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國小自我效能感與英語學習策略關係之探討

The Relation Between Elementary School Students' Beliefs in Self-Efficacy and Their
English Learning Strategies



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國立政治大學英國語文學系碩士在職專班
碩士論文提要

論文名稱：國小英語學習策略與自我效能感關係之探討

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論文提要內容：

本研究旨在探討國小學童英語學習策略使用與自我效能之關係，文獻探討涵蓋了學童使用學習策略的方法及其自我效能信念。

本研究使用量化研究，研究對象為 324 位來自新北市國小之學童，參加調查研究並填寫問卷。研究工具為英語學習策略量表及自我效能量表。研究者收集資料後，以 SPSS 進行分析，主要分析方法是採用描述性的統計、皮爾森（Pearson）相關係數及獨立樣本 t 檢定。這些分析回應了研究的三個主題：（一）國小學童的主要英語學習策略、（二）國小學童的英語學習策略與自我效能信念之間的關係以及（三）國小學童在使用英語學習策略和自我效能方面的性別差異。

研究結果顯示：

1. 台灣國小學童使用英語學習策略的頻率為中等，最常使用補償策略，其次是後設認知策略。
2. 研究發現國小學童使用英語學習策略與自我效能呈顯著的正相關。
3. 女學童英語學習策略的使用頻率及自我效能高於男學童。
4. 女學童在使用補償、後設認知和社會策略方面顯著多於男學童，而女學童在使用自我監測學習方面也是顯著多於男學童。

這些結果有助於外語教師了解國小學童的英語學習策略使用和自我效能信念。

為了進一步研究，本研究的局限性和建議在研究的最後一部分中提出。

關鍵詞：語言學習策略、英語自我效能、自我監測學習、EFL 學生



ABSTRACT

This research explored learning strategies and English self-efficacy beliefs of primary EFL students. The literature review covered learning strategies and self-efficacy beliefs used by students.

The current research involved 324 primary school students from two schools in New Taipei City. This study adopted a quantitative method to analyze the data. The content of questionnaires included participants' background information, learning strategies, and self-efficacy beliefs. The researcher used the Statistical Package for Social Science (SPSS) to analyze collected data. It included descriptive statistics, Pearson correlation coefficients, and an independent t-test. This analysis responds to three research topics. The first one was the main learning strategies of primary school students; the second was the link between learning strategies and beliefs of self-efficacy of students; the third was the gender differences in their use of learning strategies and their self-efficacy.

The results are as follows:

1. The frequencies of learning strategies were medium. Students favored compensation strategies the most, followed by metacognitive strategies.
2. Students' learning strategies correlated with their self-efficacy beliefs.
3. Girls used learning strategies more often and had more self-efficacy beliefs than boys.
4. Girls used compensation, metacognitive, and social learning strategies more significantly than boys. There was a significant gender difference in self-efficacy for self-regulated learning.

These results are helpful for EFL teachers to understand students' English learning

strategy use and self-efficacy beliefs. Finally, the limitations of this study and recommendations for future research wrap up this study.

Keywords: language learning strategies, English self-efficacy beliefs, self-regulated learning, EFL students



CHAPTER ONE

INTRODUCTION

The constant interaction of international politics, economics, and cultures has made the world a global village. Because of this, English has become an essential tool of communication in international interactions. English competencies are required for students to become global citizens. Students need to develop English skills to prepare for life in this century.

To develop English skills, students need to understand how to use learning strategies (Oxford, 1990). Along with using learning strategies, students also need to utilize self-efficacy beliefs to produce their desired learning outcomes (Bandura et al., 2001). Both learning strategies and self-efficacy beliefs can help students succeed in language learning.

Previous research on learning strategies and self-efficacy beliefs has revealed an association between them (Magogwe & Oliver, 2007; Purdie & Oliver, 1999; Stracke, 2016; Trinder, 2013; Wong, 2005; Yang & Wang, 2015; Yilmaz, 2010). For example, Wong's (2005) study revealed that the stronger the pre-service educators' self-efficacy beliefs were, the more frequently they used learning strategies. Yilmaz (2010) reported that the more self-efficacy learners had, the more learning strategies they used. In addition, Trinder (2013) found that higher achievers had a stronger sense of self-efficacy and used more learning strategies than lower achievers. Chen (2014) also concluded that the language learning strategies of learners were related to their self-efficacy beliefs. However, a previous study (Bonyadi et al., 2012)

reported no association between them. Therefore, the relationship between learning strategies and self-efficacy beliefs of primary school students was unclear before this study.

