  | 1    |
|                                   | MG (N=66) | 3.242   | .505  | 2    |
|                                   | LG (N=64) | 3.094   | .671  | 3    |
| sub-total (N=173)                 |         | 3.204   | .641  | 8    |
| persistence when faced with challenge | HG (N=43) | 3.663   | .624  | 1    |
|                                   | MG (N=66) | 3.549   | .555  | 2    |
|                                   | LG (N=64) | 3.465   | .650  | 3    |
| sub-total (N=173)                 |         | 3.546   | .610  | 4    |
| record keeping and monitoring     | HG (N=43) | 4.023   | .732  | 1    |
|                                   | MG (N=66) | 3.864   | .642  | 2    |
The results indicated that the overall mean scores of the factor, review of records, was the highest (M=3.830), followed by the record keeping and monitoring factors (M=3.809), the self-evaluation factor (M=3.756), the persistence when faced with challenge factor (M=3.546), the interpretation guessing factor (M=3.519), the organization and transformation factor (M=3.487), the goal setting and planning factor (M=3.460), and then the seeking social assistance factor (M=3.204). This study also demonstrated that the learners in the HG (M=3.748) employed more self-regulated learning strategy use than those in the MG (M=3.548) and LG (M=3.381), which shows that both the HG and MG learners used self-regulated learning strategies at a high level (Oxford & Burry-Stock, 1995). The outcomes of the study are in line with findings of previous studies (Pintrich, 2000; Wang & Pape, 2004), meaning that learners who display more self-regulatory strategies use showed better language achievement.

In order to determine if there was a significant difference within groups, a MANOVA was carried out, and those results are shown in tables 7 and 8. Significant differences were, indeed, found within groups (Sig.=.001) with

| Factor                        | HG (N=43) | MG (N=66) | LG (N=64) | sub-total (N=173) |
|-------------------------------|-----------|-----------|-----------|-------------------|
| Goal setting and planning     |           |           |           |                   |
| LG (N=64)                     | 3.609     | .774      | 3         |                   |
| sub-total (N=173)             | 3.809     | .730      | 2         |                   |
| Review of records             |           |           |           |                   |
| LG (N=64)                     | 3.733     | .693      | 1         |                   |
| sub-total (N=173)             | 3.460     | .696      | 7         |                   |
| Interpretation guessing       |           |           |           |                   |
| LG (N=64)                     | 3.348     | .781      | 3         |                   |
| sub-total (N=173)             | 3.348     | .781      | 7         |                   |
| Total                         |           |           |           |                   |
| LG (N=64)                     | 3.664     | .904      | 3         |                   |
| sub-total (N=173)             | 3.536     | .426      | 1         |                   |
a moderate effect size (ES=.110).

Table 7 MANOVA Results on the OESRLS

| Effect               | Source            | SS     | df   | MS    | F     | Sig.  | ES  |
|----------------------|-------------------|--------|------|-------|-------|-------|-----|
| Intercept            | Wilks’ Lambda     | .013   | 1591.178 | 8     | 163   | .000  | .987|
| Group                | Wilks’ Lambda     | .792   | 2.524 | 16    | 326   | .001  | .110|

