Exploring the Relationship between Language Learning Strategies and Self-efficacy of Chilean University EFL Students

Jenny Montaño-González & Marco Cancino, Universidad Andres Bello, Santiago, Chile

Abstract

Language learning strategies (LLSs) and self-efficacy (SE) beliefs have been two important research foci in the field of English as a second (ESL) or foreign language (EFL). The present study explored the relationship between these two constructs as perceived by sixty-two EFL learners at a public Chilean university. Data were obtained by means of a strategy questionnaire (SILL), a self-efficacy questionnaire (QESE), and an interview. Quantitative results revealed a significant positive relationship between participants’ strategy use and their self-efficacy, and that these respondents displayed moderate levels of overall LLS use and SE. Qualitative findings mirrored quantitative results, as they suggested that high-strategy users also experienced a heightened sense of SE. Interviews showed that EFL students’ motivation can help them increase their use of LLSs and their SE. Implications for research and pedagogy in EFL contexts are addressed.

Introduction

Since second language scholars have shifted the research focus from teachers’ teaching to learners’ learning, numerous research projects have been conducted to explore factors that influence students’ language performance (Osman, 2013). Researchers have identified several individual differences that play a part in the process, such as gender, age, aptitude, motivation, cognitive style, learning style, learning beliefs (Li, 2010), and self-efficacy beliefs (i.e., the beliefs in English capabilities (Yilmaz, 2010)). Among these variables, language learning strategies (LLSs) and self-efficacy (SE) have been two important research foci in the field of English as a second or foreign language (ESL and/or EFL) (Bonyadi et al., 2012). Strategy use and its relationship with other variables have received considerable attention in the second language acquisition (SLA) literature (Cohen & Macaro, 2007; Griffiths & Oxford, 2014; Kyungsim & Leavell, 2006; Shi, 2018; Véliz C., 2012; Yilmaz, 2010). An important finding in this respect is the idea that LLSs and SE are effective predictors of learners’ academic achievement and performance (Diseth, 2011). A number of scholars have conducted studies aimed at exploring the relationship between these two variables (e.g., Borzone Valdebenito, 2017; Gahungu, 2007; Magogwe & Oliver, 2007; Sardegna et al., 2018; Shi, 2018; Wong, 2005; Yilmaz, 2010). These investigations have reported a significant relationship between these two constructs; that is, if LLSs use increases, so does SE. Hence, contributing to this emerging field of research, the present study provides insights into Chilean university EFL students’ strategy use and how this is related to their SE.

Language Learning Strategies (LLSs)

Researchers have defined LLSs in different ways. According to Ortega (2009), LLSs are “conscious mental and behavioral procedures that people engage in with the aim to gain control over their learning process” (p. 208). This comprehensive definition does not clearly state whether such strategies are intentional or automatic actions (Szyszka, 2017). Griffiths (2017) sought to reconcile this contention by arguing that LLSs are mental and behavioral actions that are consciously and subconsciously taken by students in order to monitor their learning process. However, individuals select LLSs depending on the situation, and this selection is influenced by individual factors (Brown, 2006).

There have been numerous attempts to categorize LLSs. Most notably, Oxford (1990) classified strategies into two major groups: direct (memory, cognitive, and compensation) and indirect (metacognitive, affective,
and social). O’Malley and Chamot (1990) referred to only three categories of LLSs: cognitive, metacognitive, and social/affective, while Schmidt and Watanabe (2001) subdivided them into four types (cognitive, social, study, and coping). Taking a somewhat different approach, Cohen et al. (2006) put forward a model that categorizes strategies according to skills (listening, speaking, reading, writing, vocabulary, and translation). This lack of agreement toward a taxonomy for strategies is problematic, as researchers should work collaboratively to develop a more coherent and comprehensive organization of LLSs that can be investigated in different contexts (Griffiths & Oxford, 2014).

**Self-efficacy (SE)**

In the SLA field, SE can be defined as the views that individuals hold regarding their own capabilities to perform a given language task (Genç et al., 2016). These views are influenced by motivational factors and may lead learners to successful autonomous learning (Spratt et al. 2002). According to Schunk and Pajares (2001), individuals with high levels of SE are more likely to make a greater effort to face any difficulty, while individuals with low levels of SE succumb to learning obstacles more often. However, a high sense of self-efficacy may lead students to generate overconfidence in themselves (Vancouver & Kendall, 2006) which can affect their performance over time (Ouweneel et al., 2013).

A number of researchers have investigated how SE affects the language learning process (Wang et al., 2014), and how it correlates with other learner differences (Del Río et al., 2011; Genç et al., 2016; Mahyuddin et al., 2006; Raoofi et al., 2012). For instance, Del Río et al. (2011) explored the relationship between SE and academic achievement in sixty-nine pre-service Chilean teachers. They discovered that SE became stronger as students increased their participation in educational practices throughout the program. Genç et al. (2016) suggested that EFL learners with heightened SE tend to hold a strong belief that motivational factors helped them to succeed in language learning. Moreover, research confirms that the improvement of students’ SE may be crucial to increase their use of strategies (Wong, 2005). In light of these findings, there is an argument for SE to be included in teaching approaches (Wang et al., 2014).

**Relationship between Strategy Use and Self-efficacy Beliefs**

The relationship between LLSs and SE has received considerable attention from language learning scholars in diverse contexts. Most of these authors have provided evidence suggesting a link between these constructs. ESL studies, for instance, have demonstrated a significant positive relationship between these two constructs; that is, the more SE participants display regarding their command of English, the better their use of strategies is when compared to their low SE counterparts (Magogwe & Oliver, 2007; Shi, 2018; Wong, 2005). Studies in foreign language contexts have reported similar findings (Gahungu, 2007; Sardegna et al., 2018; Yilmaz, 2010), except Bonyadi et al. (2012), who did not find correlations between the two variables across gender.