Previous studies (Shi, 2018; Wong, 2005) on learning strategies and self-efficacy beliefs rely on questionnaires to analyze collected data. These studies evaluated the learning strategies and self-efficacy of adults and teenagers. Learning strategies and self-efficacy beliefs impact English learning of adults, adolescents, and children. Little is, however, known about children. It is necessary to investigate research on children's use of learning strategies and self-efficacy beliefs.

1.1 Purpose of Study

The purpose of this study was to examine primary school students' learning strategies, beliefs of self-efficacy, and whether there could have been a relationship between them. Given the lack of research on children, this study used questionnaires and data analysis to address these issues.

To achieve the objective of this study, the researcher used questionnaires of existing literature on learning strategies and self-efficacy beliefs to conduct this research by collecting data from students in two primary schools.

1.2 Significance of Study

The current research helps educators understand children's learning strategies and self-efficacy beliefs. Hopefully, this research can provide references for further research on educational institutions, primary school teachers, and related students.

CHAPTER TWO

LITERATURE REVIEW

There are three parts in this chapter. The first is Oxford's (1990) English learning strategies, the second focuses on the diverse facets of self-efficacy beliefs of Bandura (2006), and the last presents related research on these two topics. Through an overview of previously published research on these two topics, the researcher could understand the key findings and debates of these two topics to develop the framework of this study.

2.1 English Learning Strategies

Many researchers have defined learning strategies in earlier studies. For example, Oxford (1990) has thought of learning strategies as techniques that students use to solve problems and change their behavior. Chamot (2005) explained that the learning strategies, which facilitate learning tasks, are usually conscious and goal-driven. Griffiths (2015) indicated that learners select learning strategies to learn a language. Scarcella and Oxford (1992) described learning strategies as special skills for finding a dialogue partner or encouraging oneself to deal with English tasks. These researchers had similar definitions of learning strategies. Learning strategies aim to improve or adjust students' language learning.

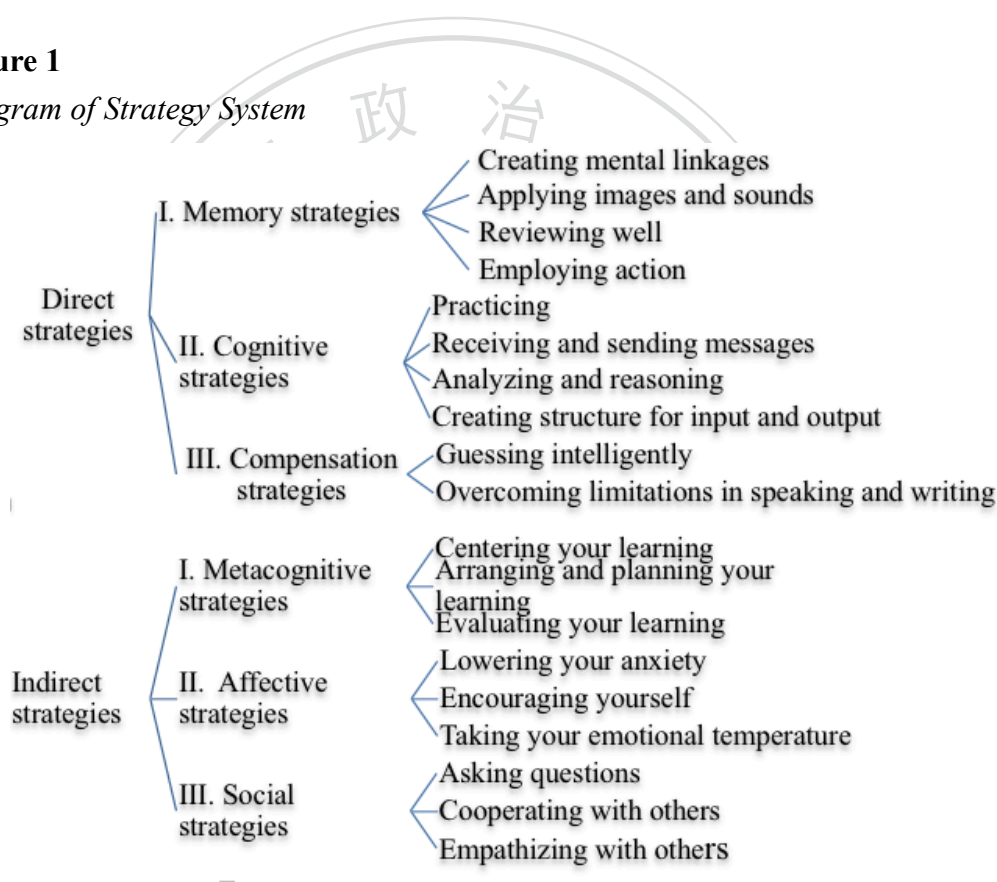
According to the aforementioned, learning strategies enhance students' language learning. Learning strategies explained how students could become independent and have the power to make their own decisions (Little, 1991). Learning strategies help students become independent learners after class.

