EXPLORING THE RELATIONSHIP BETWEEN L2 LANGUAGE PROFICIENCY, LANGUAGE LEARNING STRATEGIES, AND SELF-EFFICACY: EVIDENCE FROM CHILEAN CLASSROOMS

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Abstract: Language learning strategy (LLS) use and L2 self-efficacy (SE) have been regarded as crucial for the development of learners of a second language (Rose et al., 2018). Although the relationship between these two variables has been addressed in the literature, scant attention has been given to how L2 language proficiency is related to both constructs in EFL contexts. Therefore, the present quantitative study gathered questionnaire data to characterize the relationship between the LLSs, SE perceptions, and L2 language proficiency of 47 adult EFL learners at a Chilean university. Results revealed significant strong correlations between speaking SE and cognitive strategies, as well as between writing SE and memory strategies. Weak but significant correlations were found between language proficiency and receptive skills (listening and writing SE). Pedagogical implications refer to the ways in which EFL teachers can increase their learners’ use of metacognitive strategies and increase their SE.

Key words: language learning strategies, self-efficacy, EFL learning, L2 proficiency.

1. INTRODUCTION

Studies investigating language learning strategies – defined as “specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective and more transferable to new situations” (Oxford, 1990: 8) – have reported that proficient learners use more strategies than those who are less proficient (Green & Oxford, 1995; Norton & Toohey, 2001; Fewell, 2010; Yilmaz, 2010). Furthermore, more successful learners employ a wider range of language learning strategies (henceforth, LLSs) and are able to use them to keep track of their learning process (Norton & Toohey, 2001), while lower proficiency learners rely on memorization strategies, which may not be enough to prompt language learning (Vann & Abraham, 1990). The role of self-efficacy – that is, the perception an individual has of their own abilities to carry out a task or to obtain new knowledge (Bandura, 1997) – in the nurturing of language learning strategies has also been underscored. High levels of self-efficacy (henceforth, SE) have been related to a more extensive use of LLSs (Yang & Wang, 2015). As Bandura (1997) states, the ability to create achievable expectations based on one’s self-regulated learning capabilities allows for a more conscious and personalized learning experience. He argues that SE has an impact on how learners perceive their academic development and overall performance, which in turn influences how proficient they may become. Thus, learners with high proficiency levels typically display higher SE levels when compared to their lower proficiency counterparts (Garbanzo, 2007).

Even though both LLSs and SE are regarded as beneficial for the development of second language learners (Rose et al., 2018), there is a lack of quantitative research identifying a relationship between these two variables in EFL contexts by taking into account the L2 proficiency of the learners. Thus, the aim of this research is to assess the use of LLSs and the levels of SE across proficiency levels in an EFL context, and to identify relationships between these variables. The research questions in the study are as follows:

RQ1: What is the relationship between language learning strategies and self-efficacy perceptions in university level EFL learners?

RQ2: Is language proficiency related to language learning strategy use and self-efficacy perceptions in these learners?
Regarding the context in which the study took place, it is worth mentioning that the Chilean EFL learning setting focuses on learning the four linguistic skills (namely, reading, writing, listening, and speaking) in EFL courses that become mandatory in the national curriculum from the fifth grade (Ministerio de Educación, 2013). Although a strategic approach to language learning is advocated by the national curriculum, it is not clear how learners should approach it in or outside the classroom. In EFL contexts such as the Chilean one, the opportunities for practicing the language outside the classroom are scarce (Cancino, 2020), which may reduce SE levels and motivation. In line with studies conducted in other settings, Chilean university students have been found to achieve higher levels of academic performance when they display high SE levels (Oriol-Granado et al., 2017). Chilean educational institutions aim to generate proficient English speakers so that they can function in a society that seeks to become bilingual and to use English as a gateway to accelerate the competitiveness of the country in a globalized economy (Díaz et al., 2013; Ministerio de Educación, 2014). However, the EFL nature of the country prompts learners to see the learning of English as another academic subject rather than an essential tool (Barahona, 2014). This is confirmed to a certain extent by the position that Chile holds in the English proficiency index survey for adult learners (37th), which represents moderate proficiency in English (EPI, 2020).