Overall, scholars have provided evidence supporting the relationship between students’ SE beliefs and their strategic choices across ESL and EFL settings. Second or foreign language learners may present low, medium or high levels of strategy use, and ESL students have stronger self-efficacy compared to those in EFL contexts (Genç et al., 2016). Although in the Chilean context a number of authors have investigated university learners’ LLSs and their SE (Borzone Valdebenito, 2017; Del Río et al., 2011; Hitt & Véliz, 2015; Véliz C., 2012), such studies have focused on pre-service teachers either English domain or other areas, and not on EFL learners. EFL students have fewer opportunities to communicate with English speakers inside and outside the classroom (Tominaga, 2009), which can affect their LLS use and SE levels. Therefore, the present study sought to contribute to research exploring the relationship between these aspects in a Chilean EFL setting.

**Methodology**

**Research Questions**

The following questions guided the research work:

1. What is the nature and frequency of the LLSs that Chilean university EFL learners use when learning a foreign language?
2. What is the level of SE beliefs of these university EFL learners?
3. Is there a relationship between the participants’ LLS use and their SE beliefs?
4. What are the views of language learners portraying specific LLSs and SE profiles regarding these two aspects?
Research Design

The study adopted a mixed-methods research approach to gain an understanding of the relationship between LLSs use and SE beliefs in Chilean adult EFL contexts. Specifically, it followed a sequential explanatory mixed-methods design; first, researchers gathered quantitative findings from a population sample and then they elaborated on those findings by collecting qualitative data (Dörnyei, 2008).

Context and Participants

The context selected for conducting the study was a university EFL setting in Chile. Over the last three decades, the Chilean higher education system has introduced a number of changes to the English language curriculum. The first educational reform in the 1990s regarding the EFL curriculum was more focused on developing receptive skills (listening and reading) than productive ones (speaking and writing) (Ministerio de Educación, 2009). In 2009, other adjustments to the EFL curriculum were made as it was acknowledged that the emphasis on receptive skills was not enough to allow citizens to be competent in the global market (Barahona, 2015). Thus, in 2012, the curriculum stressed the development of both receptive and productive skills and adopted a communicative language-teaching approach (Ministerio de Educación, 2012).

In the present study, the participants were 62 (25 males, 37 females) university EFL learners studying for a professional degree in Accounting at a public University in Santiago of Chile. These students were chosen through a non-probabilistic convenience sampling (Creswell, 2012) and their ages ranged from 20 to 31 years ($M=21.55$, $SD=2.05$). According to the University, participants had an intermediate level of L2 proficiency and were in their third semester of an EFL compulsory course, which usually consists of four semesters. They received three hours of English classes per week and such lessons followed the EFL curriculum of the Chilean universities (Ministerio de Educación, 2012), which emphasizes the development of listening, speaking, reading, and writing skills. Students were asked to accomplish basic tasks related to their major, (e.g., conversations about internet shopping, and writing paragraphs). In this context, as in most EFL settings, learners rarely have the opportunity to practice English outside the classroom and, during the classes, they are limited to having real L2 interaction mostly with the teacher.

Instruments and Procedures

Three instruments were adapted and created for data collection. The first is an adapted version of the strategy inventory for language learning (SILL), which was designed by Oxford (1990) (Appendix 1), and is considered to be more comprehensive and detailed than other models (Wong, 2005). This 50-item questionnaire has been used for assessing learners’ strategy use and contains a 5-point rating scale ranging from 1 (Never true of me) to 5 (Always true of me). The items in the questionnaire are grouped into six categories of strategies: (a) memory (items 1-9); (b) cognitive (items 10-23); (c) compensation (items 24-29); (d) metacognitive (items 30-38); (e) affective (items 39-44); and (f) social (items 45-50). Oxford’s SILL questionnaire has been validated in several studies (e.g., Osman, 2013; Yilmaz, 2010; Yin, 2008). The version that this study employed was a Spanish version of the SILL questionnaire developed by Barrios and Montiajano (2017). To increase validity, the questionnaire was pilot-tested on a representative sample of university EFL students ($N=10$) who were not part of data collection. The final version of the instrument contained 50 items and provided high internal consistency as indicated by Cronbach’s alpha ($\alpha=.93$). Once participants understood the main aspects of their participation (including objectives, procedures, and confidentiality issues) they completed the questionnaire in approximately 20 minutes.