Thus, the promotion of learning strategies has been popular for learning a second language (Cohen & Macaro, 2007; Oxford, 2011).

Oxford (1990) identified six major learning strategies (memory-related, cognitive, compensatory, metacognitive, social, and affective strategies) for learning a foreign language. These learning strategies form a regular system (Figure 1) (Oxford, 1990, p17). This model of learning strategies has become widely used in research fields (Radwan, 2011).

Figure 1

Diagram of Strategy System



Note. Adapted from Oxford (1990, p17).

The categories of these six learning strategies include two parts. One is direct, and the other is indirect (Oxford, 1990). To explain these mutually supportive learning strategies, Oxford compared their working model to a theater. First, direct strategies are like performers in a stage play. This category of performers consists of memory, cognitive, and compensation

strategies. Performers work together with directors to achieve the best outcome. Second, indirect strategies are stage directors composed of metacognitive, affective, and social strategies. Directors serve as hosts to check, guide, correct, focus, organize, encourage, and cheer performers. Directors finally have to ensure performers work together with other actors in the play (Oxford, 1990).

This classification of six major learning strategies becomes a system of learning strategies. However, classification conflicts are inevitable (Oxford, 1990). For example, some experts consider that the method (*using synonyms for new words*) is a learning strategy. Other experts think identifying this method (*using synonyms for new words*) as a learning strategy is premature because they believe it is a communication strategy that is impractical (Oxford, 1990). In addition, some learning strategy specialists have different categories on whether the classification of self-monitoring strategies should be as direct or indirect. The reason is that some learning strategy specialists have different definitions of *direct* and *indirect* terms. Finally, when individual specialists have new insights, they usually use different ways to classify learning strategies (Oxford, 1990).

Even though conflicts of classifying learning strategies are inevitable for investigators, studies have revealed that these strategies help students control their learning and help students become more proficient in English than before. Teachers' experiences also indicate that this strategy system is a way to examine learning strategies (Figure 1). It provides investigators, educators, and students with a structure to understand learning strategies. Therefore, they can easily use it (Oxford, 1990).

2.2 Self-Efficacy Beliefs

This section begins to describe the diverse aspects of self-efficacy beliefs. Then the role of self-efficacy beliefs is crucial in Social Cognitive Theory. Finally, advanced technology shows its influence on students' self-efficacy beliefs.

2.2.1 Multiple Facets of Self-Efficacy Beliefs

Self-efficacy beliefs work as a factor in a learner's competence.

Self-efficacy beliefs play a vital role in students' learning. After learning about their capabilities, students could quickly and efficiently complete assignments (Bandura, 1984). In other words, self-efficacy beliefs could help students realize that they can accomplish tasks. These students ensure that they can accomplish tasks and strive to avoid failure (Ching, 2002). The following three parts describe self-efficacy beliefs from different facets.