LITERATURE REVIEW

Language learning strategies (LLSs)

Language learning strategies are typically defined in the literature as a conscious method of self-tuition in which a learner creates more efficient ways of understanding and using a second language (Oxford, 1990). They are “specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective and more transferable to new situations” (8). Oxford (1990) divides LLSs into two main categories: direct and indirect LLSs. Direct strategies focus on explicit approaches to learning the target language. These strategies are divided into memory, cognitive and compensation strategies. Memory strategies (e.g., association) help learners to store new information about the L2. Cognitive strategies (e.g., analyzing or reasoning) give learners the tools to develop the new language in many ways. Compensation strategies (e.g., using metonymy or switching to the L1) provide learners with the opportunity to communicate despite a lack of proficiency. On the other hand, indirect strategies are defined as strategies that implicitly aid in the learning of the second language. These strategies are divided into metacognitive, affective, and social. Metacognitive strategies (e.g., organizing, setting goals and planning) help learners to provide structure and order to their learning process. Affective strategies (e.g., encouragement) help to regulate the feelings that students experience when learning a L2. Finally, social strategies (e.g., cooperating and empathizing), allow the learner to develop the language via interactions with peers (Oxford, 1990). Another description of LLSs was provided by O’Malley and Chamot (1990), who categorized them into three types. Cognitive strategies, such as reviewing and summarizing, help learners to organize and understand their own knowledge of the L2. Metacognitive strategies, such as self-evaluation or monitoring, support learners in understanding how they learn and optimizing their learning and knowledge storage processes. Socio-affective strategies, such as questioning for clarification or cooperating with classmates, make use of social skills to optimize the L2 learning process. As stated by Griffith and Oxford (2014), these taxonomies have typically encompassed language learning strategies in second language acquisition.

Self-efficacy (SE)

The term self-efficacy was coined by Bandura (1997) to refer to “the perception an individual has of their own abilities to carry out a task or to acquire new knowledge” (1997: 48). Bandura explains that SE can be considered an aspect of human agency; that is, the degree of influence that individuals have over the actions they carry out. Bandura argued that “behavior is influenced by generalized expectancies that outcomes are determined either by one’s actions or by external forces beyond one’s control” (Bandura, 1997: 19). Thus, those individuals who perceive outcomes as determined by their behavior are more likely to succeed than those who view them as determined by external factors. SE is regarded as one of the key variables in second language learning, since the way in which learners perceive their capacity to carry out tasks can have an effect on their performance (Raooft et al., 2012). Therefore, the teachers’ task is to give learners opportunities to notice their peers’ and their own success so as to increase self-regulation processes. As Wang, et al. (2014) state, improving what students believe about their own capabilities can positively affect the effort that is put into learning a language, which implies that SE itself can affect language learning.

Relationship between LLSs, SE, and language proficiency

Previous research has reported that proficient learners use more strategies and employ a wider range of strategies than less proficient learners (Green & Oxford, 1995; Norton & Toohey, 2001; Fewell, 2010; Yilmaz, 2010). However, there are studies suggesting that this relationship is much more complex. Earlier studies found that more proficient learners in fact used fewer LLSs but used them in a much more effective manner than less proficient learners (Si-Qing, 1990). Moreover, Magogwe and Oliver (2007) found that second and third grade learners are much more prone to utilizing metacognitive LLSs than those in the first grade, which was likely due to the degree of
cognitive development reached by the former. The authors also found that the relationship between SE and overall use of LLSs would decrease at higher grades of primary education.