The second instrument is an adapted version of the questionnaire of English self-efficacy (QESE), designed by Wang et al. (2014) (Appendix 2). It consists of 32 items on a 7-point rating scale ranging from 1 (I cannot do it at all) to 7 (I can do it very well). The design of the questions sought to measure self-efficacy beliefs in the following areas: (a) listening (items 1, 3, 9, 10, 15, 22, 24, and 27); (b) speaking (items 4, 6, 8, 17, 19, 20, 23, and 30); (c) reading (items 2, 12, 16, 21, 25, 26, 29, and 32); and (d) writing (items 5, 7, 11, 13, 14, 18, 28, and 31). Wang et al.’s QESE has been validated by several authors (Kim et al., 2015; Pakampai, 2018). Researchers translated the QESE scale into Spanish so that participants’ L2 would not hinder comprehension of the items. To increase the validity of such items, the scale was piloted with the same university EFL learners who piloted the SILL instrument. Once this was done, the scale’s final version resulted in a total of 32 items. The QESE displayed a high-reliability coefficient, as indicated by Cronbach’s alpha ($\alpha=.97$). One week after completing the SILL questionnaire, the participants were asked to answer the QESE, which took them 10 minutes.
The third instrument is a semi-structured interview that sought to gain further insights into beliefs. Researchers selected four out of the sixty-two participants based on two specific profiles according to their mean scores on the SILL and QESE instruments. Profile 1 was set to include students portraying high LLSs use and high SE, while Profile 2 represented students portraying low-to-moderate levels of LLSs and SE. Of the four participants taking part in the interviews, one of them belonged to Profile 1, as his mean scores in the questionnaires were higher (i.e., the overall means in SILL and QESE instruments was more than 3.5 and 5.1 respectively). The other three participants belonged to Profile 2, as their mean scores for the SILL and QESE were lower as compared to Profile 1. Two students were male and two were female, and their ages ranged from 20 to 22 years. The interview protocols contained a series of predetermined but open-ended questions addressing the answers that each learner provided in the questionnaires. The questions delved into general perceptions with relation to LLSs and SE but also focused on particular answers provided by participants, as well as the diverse reasons they may have had for providing such answers. The protocols were translated into Spanish and pilot tested with three learners sharing similar background characteristics with the participants. The final version of the interview contained 32 questions for each profile (Appendix 3 for Profile 1 questions). Students were informed about the interviews’ objectives and completed the process individually in about 45 minutes. The language of the interview was Spanish, and learners’ answers were audio-recorded.

Results and Discussion

Quantitative and qualitative results and discussion are reported below for each research question.

1. What is the nature and frequency of the LLSs that Chilean university EFL learners use when learning a foreign language?

This question was answered by means of the SILL questionnaire data. Descriptive statistics were employed to analyze such data. The results are presented in Table 1. To provide a comprehensive treatment of this question, the following aspects were addressed: a) Participants’ level of strategy use; b) Ranking of the strategy categories and subcategories.

To classify the respondents’ scores, the current study used the scale proposed by Oxford and Burry-Stock (1995). They suggest that a mean score of all participants in the range of 4.5 to 5.0 (always used) and 3.5 to 4.4 (usually used) on a SILL item is considered to represent a high frequent use of that strategy, 2.5 to 3.4 (sometimes used) is regarded as a moderate use, and 1.5 to 2.4 (seldom used) and 1.0 to 1.4 (never used) represent a low use.

With respect to the strategy use level, Table 1 shows that these EFL students were medium strategy users, as the overall mean for this is 2.96, indicating that their LLSs use was not strong. This finding concurs with Magogwe and Oliver (2007), who found that ESL learners reported a medium use of strategy categories. In contrast, other researchers reported that EFL and ESL learners were high-strategy users (Bonyadi et al., 2012; Shi, 2018). However, Wong (2005) and Gahungu (2007) discovered that second or foreign language students perceived themselves as low strategy users. These mixed results confirm that learner perceptions not only depend on participants’ contexts (Kyungsim & Leavell, 2006) but on other factors including proficiency, gender, and self-efficacy (Yilmaz, 2010).

As regards the ranking of the categories and subcategories in the SILL questionnaire, Table 1 depicts the mean scores for both direct (2.84) and indirect (3.01) categories. The means suggest that these EFL learners somewhat employed more indirect than direct strategies. Results also show that most of the respondents displayed the highest preference for social strategies (Mean = 3.21, SD = .89) followed by metacognitive (Mean = 3.18, SD = .74), compensation (Mean = 2.98, SD = .66), cognitive (Mean = 2.82, SD = .67), affective (Mean = 2.80, SD = .74), and finally memory strategies, with the lowest mean (Mean = 2.74, SD = .71).

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct strategies</td>
<td>2.84</td>
<td>.55</td>
</tr>
<tr>
<td>Memory Strategies</td>
<td>2.74</td>
<td>.71</td>
</tr>
<tr>
<td>Cognitive Strategies</td>
<td>2.82</td>
<td>.67</td>
</tr>
<tr>
<td>Compensation Strategies</td>
<td>2.98</td>
<td>.66</td>
</tr>
<tr>
<td>Indirect strategies</td>
<td>3.01</td>
<td>.68</td>
</tr>
<tr>
<td>Metacognitive Strategies</td>
<td>3.18</td>
<td>.74</td>
</tr>
<tr>
<td>Affective Strategies</td>
<td>2.80</td>
<td>.74</td>
</tr>
<tr>
<td>Social Strategies</td>
<td>3.21</td>
<td>.89</td>
</tr>
<tr>
<td>Overall</td>
<td>2.96</td>
<td>.57</td>
</tr>
</tbody>
</table>

Table 1: Descriptive statistics for strategy category use (N=62)
The aforementioned findings are in line with Hitt and Véliz’s (2015) findings, which revealed that Chilean pre-service teachers employed social and metacognitive strategies the most, and affective and memory strategies displayed the lowest amount of use. Other studies have revealed that the highest-ranked categories used among university students are metacognitive, social (Bonyadi et al., 2012; Magogwe & Oliver, 2007; Shi, 2018), cognitive (Gahungu, 2007; Wong, 2005), and compensation strategies (Yilmaz, 2010). In terms of the lowest ranking categories, Magogwe and Oliver (2007) documented that their participants displayed low scores regarding compensation strategies, this finding contradicted the one reported in this research work.

Overall, the results suggest that the 62 participants reported using LLSs moderately and the emerging picture is that they indicated a preference for more social strategies and fewer memory strategies. It can be argued that the high amount of social strategies used by these learners may be due to the characteristics of the Chilean English language education, which has a strong orientation to communicative methods (Ministerio de Educación, 2012). The reason for the lower use of memory strategies may be explained in terms of Shi’s (2018) contention that Hispanic students use few rote memorization strategies when compared with other ethnicities.