First, Bandura (2006) developed scales to explore four sources of self-efficacy beliefs. They are "enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states." The enactive mastery experiences are the first and most important cause of self-efficacy beliefs. Enactive mastery experiences demonstrate that students can use their self-efficacy beliefs to overcome obstacles. The second is vicarious experiences. Vicarious experiences indicate that learners can effectively strengthen their self-efficacy by modeling others' behaviors. The third is verbal persuasion. Verbal persuasion often exists when teachers give learners feedback. Teachers' feedback highlights students' capabilities and deepens students' self-efficacy beliefs. The fourth one is physiological and affective states (Bandura 1997). Affective states can increase learners'

self-efficacy by improving their physical and mental situations.

Second, Bandura (2006) developed a scale to examine children's self-efficacy beliefs for self-regulated learning. Self-efficacy for self-regulated learning (SRL) is related to students' perceived capability to use SRL strategies. Students perform their SRL efficacy in self-evaluation, self-monitoring, planning and goal setting, environmental restructuring, and self- consequences (Zimmerman et al., 1992). SRL efficacy is an indicator for students' successful use of self-regulatory skills and strategies in the school field (Zimmerman et al., 1992). SRL efficacy also has a relationship with students' learning motivation and performance in school (Pajares, 2008).

Third, Wang et al. (2013) developed a scale to examine the self-efficacy beliefs for students to apply their four English skills. In their study, this scale examined students' self-efficacy beliefs in completing English tasks in listening, speaking, reading, and writing.

2.2.2 Self-Efficacy in Social Cognitive Theory

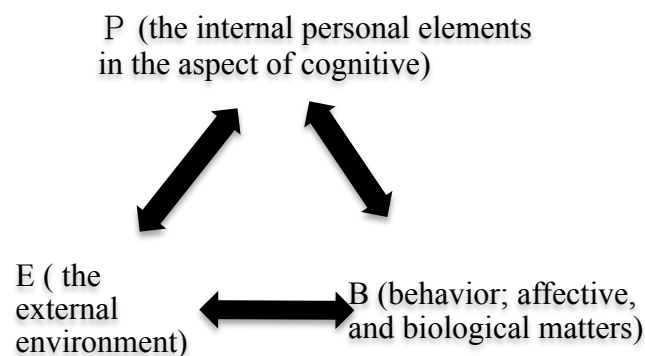
Self-efficacy beliefs are part of an extensive Social Cognitive Theory (Bandura, 2012). Social Cognitive Theory regards students as active agents who can interact with their environment. The most vital component of this theory was students' observational learning. The replication of observed behavior depended on the strength of the learner's self-efficacy beliefs. In other words, learners' self-efficacy beliefs affect whether they reproduce the observed behavior (Thought, 2019). The following section will explain the existence of self-efficacy beliefs and observed behaviors in Social Cognitive Theory.

According to Social Cognitive Theory, students can produce observed

behaviors through interacting with their environment. Social Cognitive Theory provides a framework within which researchers can understand how students actively change and are changed by their environment. This framework explains that human agency acts within a causal structure called “triadic reciprocal causation” (Figure 2). The three forces of this structure come from behaviors, the external environment, and internal personal elements (self-efficacy beliefs). They depend on each other and present the performing process of self-efficacy beliefs (Bandura, 1997). Because of this triadic reciprocal causation, students worked efficiently and effectively. These forces worked like interacting factors between individuals and society (Bandura, 2012). In other words, the external environment impacts students’ behaviors and internal personal elements. These elements, self-efficacy beliefs, were affected by students’ mental capacities. Self-efficacy beliefs, working as the students’ agency, could change their behavior. Because these factors interacted, students could create events and activities (Bandura, 2012).

Figure 2

The Three Types of Forces in Triadic Reciprocal Causation



Note. Adapted from Bandura (1997, p6).

Students receive education in school. Schools are a vital environment for enhancing learners' sense of self-efficacy (internal personal elements) (Bandura, 1997). The determination of self-efficacy beliefs depended on peer modeling, social comparisons, or teachers' interpretations of learners' successes and failures. Through these instructions, learners could equip themselves with self-regulatory capabilities for learning (Bandura, 2001). Students' learning behavior strengthens their self-efficacy beliefs and changes their environment. These behaviors, internal personal elements, and environment work like the triadic reciprocal causation of Social Cognitive Theory. As mentioned in Social Cognitive Theory, students interact with the environment.