Table 8 Group Comparison in the OESRLS

| Categories                  | Source            | SS     | df   | MS    | F     | Sig.  | ES  |
|-----------------------------|-------------------|--------|------|-------|-------|-------|-----|
| self-evaluation             | Between Groups    | 6.580  | 2    | 3.290 | 8.873 | .000  | .095|
|                             | Within Groups     | 63.039 | 170  | 371   |       |       |     |
|                             | Total             | 69.619 | 172  | 3.661 |       |       |     |
| organization and transformation | Between Groups    | 2.364  | 2    | 1.182 | 5.313 | .006  | .059|
|                             | Within Groups     | 37.814 | 170  | .222  |       |       |     |
|                             | Total             | 40.178 | 172  | 1.404 |       |       |     |
| seeking social assistance  | Between Groups    | 1.359  | 2    | .680  | .1673 | .191  | .019|
|                             | Within Groups     | 69.202 | 170  | .407  |       |       |     |
|                             | Total             | 70.561 | 172  | 1.087 |       |       |     |
| persistence when faced with challenge | Between Groups    | 1.009  | 2    | .504  | .1361 | .259  | .016|
|                             | Within Groups     | 62.996 | 170  | .371  |       |       |     |
|                             | Total             | 64.005 | 172  | .875  |       |       |     |
| record keeping and monitoring | Between Groups    | 4.721  | 2    | 2.361 | 4.614 | .011  | .051|
|                             | Within Groups     | 86.984 | 170  | .512  |       |       |     |
|                             | Total             | 91.705 | 172  | 2.873 |       |       |     |
| goal setting and planning  | Between Groups    | 4.324  | 2    | 2.162 | 4.651 | .011  | .052|
|                             | Within Groups     | 79.018 | 170  | .465  |       |       |     |
|                             | Total             | 83.342 | 172  | 2.627 |       |       |     |
| review of records          | Between Groups    | 8.455  | 2    | 4.227 | 7.313 | .001  | .079|
|                             | Within Groups     | 98.265 | 170  | .578  |       |       |     |
|                             | Total             | 106.720 | 172  | 4.805 |       |       |     |
| interpretation guessing    | Between Groups    | 5.207  | 2    | 2.603 | 12.070| .000  | .124|
|                             | Within Groups     | 36.670 | 170  | .216  |       |       |     |
|                             | Total             | 41.877 | 172  | 2.819 |       |       |     |

*p<.05, ES= Effect Size

The findings show that there were significant differences between the six categories, that is, the self-evaluation factor (Sig=.000), organization and transformation factor (Sig=.006), record keeping and monitoring factor (Sig=.011), goal setting and planning factor (Sig=.011), review of records
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factor ($\text{Sig.} = .001$), and interpretation guessing factor ($\text{Sig.} = .000$), except for the seeking social assistance and persistence when faced with challenge factors.

To specifically investigate where the differences laid, post-hoc pairwise comparisons were administered, and the results are demonstrated in Table 9.

| Categories                      | Group | MD (I–J) | Std. Error | Sig. |
|---------------------------------|-------|----------|------------|------|
| self-evaluation                 | HG    | .2872    | .11934     | .052 |
|                                 | MG    | .5055*   | .12007     | .000 |
|                                 | LG    | .2183    | .10683     | .128 |
| organization and transformation | HG    | .1992    | .09243     | .098 |
|                                 | MG    | .3023*   | .09300     | .004 |
|                                 | LG    | .1030    | .08274     | .644 |
| record keeping and monitoring   | HG    | .1596    | .14019     | .769 |
|                                 | MG    | .4139*   | .14105     | .011 |
|                                 | LG    | .2543    | .12549     | .133 |
| goal setting and planning       | HG    | .3424*   | .13361     | .034 |
|                                 | MG    | .3849*   | .13443     | .014 |
|                                 | LG    | .0425    | .11960     | 1.000 |
| review of records               | HG    | .4669*   | .14900     | .006 |
|                                 | MG    | .5452*   | .14991     | .001 |
|                                 | LG    | .0784    | .13338     | 1.000 |
| interpretation guessing         | HG    | .1454    | .09102     | .336 |
|                                 | MG    | .2824*   | .08148     | .002 |

The outcomes reveal that learners in the HG employed more learning strategies than those in the LG with respect to self-evaluation, organization and transformation, and record keeping and monitoring factors. In addition, learners in the HG used the goal setting and planning and review of records factors more than those in the MG and LG, whereas both HG and MG learners reported more strategy use than LG ones in terms of the interpretation guessing factor.

More specifically, high achievers in the present study frequently used self-evaluation, organization and transformation, and record keeping and monitoring factors, which belong to cognitive and metacognitive learning strategies, than lower achievers. As Pintrich and De Groot (1990) suggested,
learners need to be instructed how to apply cognitive and metacognitive strategies to their learning methods to be more self-regulated language learners. Plus, to help raise learners' awareness of self-regulatory skills, teachers can point out areas where the learners aren't using the strategies sufficiently.

Empirical researchers stress that it is important for teachers to provide learners with various types of instrumental and responsive scaffolding in which learners can be aware of and acquire the proper self-regulatory skills (Mahmoodi et al., 2014; Zimmerman, Bonner, & Kovach, 1996). Additionally, learners' self-regulatory processes could be enhanced through sociocultural perspectives. In other words, teachers can make learners become more aware of their learning techniques and have opportunities to employ strategic techniques by assessing their own learning habits, done through narrative accounts and reactions to the social world (Brown & Lee, 2015; Lamb, 2011). Consistent strategy-training instruction may help less successful learners become more confident and motivated to choose and use appropriate strategies in performing tasks even when faced with challenging situations.