2. What is the level of SE beliefs of these university EFL learners?

This research question was answered by means of the QSESE questionnaire data, which were analyzed through descriptive statistics. The results appear in Table 2. Discussion focuses on the following aspects to have an in-depth understanding of the data: a) Participants’ level of self-efficacy; b) Ranking of the four skills in the QSESE questionnaire.

Scholars have proposed different criteria for evaluating the level of SE beliefs (Pakampai, 2018; Thipsoda, 2013). For example, Pakampai (2018) claimed that a mean score in the range of 3.5 to 7.0 on a QSESE question reflects a high level of SE, whereas 1.0 to 3.4 is considered low. However, although the criteria have a fair ranking among high and low levels, this classification does not recognize a medium level. Therefore, in this current study, researchers created and used the following criteria: a mean score of all participants in the range of 5.1 to 7.0 on a QSESE question was considered to represent a high level of self-efficacy, 3.1 to 5.0 a medium level, and 1.0 to 3.0 a low level.

As regards the level of self-efficacy, Table 2 depicts that the overall mean of SE is 4.48, which indicates that respondents in this study presented a medium level of SE that is not considered strong. This result may be related to these learners’ context, as it provides them with few chances to practice English outside of the university, which might affect their SE. The aforementioned finding concurs with Genç et al. (2016), who found that Turkish EFL undergraduate students reported having moderate levels of SE. In contrast, Shi (2018) reported that ESL learners had a strong sense of SE. It seems that in Shi’s study, the participants’ educational context might have influenced their level of SE.

With respect to the ranking of the four skills in the QSESE questionnaire, Table 2 shows that the 62 participants rated questions related to SE for reading (M=4.68, SD=1.16) and listening (M=4.61, SD=1.15) with the highest mean scores, indicating that receptive skills (M=4.64, SD=1.19) were the least difficult to perform. This result mirrors Wong’s (2005) findings, which revealed that Malaysian ESL pre-service teachers appeared to have a strong sense of SE for reading and listening. In terms of the lowest ranking skills, learners in this study rated questions related to SE for writing (M=4.32, SD=1.20) and speaking (M=4.31, SD=1.28) with the lowest mean scores, indicating that productive skills (M=4.31, SD=1.21) were the most difficult to accomplish. This result supports previous studies, which also found that foreign language students ranked writing (Genç et al., 2016) and speaking (Gahungu, 2007) as the most difficult skills.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Receptive skills</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-efficacy for Reading</td>
<td>4.68</td>
<td>1.16</td>
</tr>
<tr>
<td>Self-efficacy for Listening</td>
<td>4.61</td>
<td>1.19</td>
</tr>
<tr>
<td><strong>Productive skills</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-efficacy for Writing</td>
<td>4.32</td>
<td>1.20</td>
</tr>
<tr>
<td>Self-efficacy for Speaking</td>
<td>4.31</td>
<td>1.28</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.48</td>
<td>1.15</td>
</tr>
</tbody>
</table>

Table 2: Descriptive statistics for self-efficacy beliefs (N=62)

Overall, students in this context perceived themselves as having medium levels of SE and reported having more SE in relation to receptive skills than productive ones, although the mean scores do not differ
significantly. This result may be related to their educational experiences, which might guide them in developing some skills (reading and listening) over others, regardless of government efforts to develop receptive and productive skills in tandem. It also reflects the challenge that English teachers face when attempting to implement the new adjustments made to the Chilean EFL curriculum (Barahona, 2015; Ministerio de Educación, 2012).

3. Is there a relationship between the participants’ LLS use and their SE beliefs?

The Spearman rank-order correlation analysis done with the SILL and QESE questionnaire data examined the relationship between LLS use and SE (Table 3), and the relationship between each LLS subcategory and SE level for each English skill (Table 4).

Regarding the relationship between strategy use and self-efficacy, Table 3 demonstrates a statistically positive significant correlation between these two variables \( r=0.55, p<0.01 \), though the strength of the correlation was moderate. The significant relationship between the two variables reflected that students who utilized a wide range of LLSs also experienced a strong sense of SE.

\[
\begin{array}{|l|c|}
\hline
1 & 2 \\
\hline
1. Strategy use & -- .55** \\
2. Self-efficacy & -- \\
\hline
\end{array}
\]

Table 3: Spearman rho correlations between strategy use and self-efficacy \((N=62)\)

The aforementioned findings were in line with previous investigations reporting a significant relationship between LLSs and SE (Borzone Valdebenito, 2017; Gahungu, 2007; Magogwe & Oliver, 2007; Sardegna et al., 2018; Shi, 2018; Wong, 2005). However, this finding contradicted Bonyadi et al. 2012’s study, which displayed no association between these two constructs. A possible reason for Bonyadi et al.’s result might be the fact that their participants had less information about strategies and used them subconsciously, which may have hidden a clear relationship.