Self-efficacy beliefs of students may be affected by external factors, according to the performing process of the triadic reciprocal causation of Social Cognitive Theory. One of the external factors is advanced technology. The following section addresses how advanced technology impacts students' self-efficacy beliefs.

2.2.3 Technological Impact

Students used to receive educational programs and assignments that schools delivered. Nowadays, information exchange through advanced technologies has enabled the rapid development of English education. This change helps students develop and renew their self-efficacy beliefs in daily life. In contrast, modern technology has given students the ability to share information, so the exchange of new information is quick and easy to influence students' self-efficacy beliefs (Bandura, 2001).

Advanced technology, such as websites and software for language learning, provides students with different learning methods of English. With the help of advanced technology, students could learn English from teachers when they are inside the class. After school, they could use advanced technology at home or in public facilities such as libraries to learn English. Students could easily use these facilities and resources with the help of advanced technology to learn at any time or in any location (Bandura, 2001). In this environment, self-efficacy for self-regulated learning could improve their English. On the other hand, those having less self-efficacy for self-regulated learning would learn English more slowly than those who have more (Zimmerman, 1990).

After an overview of learning strategies and self-efficacy beliefs, the following section reviews their relationships in related literature research.

2.3 English Learning Strategies and Self-Efficacy Beliefs

Most previous research shows that learning strategies and self-efficacy beliefs impact students' English learning. If students enjoyed a high level of self-efficacy beliefs, they were high achievers when they applied learning strategies in their learning (Zimmerman & Pons, 1986). Another study revealed that, after receiving strategy instruction, students used more learning strategies and possessed stronger self-efficacy beliefs than beforehand (Chamot et al., 1996). The following section will describe the relationship between learning strategies and self-efficacy beliefs by reviewing the literature.

2.3.1 Related Studies

Research (Chen, 2014; Trinder, 2013; Wong, 2005; Yilmaz, 2010) has explored learning strategies and self-efficacy beliefs. The results of these earlier studies have shown an association between learners' self-efficacy beliefs and their use of learning strategies.

Wong (2005) has earlier explored the association between language learning strategies and self-efficacy beliefs. To explore these issues, a total of seventy-four pre-service teachers graduating from a Malaysian university participated in this investigation. This investigation found an association between pre-service educators' learning strategies and self-efficacy beliefs.

Most related studies focused on university students. For example, Yilmaz (2010) conducted a study concerning the association between students' use of language learning strategies and their possession of self-efficacy beliefs. The participants of this study were English majors and consisted of three groups according to their English levels. The research of Yilmaz (2010) showed that students' self-efficacy beliefs impact their language acquisition, and their frequent use of learning strategies had become a notable factor for learners' success in English learning.

In addition, Trinder (2013) conducted research focused on the context of students' English for a specific purpose. This study used interviews and questionnaires to examine 156 business students. The results of this study revealed that high achievers strengthened their self-efficacy beliefs and increased their use of learning strategies more than was the case for low achievers.

After the earlier research on university students from various countries in the last section, this section reviews the relevant studies of Taiwanese

university students. These studies focus on the trend of English teaching. English teaching has shifted to teaching four English skills in recent years. College students had to achieve certain levels of English, which became a graduation requirement. In this context, Chen (2014) investigated factors that influence EFL students' English acquisition. Chen's study aimed to explore the associations between language learning strategy use and self-efficacy beliefs of technical university students. A total of 170 students attended this study from four departments. This study showed that learners' language learning strategies significantly correlated with their self-efficacy beliefs.

Moreover, different universities in Taiwan may take different approaches in their English teaching. Exploring an effective learning method is necessary to improve the motivation and self-confidence of students in English education. Yang and Wang (2015) found that learning strategies could help learners become more independent and autonomous through explicit strategy instruction than before. Their study surveyed seventy-eight college students who took English reading courses in northern Taiwan. The average age of the participants was 33.67 years old, ranging from eighteen to sixty-one years old. According to the results of this study, 53.85% of the students were at a pre-medium English level, 15.38% were medium, and 30.77% were at a primary English level. A strong association existed between students' language learning strategies and self-efficacy beliefs.