When the focus is placed on SE, learners with high L2 language proficiency typically display high SE (Garbanzo, 2007). Wang et al. (2014) administered a questionnaire on SE in English as a second language (QESE) to a group of 500 sophomore students at a Chinese university and found that participants who displayed high levels of SE also possessed high proficiency in English. Focusing on the impact of SE on proficiency and motivation, Ouweneel et al. (2013) found that high SE levels may cause an increment in performance and motivation, and that low SE levels may negatively affect these aspects. In contrast, some studies have reported negative effects of high SE, as it can create a sense of overconfidence in one's abilities (Stone, 1994). This can lead to over-relaxation and can create problems such as a reduced focus on learning due to the learners’ excess of confidence regarding their knowledge (Vancouver & Kendall, 2006). In any case, SE has been identified as a factor that affects academic performance due to its influence over possible outcomes (Garbanzo, 2007). Self-efficacy helps learners to set expected goals, which generates motivation toward possible achievement (Bandura, 1997), and in turn increases their SE. Therefore, learners that experience success tend to develop a high level of SE which at the same time enables further achievement. In language learning settings that afford more opportunities for learning achievement through practice (such as English as a second language contexts), learners have been found to possess higher levels of self-efficacy when compared to learners in EFL settings (Genc et al., 2016). Regardless of the context, SE seems to be an influential factor for language learning, and teachers should benefit from developing it in their learners (Meera & Jumana, 2015). Finally, Montaño-González and Cancino (2020) gathered quantitative and qualitative data regarding these variables from 62 EFL learners at a public university in Chile. Results revealed a significant relationship between participants’ LLS use and their SE. That is, the higher their SE, the higher the awareness regarding LLS use was. Also, qualitative findings showed that participants who displayed higher levels of SE and LLS were much more skilled in overcoming learning difficulties. However, the influence of proficiency level was not addressed, which highlights the scarcity of studies addressing L2 language proficiency, LLSs, and SE in EFL contexts.

METHODOLOGICAL FRAMEWORK

Overall study design

The present study is quantitative in nature and seeks to characterize the relationship between LLSs, SE, and proficiency level. The first question focuses on identifying the type of relationship between LLSs and SE in EFL learners. The second question aims to find a relationship between language proficiency and the use of LLS and SE levels. The study adopts a correlational design to describe the relationship between the three variables.

Participants

The participants in the present study were 47 adult learners at a Chilean university. They were native speakers of Spanish taking an EFL course at two different levels (Beginners and Intermediate). They belonged to the language learning context previously described and attended two 60-minute classes per week in the institution. Due to COVID-19 restrictions, learners attended the classes remotely, so the researchers had to adapt the instruments to be delivered online by means of Google Forms.

Instruments

STRATEGY INVENTORY FOR LANGUAGE LEARNING (SILL) QUESTIONNAIRE

The strategy inventory for language learning (SILL; Oxford, 1990) was adapted for the present study, since it is an instrument that has been extensively used in the literature to gather data on LLSs. Since the participants’ L1 was not English, the instrument was translated into Spanish following Barrios and Montijano (2017). The questionnaire measures strategy use using a 5-point rating scale 1 (never) to 5 (always). The final version of the instrument included the six types of strategies discussed by Oxford (1990): memory, cognitive, compensation, metacognitive, affective, and social. However, data analysis was not conducted with social and affective strategies as these indirect strategies presented low internal consistency (α <0.5). The low reliability can be explained to some extent in terms of the participants attending online classes during the pandemic context, which may have affected their social involvement in different ways. For example, studies have reported that the lack of physical connection between learners and teachers can make some learners feel frustrated and unable to learn by themselves without a guide (Qiu et al., 2020).

QUESTIONNAIRE OF ENGLISH SELF-EFFICACY (QESE)

The questionnaire for SE perceptions was adapted from Wang et al. (2014). The instrument includes a self-report 7-point rating scale ranging from 1 (“I cannot do it at all”) to 7 (“I can do it very well”). This questionnaire
assesses SE in reading, listening, speaking, and writing. The instrument was translated into Spanish, following Montaño-González and Cancino (2020).