In regard to the relationship between each strategy subcategory and self-efficacy for each skill, Table 4 reveals that cognitive strategies had moderate significant correlations with SE for the four English skills: writing \( r=0.68, p<0.01 \); reading \( r=0.61, p<0.01 \), speaking \( r=0.61, p<0.01 \), and listening \( r=0.60, p<0.01 \). Moderate relationships were also found between metacognitive strategies and SE for three skills: writing \( r=0.58, p<0.01 \), speaking \( r=0.54, p<0.01 \), and reading \( r=0.44, p<0.01 \). Likewise, it was evidenced that social strategies were moderately correlated with SE for writing \( r=0.45, p<0.01 \), and with SE for speaking \( r=0.43, p<0.01 \). A moderate correlation also exists between memory strategies and SE for writing \( r=0.42, p<0.01 \). Moreover, findings evidenced a low relationship between metacognitive strategies and SE for listening \( r=0.37, p<0.01 \). Social strategies also displayed weak correlations with SE for reading \( r=0.36, p<0.01 \), and with SE for listening \( r=0.35, p<0.01 \). Similarly, low relationships between memory strategies and SE were found for three skills: reading \( r=0.36, p<0.01 \); listening \( r=0.31, p<0.05 \), and speaking \( r=0.31, p<0.05 \). Affective strategies also presented a weak correlation with SE for writing \( r=0.25, p<0.05 \), and compensation strategies had low correlations with SE for listening \( r=0.32, p<0.05 \), and with SE for writing \( r=0.30, p<0.05 \).

Finally, no significant correlations were found between compensation strategies and SE for two skills: speaking \( r=0.24, p>0.05 \) and reading \( r=0.23, p>0.5 \). Likewise, affective strategies were not significantly correlated with SE for speaking \( r=0.21, p>0.05 \), SE for reading \( r=0.17, p>0.05 \), and SE for listening \( r=0.17, p>0.05 \).

\[
\begin{array}{|l|cccccccccc|}
\hline
& 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 \\
\hline
1. Memory Strategies & -- & .53** & .44** & .48** & .53** & .61** & .31* & .31* & .36** & .42** \\
2. Cognitive Strategies & -- & .42** & .60** & .29* & .50** & .60** & .61** & .61** & .68** \\
3. Compensation Strategies & -- & .39** & .28* & .41** & .32* & .24 & .23 & .30* \\
4. Metacognitive Strategies & -- & .47** & .60** & .37** & .54** & .44** & .58** \\
5. Affective Strategies & -- & .52** & .17 & .21 & .17 & .25* \\
6. Social Strategies & -- & .35** & .43** & .36** & .45** \\
7. Self-efficacy for Listening & -- & .86** & .90** & .82** \\
8. Self-efficacy for Speaking & -- & .86** & .91** \\
9. Self-efficacy for Reading & -- & .87** \\
10. Self-efficacy for Writing & -- \\
\hline
\end{array}
\]

Table 4: Spearman rho correlations between strategy categories and self-efficacy for English skills \((N=62)\)
These results show that these respondents presented medium scores in their strategy use and self-efficacy, and there was a significant relationship between these constructs. In addition, the strongest correlations were found between cognitive strategies and SE, while the weakest correlations were found between affective strategies and SE. Students in this context did not seem to use a strategic approach that included affective strategies very frequently.

4. What are the views of language learners portraying specific LLSs and SE profiles regarding these two aspects?

This research question was answered through the analysis of the students’ interviews. As was mentioned before, four learners (Participant 1, Participant 2, Participant 3, and Participant 4) took part in the interviews. Participant 1 belonged to Profile 1 (P1) which represents high LLSs use and high SE, while the other three participants belonged to Profile 2 (P2) which reflects low-to-moderate levels of LLSs and SE. To have a comprehensive treatment of this research question, this section describes and summarizes the major themes that emerged from the interviews, which were coded with the help of Atlas.ti software. The themes identified were a) Difficulties in language learning; b) Use of learning strategies; c) Learner self-efficacy beliefs.

Regarding difficulties in language learning, interviewees were asked to share their views on the issues they encounter when learning English. Their responses portrayed diverse perspectives; each of them stressed different aspects related to this topic. They mentioned that the main problems were having a limited vocabulary, being unable to understand reading or listening material, and lacking proficiency in L2 pronunciation and communication.

It was found that participants portraying P2 attributed their difficulties in language learning to external factors, such as having monotonous and demotivating L2 classes. In this respect, Participant 2 states: “I think one difficulty is that the system we have for learning English is very monotonous [...] we do not have didactic activities in English”.

They also attributed their difficulties to having a reduced time for learning the L2. Participant 3 provided an example of this:

I believe that I am a weak English learner [...] I devote few hours for learning English, I need to dedicate more time. In addition, I just have three hours of English per week [...] if I had more hours I would learn more.

These comments reveal that these students did not take responsibility for their own learning and blamed external attributions for their difficulties. In contrast, the student portraying P1 commented that his classes were a place to learn English. He asserted:

Once I told my teacher that I wanted to learn more about the numbers because it was difficult for me, therefore she asked me to read a text and she had us write phone numbers, dates of the year, so it was engaging.

Participant 1 was able to take control of his learning and solve the difficulty found in the process by, for example, asking his teacher how he could learn English numbers more effectively.

In terms of the use of LLSs, interviewees were asked to share their opinions regarding their use of LLSs. They were also asked to describe factors that could help them increase their strategy use. Their answers were quite diverse since students select LLSs depending on the situation, and are influenced by individual factors (Brown, 2006). In general, participants mentioned cognitive strategies such as playing online games, watching movies or YouTube tutorials in English, translating and repeating phrases as well as memory strategies such as checking guides and reviewing English lessons. More specifically, interviewees portraying P2 reported using very few LLSs. For example, Participant 3 shared the cognitive strategies she used when learning English: “I do not use many strategies [...] for example, I learn vocabulary and verbs through movies and songs, and it has helped me a lot. But I sometimes do this”.

With respect to the factors helping students increase their LLSs, they reported that motivation is an important factor that would help them learn English. They also recognized the importance of adding LLSs in their learning process. Unlike learners in P2, the participant portraying P1 was able to use more LLSs including cognitive and social strategies:

I use some strategies that have helped me improve my English a lot, for example, playing online games in English which is something I always do, watching movies in English, listening to and talking with other people in English.