Specifically, Magogwe and Oliver (2007) examined three groups of participants of different ages. This study probed the correlation between Botswana primary, secondary, and university school students' language learning strategies and their self-efficacy beliefs. In Botswana, English as its official language helped learners frequently to use learning strategies and

possess self-efficacy beliefs. In other words, primary, secondary, and tertiary students employed language learning strategies, and their self-efficacy beliefs helped them learn English. The correlations between learning strategies and self-efficacy beliefs were medium in primary and middle school students but weak in tertiary school students.

As mentioned earlier, most relevant studies have focused on the learning strategies and self-efficacy beliefs of adolescent and adult learners, but few studies have targeted elementary school students. Stracke (2016) began to examine these two issues in Asia. In Stracke's study, participants came from a total of 522 children. One finding of this study indicated that children's confidence in using the learning strategies influenced their self-regulated learning efficacy.

In Taiwan, earlier studies (Chen, 2014; Yang & Wang, 2015) investigated college students' learning strategies and self-efficacy beliefs but rarely involved primary school students. Lan and Oxford's (2003) study focused on the English learning strategies of children in Taiwan. Their research investigated children's use of learning strategies, but there was a lack of research on their self-efficacy beliefs. Therefore, jointly investigating students' use of learning strategies and their self-efficacy beliefs has become the aim of current research. The present study hoped to explore information on primary school students' learning strategies and self-efficacy beliefs.

Most relevant studies have showed a connection between students' learning strategies and self-efficacy beliefs. However, of the 130 freshmen students from three universities in Urmia attending the study of Bonyadi et al. (2012), the results showed no relationship between students' language learning strategies used and their self-efficacy beliefs.

After an overview of the literature, some research showed a relationship between learning strategies and self-efficacy beliefs, but some showed none. It is an unclear relationship between students' learning strategies and self-efficacy beliefs. Little research is about children on these topics. Therefore, the current study for children on these two topics is necessary.

At the end of the literature review, Table 2.1 lists related studies.

Table 2.1

List of Related Studies

Source	Participants	Place	Method	Related Findings
Stracke (2016)	522 primary school students	Indonesia	Survey	Students with stronger self-efficacy beliefs adopted learning strategies more often than those who had weaker self-efficacy beliefs.
Yang and Wang (2015)	78 college learners	Taiwan	Survey	After the strategy instruction, a strong correlation existed between language learning strategies and English self-efficacy beliefs.

Chen (2014)	170 students	Taiwan	Survey	Learners' language learning strategies had a relationship with their self-efficacy beliefs.
Trinder (2013)	156 students	Australia	Survey and inter-vie ws	High achievers had stronger self-efficacy beliefs and used more learning strategies than low achievers.
Bonyadi et al. (2012)	130 freshmen students	Iran	Survey	There was no connection between students' self-efficacy beliefs and their learning strategy use.
Yilmaz (2010)	140 students majoring in English	Turkey	Survey	Students with stronger self-efficacy beliefs used more certain learning strategies than learners who had weaker self-efficacy beliefs.
Magogwe and Oliver (2007)	480 students	Southern Africa	Survey	1. The connection between tertiary school students' learning strategies and their self-efficacy beliefs was weak

($r = .297$).

2. The connection
between secondary
school students'
learning strategies
and their self-efficacy
beliefs was medium
($r = .435$).

3. The connection
between primary
school students'
learning strategies
and their self-efficacy
beliefs was medium
($r = .588$).

Wong (2005)	74 graduate teachers before service	Malaysia	Inter-vie w and survey	A correlation existed between the learning strategies of pre-service educators and their language self-efficacy beliefs.
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CHAPTER THREE

RESEARCH METHOD

This chapter aims to describe the procedures of the research. This chapter first introduces the three research topics. After the research topics, this chapter proceeds to present research designs, questionnaires, and data analysis in the study.