**OXFORD QUICK PLACEMENT TEST (OQPT)**

The L2 proficiency test administered was the Oxford’s Quick Placement Test (University of Cambridge Local Examinations Syndicate, 2001). The test itself comprised 40 items that included gap filling, sentence completion, and multiple choice. The mean for the sample was $M = 20.68$, $SD: 6.1$, placing the participants in a low-intermediate level of proficiency.

**Study procedures**

Before the final versions of the questionnaires were administered, a pilot study with 15 EFL students, who were not part of the sample, was carried out with the SILL and QESE instruments so that any issues with the delivery of the items could be tackled. The feedback provided by these students was mainly related to the format in which the instructions were delivered. There were no clarity issues reported regarding questionnaire items. Once the final online versions of the instruments were created on Google Forms, they were administered to the intended sample. The instruments were completed during class time, on three consecutive days, so as to reduce fatigue effects. Participants were informed that data handling would be done safeguarding their confidentiality, and that their names would not be used at any stage of the research process. Once the data from the three instruments were collected, a correlational approach to their analysis was done with the three variables in the study, namely, LLS use, SE level, and language proficiency level.

**RESULTS**

**Descriptive statistics**

Table 1 below presents the descriptive statistics for L2 language proficiency (OQPT scores), SILL components, and QESE components.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>OQPT scores</td>
<td>47</td>
<td>6</td>
<td>39</td>
<td>20.68</td>
<td>6.10</td>
</tr>
<tr>
<td>SILL Memory strategies</td>
<td>47</td>
<td>1.56</td>
<td>4.11</td>
<td>2.77</td>
<td>0.57</td>
</tr>
<tr>
<td>SILL Cognitive strategies</td>
<td>47</td>
<td>1.64</td>
<td>4.21</td>
<td>2.95</td>
<td>0.61</td>
</tr>
<tr>
<td>SILL Compensation strategies</td>
<td>47</td>
<td>1.17</td>
<td>4</td>
<td>2.92</td>
<td>0.63</td>
</tr>
<tr>
<td>SILL Metacognitive strategies</td>
<td>47</td>
<td>1.67</td>
<td>4.78</td>
<td>3.40</td>
<td>0.67</td>
</tr>
<tr>
<td>QESE listening</td>
<td>47</td>
<td>2.63</td>
<td>6.75</td>
<td>4.99</td>
<td>0.91</td>
</tr>
<tr>
<td>QESE speaking</td>
<td>47</td>
<td>1.75</td>
<td>6.63</td>
<td>4.82</td>
<td>1.07</td>
</tr>
<tr>
<td>QESE reading</td>
<td>47</td>
<td>2.25</td>
<td>6.75</td>
<td>5.14</td>
<td>0.88</td>
</tr>
<tr>
<td>QESE writing</td>
<td>47</td>
<td>1.50</td>
<td>6.63</td>
<td>4.76</td>
<td>0.98</td>
</tr>
</tbody>
</table>

Results for the SILL components reveal that the metacognitive strategies component had the highest mean ($M = 3.4$). The rest of the SILL components displayed similar means, with the memory strategies component having the lowest ($M = 2.77$). Figure 1 below shows the item mean scores for the highest mean in the SILL instrument, namely, the metacognitive strategies component.

Most of the items in the component displayed high means. The highest mean ($M = 4.09$) is found in item 37 (“I have clear objectives for improving my English skills”), which reflects the metacognitive nature of the strategies that participants may adopt to approach their learning. The lowest mean ($M = 1.67$) was reported for item 35 (“I look for people I can talk to in English”), which may be explained by the difficulties these EFL participants have finding English speakers outside the language classroom.