This comment can be related to Oxford (2017), who states that students who use several language strategies are more likely to monitor their process and maximize their learning potential.
Concerning learner self-efficacy beliefs, interviewees were asked to share their perceptions about their SE beliefs regarding their ability to perform EFL tasks. They were also asked to describe factors that could foster their SE. Their responses confirmed the idea that SE varies between individuals depending on different factors including past experiences and psychological states (Bandura, 1997). All participants agreed that speaking represented the most difficult task. The interviewee portraying P1 provided an example of this, stating that:

*I think we should reinforce the English-speaking skill because many of my classmates speak very badly in English and their speech sounds robot-like [...] more presentations are needed [...] the teacher has already done it, but maybe the students need to take control of their learning as well.*

In other words, the participant mentions a lack of a strategic approach that may be causing his classmates to remain as unsuccessful L2 speakers. Specifically, he is referring to metacognitive strategies (Herrera, 2010).

Regarding the factors helping students boost their SE, interviewees portraying P2 perceived themselves as inefficient learners and believed that their SE would be increased by enhancing their strategy use. They reported that they would do so by watching TV shows spoken in English (cognitive strategies) and writing in a language diary (affective strategy). On the contrary, the P1 student, who regarded himself as having a strong sense of SE, mentioned that this is due to his qualified EFL training.

To sum up, qualitative findings indicated that the P1 participant perceived himself as having higher levels of LLS use and SE, and consequently, was more skillful when resolving learning difficulties in comparison with participants in P2. Interviewees’ answers also reflect the earlier finding that there is a positive relationship between LLSs use and SE; that is, the more strategies learners use, the more self-efficacious they feel.

**Limitations**

The present study sought to explore the existing relations between a group of Chilean university EFL students’ LLSs and their SE beliefs. It also examined the views of participants regarding these two constructs. Before presenting the conclusions, a number of limitations must be addressed. The first limitation concerns the research design; this correlational study helped to establish the relationship between LLSs use and SE, but it cannot determine a cause-effect relationship. Thus, a quasi-experimental design can be done next to assess the impact of strategy instruction on learners’ self-efficacy.

The second limitation is related to the research collecting methods, as both SILL and QESE Likert scales were used, quantitative findings are based on certain built-in limitations. In the SILL questionnaire, respondents rated themselves on what they think they do, but it is not possible to measure what they actually do. In the QESE scale, students judged themselves on what they believe they can do with the L2, but items may have overlapped other variables including self-esteem and motivation, which are sometimes confused with SE (Gahungu, 2007). Finally, researchers planned to interview participants portraying four different profiles of LLSs and SE, but they were only able to interview students who belonged to two profiles because they did not have access to other types of participant profiles. Therefore, gaining access to learners with diverse profiles, as well as including other data collection methods such as class observations, focus group discussions, and teachers’ interviews would likely increase our understanding of the role played by LLSs and SE in the Chilean adult EFL context.

**Conclusions and Implications**

The main findings and implications of the present study can be summarized as follows. First, participants were found to be medium strategy users, indicating that they need to increase their use of LLSs to be more effective in learning English. The amount of strategies that individuals use in their language learning process is what determines their level of success (Gahungu, 2007). In addition, findings showed that these students appeared to mention a preference for more (indirect) social strategies and fewer (direct) memory strategies. Practicing both direct and indirect strategies is beneficial as they contribute crucially to learning (Oxford, 1990). Therefore, EFL teachers are advised to incorporate strategy instruction into their planning in order to allow learners to understand and use different LLSs, which can help them enhance their autonomy and proficiency (Herrera, 2010; Shi, 2018).

Second, results revealed that participants perceived themselves as having a medium level of SE, which indicates that they need to foster their perceptions of their abilities in EFL. Students with a high level of SE are more likely to engage with language tasks and manage any difficulty found in their learning process (Gahungu, 2007). It was also discovered that participants regarded themselves as more self-efficacious for reading and listening (receptive skills) than for speaking and writing (receptive skills). Teachers can enhance
learners’ self-efficacy by providing ongoing feedback, scaffolding, and positive reinforcement (Sardegna et al., 2018).

Third, a positive significant relationship was found between LLSs and SE, indicating that respondents who utilized a wide range of LLSs also reported a healthy dose of SE. Participants’ self-efficacy beliefs significantly correlated with four strategy categories (cognitive, memory, metacognitive, and social), and did not correlate with compensation and affective categories. Although all correlations in this study were not high, results suggest that English teachers can benefit from guiding students in using learning strategies as a way of increasing their self-efficacy beliefs (Shi, 2018).

Fourth, interview findings coincided with correlation results, as they suggested that high-strategy users also experienced a strong sense of SE, and consequently, they were more likely to make a greater effort to face any learning difficulty than their low-strategy counterparts. Findings also showed that the interviewees, in general, perceived themselves as low strategy users and low-proficiency English speakers. There is a need for L2 teachers of higher education to address these issues, perhaps by applying affective strategy instruction which allows students to increase their motivation to communicate in English (Wong, 2005).

Overall, these results show that 62 Chilean university EFL learners’ use of strategies were positively correlated with their self-efficacy, findings that are in line with studies conducted in diverse settings, which have reported a significant relationship between these two constructs (Borzone Valdebenito, 2017; Gahungu, 2007; Magogwe & Oliver, 2007; Sardegna et al., 2018; Shi, 2018; Wong, 2005; Yilmaz, 2010). In addition, the aforementioned studies have found that both EFL and ESL students may present low, medium or high levels of LLSs use, and Shi (2018) and Genç et al. (2016) discovered that ESL learners have stronger self-efficacy compared to those in EFL contexts, results that are similar to the ones reported in the present research work. These findings contribute to the literature on language learning strategies and self-efficacy in this context and highlight the idea that these variables should be nurtured in the EFL language classroom in order to advance learning.