3.1 Research Questions

This research aims to examine students' learning strategies and their self-efficacy beliefs. To achieve this general aim, the researcher formulated three research topics as follows:

- 1) What are the main learning strategies for primary EFL students?
- 2) What is the link between primary EFL students' learning strategies and their beliefs of self-efficacy?
- 3) Do boys and girls differ in their learning strategies and self-efficacy?

3.2 Research Designs

After the formulation of the research questions, this section describes research designs. The research designs contain the background information of participants and data collection.

3.2.1 Participants

This section presents participants' background information of schools (Table 3.1). The content of this table included the size of the school and the

total number of participants. According to this table, 324 students participated in this study. They were sixth-graders studying in two schools in New Taipei City. Based on similar backgrounds and English learning experiences, this study aimed to examine their learning strategies and self-efficacy beliefs.

Table 3.1

Participants' Background Information

School Size	Male	Female	Total Number
Medium-sized school	97	68	165
Large-sized school	88	71	159

After the background information of the research, the following describes the ways of data collection.

3.2.2 Procedures of Data Collection

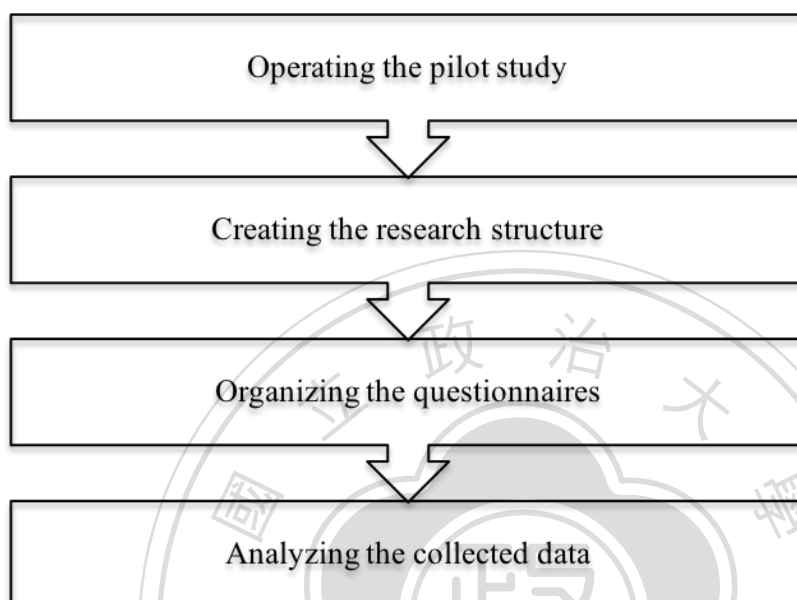
This study applied a convenience sample of questionnaires to collect the data. The purpose of this survey was to study students' learning strategies used and their self-efficacy beliefs possessed. Meanwhile, this study examined whether students' use of learning strategies and their English self-efficacy beliefs would have been affected by their gender.

The current study used four steps to collect data (Figure 3). Conducting a pilot study was the first step. Its purpose was to discover if any problems existed before formal research. Next, establishing a study structure was the second step. This structure illustrated the study procedures. Then participants answered these questionnaires based on their understanding. Organizing the

completed questionnaires was the third step. The last step was to analyze the collected data. The focus of data analysis depended on three research themes.

Figure 3

Flow Diagram of Research Designs



3.3 Questionnaires

This part introduces the questionnaires used in this study. It includes the structure, modification, and content of the questionnaires. Finally, a summary aims to understand the general situation of the questionnaires.

3.3.1 Structure

The structure of the questionnaires showed how the instruments were used (Table 3.2). The questionnaires consisted of two parts. The first part was Children's Strategy Inventory for Language Learning (SILL) by Gunning (1997), and the second part was a survey of self-efficacy beliefs, which included the Questionnaire of English Self-Efficacy (QESE) by Wang et al. (2013) and Self-Regulated Learning (SRL) scale by Bandura (2006).