Regarding QESE results, the highest mean was found for reading SE ($M = 5.14$), while the lowest mean was writing SE ($M = 4.76$). These findings suggest that there was no important variation in the reported SE of learners in the four skills, and that their overall perceptions of their abilities are not negative. Figure 2 below presents the scores for the reading component of the QESE instrument, which displayed the highest mean.
The lowest item mean ($M = 4.26$) was reported for item 26 (“Can you understand the meaning of new words using English-English dictionaries?”). Item 29 (“Can you understand articles that discuss aspects of Chilean culture?”) displayed the highest mean ($M = 6.75$), which shows that these learners felt motivated to read and learn about topics related to their own cultural setting.

**Pearson correlations for L2 language proficiency, SILL, and QESE components**

Table 2 below presents the correlations found between OQPT scores, SILL components, and SE components.

Table 2. Pearson correlation between L2 language proficiency, SILL, and QESE components.

<table>
<thead>
<tr>
<th></th>
<th>OQPT scores</th>
<th>QESE listening</th>
<th>QESE speaking</th>
<th>QESE reading</th>
<th>QESE writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>OQPT scores</td>
<td>1</td>
<td>0.297*</td>
<td>0.186</td>
<td>0.311*</td>
<td>0.223</td>
</tr>
<tr>
<td>SILL Memory strategies</td>
<td>0.054</td>
<td>0.321*</td>
<td>0.589″</td>
<td>0.405″</td>
<td>0.529″</td>
</tr>
<tr>
<td>SILL Cognitive strategies</td>
<td>0.004</td>
<td>0.382″</td>
<td>0.433*</td>
<td>0.423″</td>
<td>0.504″</td>
</tr>
<tr>
<td>SILL Compensation strategies</td>
<td>0.053</td>
<td>0.042</td>
<td>0.215</td>
<td>0.208</td>
<td>0.308*</td>
</tr>
<tr>
<td>SILL Metacognitive strategies</td>
<td>0.201</td>
<td>0.267</td>
<td>0.502″</td>
<td>0.346*</td>
<td>0.496″</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Results reveal a series of significant correlations. First, memory and cognitive strategies were significantly related to SE in all the skills. The strongest correlations were found between memory strategies and productive skills, namely, speaking SE ($r =0.59$) and writing SE ($r =0.53$). Compensation strategies appear to hold the weakest connection with SE skills, displaying a weak correlation with writing SE ($r =0.31$). Listening SE produced the weakest correlations when compared to the other SE components. Regarding the correlations between OQPT scores and SILL components, no significant correlations were found. However, OQPT scores correlated with receptive skills in the SE components, namely, listening ($r =0.3$) and reading ($r =0.31$).

**DISCUSSION**

Research Question 1: What is the relationship between language learning strategies and self-efficacy perceptions in university level EFL learners?

Research question 1 sought to identify the relationship between LLSs and SE in the four skills. Results revealed the prominence of metacognitive learning strategies, which suggests that these learners tend to use more indirect strategies to aid their learning. This can be explained to some extent by the lack of a direct approach to learning strategies in the EFL context researched. As for SE scores, the higher means for SE in receptive skills indicates that the participants felt much more confident about their reading and listening abilities, in line with Montaño-González and Cancino’s (2020) findings. In this respect, the specific guidelines in the Chilean EFL curriculum that require teachers to provide activities that focus on receptive skills (Cancino & Díaz, 2020) may prevent learners from allocating time to produce language in the classroom.

Moderate significant correlations were found between LLS use and SE components, particularly between speaking SE and cognitive strategies, and writing SE and memory strategies. The stronger relationship displayed by productive skills can be explained in terms of the need for learners to be flexible and confident to overcome challenges when producing language, aspects that characterize high SE learners (Vann & Abraham, 1990). Another aspect worth discussing is the weak correlation between compensation LLSs and most of the SE components, a finding also reported by Montaño-González and Cancino (2020). These types of direct strategies are regarded as “workarounds” to tackle language proficiency gaps, so learners may have felt that using gestures and using the L1 to communicate did not increase their perceived abilities in the L2.

Research Question 2: Is language proficiency related to language learning strategy use and self-efficacy perceptions in these learners?