Supplementally, to investigate whether or not any correlations exist between variables related to self-efficacy beliefs and self-regulated learning strategies, Pearson correlation coefficients were calculated. The results revealed the positive correlations between the four self-efficacy beliefs variables and the eight self-regulated learning strategy variables. In particular, prominent correlations were found between the interpretation guessing and English self-efficacy beliefs for listening (r=.475, Sig.=.000), speaking (r=.339, Sig.=.000), reading (r=.463, Sig.=.000), and writing (r=.569, Sig.=.000). More specifically, self-efficacy beliefs for writing showed the highest correlations from among the five categories of self-regulated learning strategies, which are self-evaluation, organization and transformation, seeking social assistance, goal setting and planning, and interpretation guessing.

The results of the current study were consistent with the findings of empirical studies that mention that increasing learners' self-efficacy was associated with promoting self-regulated learning strategy use and English attainments (Magogwe & Oliver, 2007; Su et al., 2018), introducing the role of learning-strategy knowledge and also suggesting that instrumental support can be helpful for learners to become independent and active in their own
learning.

Here, a point worth noting is that there was a significant difference among groups in terms of self-efficacy for writing. In addition, self-regulatory learning skills, self-evaluation, organization and transformation, seeking social assistance, goal setting and planning, and interpretation guessing, were significantly correlated to writing source of self-efficacy. Accordingly, in writing sessions, teachers should make learners pay special attention to the abovementioned learning strategies and apply them to their writing tasks in order to promote their English self-efficacy. For instance, strategies-based instruction consists of description and modeling of effective strategies, group strategy discussion, strategy experimentation, and integration of strategies into materials (Cohen, 2003; Mills, Pajares, & Herron, 2007).

5. Conclusion

The present study set out to examine learners’ self-efficacy beliefs and self-regulated learning strategy use depending on their English proficiency levels. The results reveal that there were significant differences among groups in terms of self-efficacy beliefs for listening, speaking, reading, and writing, showing that high-proficiency learners held a higher sense of self-efficacy than their medium- and low-proficiency counterparts. The study also indicates that there were significant differences among groups with respect to self-regulated learning strategy use. Successful learners more often employed self-regulatory skills than any other one, such as self-evaluation, organization and transformation, record keeping and monitoring, goal setting and planning, review of records, and interpretation guessing factors. Additionally, a positive correlation was found between self-efficacy and self-regulation.

The results indicate that high achievers possessed a higher sense of self-efficacy beliefs and more frequently used self-regulated learning strategies in their learning context. Similarly, Nosratinia et al. (2014) claimed that there is a significant relationship between self-efficacy and use of learning strategies, suggesting that learners who have more confidence and believe in their abilities while performing tasks would exhibit better learning performance. Therefore,
developing learners’ self-efficacy beliefs and encouraging self-regulated learning strategy use could be helpful for learners, particularly for low-proficiency learners, and that could make them have a deeper interest and confidence in English learning.

Vann and Abraham (1990) asserted that low-proficiency learners are likely to be less flexible in using and applying learning strategies to their learning processes. Explicit instruction on strategic learning can make less successful learners more aware of the functions of learning strategies and facilitate strategy application in their own learning. In terms of social assistance, teachers can help students reinforce their learning abilities by giving them direct and positive feedback and then showing them ways to apply those skills to their learning in practical ways (Mackey, Kanganas, & Oliver, 2007). When designing curriculum, it is important for teachers to analyze learners’ needs, linguistic backgrounds, motivations, and abilities, and then assign suitable tasks in order to facilitate their interest and sense of accomplishment. If learners acknowledge and evaluate the effectiveness of self-regulatory strategies, they will choose and use better strategies in their future learning processes, which will eventually make them more autonomous.

The present study has several limitations. Since the results employed were quantitative research methods, qualitative approaches are needed to more closely analyze the learners’ specific perceptions and opinions toward English learning. Additionally, it is recommended that future studies examine other measures, such as their conversation abilities, listening skills, and writing tasks, to get a more varied array of results.

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