References


Appendix 1
English Version of Strategy Use Questionnaire

Dear student,
I request your valuable collaboration on these questionnaires, which are part of the study focused on strategy use and self-efficacy beliefs adopted by Chilean university English learners.

**Part A: Personal information:**

**Direction:** Please complete the following information and put a tick ✓ in the box of the choices given.

1. Student's name: _____________________________
2. E-mail address:  _____________________________
3. Major:  ____________________________________
4. Age: _________
5. English level: _______________________________
6. Gender (please check):              male            female

**Part B: Strategy Inventory for Language Learning (SILL)**

**Direction:** Please read each statement carefully. Then evaluate the strategies that you actually use to learn English. Use the scale indicated below and mark with a tick ✓ in the box that accurately represents the frequency of using your strategies. This questionnaire is designed to measure the real use of your strategies, so there are no ‘right’ or ‘wrong’ answers. If you do not understand any statement, let the teacher know immediately.

**Rating scale**

1. I think of relationships between what I already know and the new things I learn in English.  
2. I use new English words in a sentence so I can remember them.  
3. I connect the sound of a new English word and an image or picture of the word to help me remember the word.  
4. I remember a new English word by making a mental picture of a situation in which the word might be used.  
5. I use rhymes to remember new English words.  
6. I use flashcards to remember new English words.  
7. I physically act out new English words.  
8. I review English lessons often.  
9. I remember new English words or phrases by remembering their location on the page, on the board, or on a street sign.  
10. I say or write new English words several times.  
11. I try to talk like native English speakers.  
12. I practice the sounds of English.  
13. I use the English words I know in different ways.  
15. I watch English language TV shows spoken in English or go to movies spoken in English.  
16. I read for pleasure in English.  
17. I write notes, messages, letters or reports in English.
18. I first skim an English passage (read over the passage quickly) then go back and read carefully.

19. I look for words in my own language that are similar to new words in English.

20. I try to find sentence patterns in English.

21. I find the meaning of an English word by dividing it into parts that I understand, such as roots, prefixes and suffixes.

22. I try to translate word-for-word.

23. I make summaries of information that I hear or read in English.

24. To understand unfamiliar English words, I make guesses.

25. When I can’t think of a word during a conversation in English, I use gestures.

26. I make up new words if I do not know the right ones in English.

27. I read English without looking up every new word.

28. I try to guess what the other person will say next in English.

29. If I can’t think of an English word, I use a word or phrase that means the same thing.

30. I try to find as many ways as I can to use my English.

31. I notice my English mistakes and use that information to help me do better.

32. I pay attention when someone is speaking in English.

33. I try to find out how to be a better learner of English.

34. I plan my schedule so I will have enough time to study English.

35. I look for people I can talk to in English.

36. I look for opportunities to read as much as possible in English.

37. I have clear objectives for improving my English skills.

38. I think about my progress in learning English.

39. I try to relax whenever I feel afraid of using English.

40. I encourage myself to speak English even when I am afraid of making a mistake.

41. I give myself a reward or treat when I do well in English.

42. I notice if I am tense or nervous when I am studying or using English.

43. I write down my feelings in a language learning diary.

44. I talk to someone else about how I feel when I am learning English.

45. If I do not understand something in English, I ask the other person to slow down or say it again.

46. I ask English speakers to correct me when I talk.

47. I practice English with other students.

48. I ask for help from English speakers.

49. I ask questions in English.

50. I try to learn about the culture of English speakers.

**Note:** This scale “Strategy Inventory for Language Learning” (SILL) version 7.0 was developed by Oxford (1990).
Appendix 2

English Version of Self-efficacy Questionnaire

Student’s name: ________________________________
E-mail address: ________________________________

Dear student,
I request your valuable collaboration on these questionnaires, which are part of the study focused on strategy use and self-efficacy beliefs adopted by Chilean university English learners.

Questionnaire of English Self-efficacy (QESE)

Direction: Please read the following questions carefully and make an evaluation of your current command of English. Use the scale indicated below and mark with a tick "✓" the box that accurately represents your abilities. These questions are designed to measure your judgment about your abilities, so there are no right or wrong answers. If you do not understand any statement, let the teacher know immediately.

Rating scale

1                        2                        3                       4                        5                        6                        7
I cannot do it at all I cannot do it. Maybe I cannot do it. Maybe I can do it. I basically can do it. I can do it. I can do it well.