Research question 2 aimed at identifying a correlation between the L2 language proficiency of the participants and their LLSs and SE scores. Results showed that proficiency was not significantly related to any of the SILL components, which suggests that language proficiency may not influence the perceptions of these EFL learners in relation to the language learning strategies that they use. The findings are in opposition to studies reporting that proficient learners use more strategies than those who are less proficient (Green & Oxford, 1995; Norton & Toohey, 2001; Fewell, 2010; Yilmaz, 2010). This can be explained to some extent by the features of the EFL context researched. The more proficient learners in this sample may have used fewer strategies but used them more effectively to advance their learning (Si-Qing, 1990). For example, since they may not be able to find opportunities for practicing the language outside the classroom (SILL Item 35; metacognitive strategy) they may have identified clear objectives regarding what they can do to improve their proficiency (SILL Item 37; metacognitive strategy).

As for the relation between language proficiency and SE, the weak but significant correlations between language proficiency and listening and reading SE underscore the tendency for participants to perceive themselves as more proficient regarding receptive skills. These findings are, to some extent, in line with previous studies identifying a link between SE beliefs and L2 proficiency. For example, Wang (2014) and Garbanzo (2007) concluded that students with high SE levels typically achieve higher language proficiency levels. The results of the present study display the same relationship, though its strength is rather weak, and is only present for receptive SE skills, confirming the lack of emphasis on productive skills in the EFL context selected.

**CONCLUSION**

Overall, results in the present study revealed that there were significant strong correlations found between speaking SE and cognitive strategies, as well as between writing SE and memory strategies. Regarding the relationship between L2 language proficiency and LLS use, no relationship was found between the variables. However, weak but significant correlations were found between language proficiency and receptive skills (listening and writing SE). The study has some limitations that need to be mentioned. COVID-19 restrictions reduced the sample size ($n =47$), which may have prevented the data from yielding stronger correlations for language proficiency. In addition, the logistical difficulties emerging from online classes delivered in a pandemic context may have impinged upon the reliability of social and affective strategy components in the SILL questionnaire. This
instrument was administered in a context where some learners tend to be more influenced by affective strategies (Li et al., 2019; Maican et al., 2021), which is further complicated by the unstable nature of spontaneous online learning classes. Studies carried out in similar online contexts need to exercise caution regarding gauging learners’ perceptions toward affective and social strategies.

Implications for pedagogy

The pedagogical implications emerging from the study refer to the idea that the relationship between language learning strategy use and self-efficacy beliefs can be a signal for EFL teachers to strive toward increasing their learners’ SE by allowing them to keep track of their learning accomplishments and abilities. For example, prompting learners to review their learning development can help them identify successful strategies in their learning, and use them more often. This can, in turn, increase their self-regulation processes, which are closely related to language learning strategy use (Weinstein et al., 2011). Moreover, in EFL contexts where learners do not have the chance or are not accustomed to practice the L2 outside the classroom, metacognitive strategies that seek to find learning opportunities may be hindered. It becomes necessary to increase learners’ exposure to authentic instances of L2 interaction. In this respect, COVID-19 restrictions can help teachers to implement online language exchange opportunities with native speakers of English that can increase learners’ awareness toward what they can and cannot do with the language and find strategies to tackle lacunae regarding the L2. Although there is no consensus regarding the way in which language learning strategies can be formally taught in the L2 classroom (Rose et al., 2018), the provision of opportunities for learners to identify what works for them can represent a strong building block from which they can develop self-efficacy. Ongoing feedback and scaffolding, and positive reinforcement (Sardegna et al., 2018) together with adequate guidance toward strategy use (Shi, 2018) will likely increase learner self-efficacy. This is particularly relevant in crisis-prompted remote teaching, where expectations toward earning outcomes will need to be lowered (Gacs et al., 2020) and learners will need a strategic approach to self-regulate their learning experience.

REFERENCES