Questions related to English Self-efficacy

<table>
<thead>
<tr>
<th>Questions related to English Self-efficacy</th>
<th>Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Can you understand stories told in English?</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>2. Can you do homework alone when they include reading English texts?</td>
<td></td>
</tr>
<tr>
<td>3. Can you understand English TV programs?</td>
<td></td>
</tr>
<tr>
<td>4. Can you describe your university to other people in English?</td>
<td></td>
</tr>
<tr>
<td>5. Can you compose messages in English on the internet (Facebook, Twitter, blogs, etc.)?</td>
<td></td>
</tr>
<tr>
<td>6. Can you describe the way to the university from the place where you live in English?</td>
<td></td>
</tr>
<tr>
<td>7. Can you write English compositions assigned by your English instructor?</td>
<td></td>
</tr>
<tr>
<td>8. Can you tell a story in English?</td>
<td></td>
</tr>
<tr>
<td>9. Can you understand radio programs/podcasts spoken in English?</td>
<td></td>
</tr>
<tr>
<td>10. Can you understand English videos made in Chile? (e.g., YouTube videos).</td>
<td></td>
</tr>
<tr>
<td>11. Can you leave a note for another student in English?</td>
<td></td>
</tr>
<tr>
<td>12. When you read English articles, can you guess the meaning of unknown words?</td>
<td></td>
</tr>
<tr>
<td>13. Can you make new sentences with the words just learned?</td>
<td></td>
</tr>
<tr>
<td>14. Can you write email messages in English?</td>
<td></td>
</tr>
<tr>
<td>15. If your English instructor gives you a tape-recorded English dialogue about everyday school matters, can you understand it?</td>
<td></td>
</tr>
<tr>
<td>16. Can you understand the English news on the Internet?</td>
<td></td>
</tr>
<tr>
<td>17. Can you ask your English instructor questions in English?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Question</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>18.</td>
<td>Can you make sentences with English idiomatic phrases?</td>
</tr>
<tr>
<td>19.</td>
<td>Can you introduce your English instructor to someone else in English?</td>
</tr>
<tr>
<td>20.</td>
<td>Can you discuss subjects of general interest with your fellow students in English?</td>
</tr>
<tr>
<td>21.</td>
<td>Can you read short English narratives?</td>
</tr>
<tr>
<td>22.</td>
<td>Can you understand English movies without subtitles?</td>
</tr>
<tr>
<td>23.</td>
<td>Can you answer your English instructor’s questions in English?</td>
</tr>
<tr>
<td>24.</td>
<td>Can you understand English songs?</td>
</tr>
<tr>
<td>25.</td>
<td>Can you read English newspapers?</td>
</tr>
<tr>
<td>26.</td>
<td>Can you find out the meaning of new words by using English–English dictionaries?</td>
</tr>
<tr>
<td>27.</td>
<td>Can you understand numbers spoken in English?</td>
</tr>
<tr>
<td>28.</td>
<td>Can you write diary entries in English?</td>
</tr>
<tr>
<td>29.</td>
<td>Can you understand English articles about Chilean culture?</td>
</tr>
<tr>
<td>30.</td>
<td>Can you introduce yourself in English?</td>
</tr>
<tr>
<td>31.</td>
<td>Can you write an essay in two pages about your English instructor in English?</td>
</tr>
<tr>
<td>32.</td>
<td>Can you understand new reading materials (e.g., news from the Time magazine) selected by your English instructor?</td>
</tr>
</tbody>
</table>

**Note:** This scale "Questionnaire of English Self-Efficacy" (QESE) was developed by Wang (2004) and was adapted by Wang, Kim, Bai, and Hu (2014).
Appendix 3

Semi-structured Interview Protocol: Profile 1

Instruction: Please answer accurate responses to the following questions.

Questions related to Language Learning Strategies

1. Do you know what language learning strategies are? Yes, ___ No ___
2. Have you ever received strategy instruction in your English learning process? If so, please tell me how this experience was.
3. What are the specific strategies you use when studying English?
4. How often do you use these strategies?
5. Check the strategies in the SILL questionnaire. Which of these strategies are the most effective and which ones are the least effective? Why?
6. Please tell me the difficulties you often encounter in your English learning experience. How do you solve those difficulties?
7. You are reading a text in English and you find an unknown word. What do you do?
8. What do you do to learn the meaning of new words?
9. Have you experienced nervousness, anxiety or negative feelings when studying English? How do you deal with this situation?
10. If you need assistance while studying English, who helps you?
11. Do you take notes in class? How do you organize these notes?
12. According to the SILL questionnaire, you indicate a preference for affective strategies (e.g., I give myself a reward or a gift when I do well or do something well in English), and social strategies (e.g., I practice English with other students). Is it true? Why do you use them?
13. According to the SILL questionnaire, the strategies you rarely use are cognitive strategies (e.g., I start conversations in English) and compensation strategies (e.g., I invent new words if I do not know the right words in English). Is it true? Why do not you use them?

Questions related to Self-efficacy Beliefs

14. Have you ever heard about self-efficacy perceptions in the English capabilities? Yes ___ No ___
15. Have you ever received instruction directed at improving English self-efficacy beliefs? If so, please tell me how this experience was.
16. How do you view yourself as an English learner?
17. What language skills do you feel more comfortable with? What language skills do you feel less comfortable with? Please explain.
18. Do you have the ability to master this language? Why or why not?
19. How well do you think you can discuss subjects of general interest with fluent or native English speakers?
20. How well do you think you can read English books, articles or stories?
21. How well do you think you can write English letters, email messages or essays?
22. When you are watching English movies or TV programs, how well can you understand them?
23. According to the QESE questionnaire, you report that the least difficult tasks are those that include reading (e.g., can you understand articles in English that speak about Chilean culture?), and those that include writing (e.g., can you write messages in English on the Internet (Facebook, Twitter, blogs, etc.)?). Is it true? Why do you think so?
24. According to the QESE questionnaire, you report that the most difficult tasks are those that include listening (e.g., can you understand radio programs/podcasts spoken in English?), and those that include speaking (e.g., can you ask questions in English to your English teacher in English?). Is it true? Why do you think so?

Questions related to LLSs and SE

25. What are the reasons that make you a high-strategy user?
26. What are the reasons that make you a self-efficacious English learner?
27. Why do you think you report a high level of strategy use and a strong sense of self-efficacy?
28. What factors have helped you increase your strategies and self-efficacy?
29. What would be the benefits of increasing your repertoire of strategies?
30. What would be the benefits of increasing your English self-efficacy?
31. What are the benefits of teaching learning strategies?
32. What are the benefits of fostering students’ self-efficacy beliefs?