Table 3.2*Structure of the Questionnaires*

Section	Category	N	Total Items
Background Information	School Name	1	3
	Gender	1	
	Class No. & Seat No.	1	
Language Learning Strategy	Memory	5	30
	Cognitive	10	
	Compensation	4	
	Metacognitive	5	
	Affective	3	
	Social	3	
Self-Efficacy Beliefs	Listening	8	42
	Speaking	8	
	Reading	8	
	Writing	8	
	SRL	10	

3.3.2 Modification

The questionnaires of existing literature need to be modified to collect data for this study. Initially, the researcher revised the wording of the self-efficacy questionnaire to match the Children's SILL. Namely, in the questionnaire of QESE wording, first-person replaced second-person singular, and the declarative replaced the question form. Meanwhile, adding an English

language learning task and first-person singular for each SRL questionnaire item aims to conform to the description of the Children's SILL. Then the researcher removed the subheadings of SILL, QESE, and SRL (see Appendix F) to avoid confusion for students when they read the questionnaires. Finally, the five-point Likert scale measured students' responses to questionnaires.

After the modifications, this set of questionnaires was more readable than the original version. Students could understand the meaning of the questionnaire items when reading these new descriptors.

Summary of Questionnaire Modifications

This study adopted the scales of the Children's SILL (Gunning, 1997), QESE (Wang et al., 2013), and SRL (Bandura, 2006) to examine the learning strategies and self-efficacy beliefs of primary school students. The modification of QESE and SRL questionnaires was to conform to the wording of the Children's SILL. After this modification, participants could understand and answer the questionnaires without difficulty.

3.3.3 Content

This section introduces the content of the questionnaires, including items on learning strategies and self-efficacy.

Learning Strategies in Questionnaire Survey

This study adopted the Children's SILL (Gunning, 1997) based on the ages and interests of the participants to examine students' use of learning strategies. Children's SILL used plain words to help students understand the questionnaire. The Children's SILL (see Appendix C) was to conform to

Oxford's (1990) SILL questionnaire widely adopted by earlier studies (Alhaisoni, 2012; Goh & Foong, 1997; Oxford, 1989; Xue, 2015). Meanwhile, the Chinese translation of Children's SILL of this study adapted from the version of Oxford and Su (2007) to examine EFL students' learning strategies. This Children's SILL contained thirty items categorized by the six major learning strategies. They were memory (Items 1–5), cognitive (Items 6–15), compensation (Items 16–19), metacognitive (Items 20–24), affective (Items 25–27), and social (Items 28–30). Each item presented an available strategy (e.g., *using rhymes to remember new words*).

Self-Efficacy Beliefs in Questionnaire Survey

The self-efficacy questionnaire contained two scales: the QESE and SRL scales. The researcher modified these two scales to conform to the wording of the SILL questionnaire. The QESE scale (see Appendix D) examined primary school students' self-efficacy beliefs across the four English skills even though this scale examined adolescents' self-efficacy beliefs in the previous study (Wang et al., 2013). Furthermore, the SRL scale adapted from the Children's Self-Efficacy Scale (Bandura, 2006) has a good validity (Zimmerman & Pons, 1986) to test learners' SRL efficacy (see Appendix E).

Students' self-efficacy beliefs are in multiple facets (Bandura, 2006). This study intended to measure students' four English skill self-efficacy beliefs in the QESE and their self-regulated learning in the SRL questionnaire. In other words, in this study, the questionnaire of self-efficacy beliefs contained two scales: (1) QESE: to examine learners' self-efficacy beliefs among the four English skills (Wang et al., 2013) and (2) SRL scale: to examine their self-efficacy for self-regulated learning (Bandura, 2006).

As mentioned, the self-efficacy beliefs in the questionnaire included two scales. The beginning part of this questionnaire was the QESE scale (Wang et al., 2013). This QESE scale consisted of thirty-two items including four skills: listening (Items 1, 3, 9, 10, 15, 22, 24, and 27), speaking (Items 4, 6, 8, 17, 19, 20, 23, and 30), reading (Items 2, 12, 16, 21, 25, 26, 29, and 32), and writing (Items 5, 7, 11, 13, 14, 18, 28, and 31). The next part of this questionnaire was the SRL scale consisting of ten items (Items 33–42) (Bandura, 2006).

3.4 Data Analysis

After the collected data of the questionnaires, this section describes the data analysis of this study to answer three research questions. The data analysis consisted of two stages. They were the data analysis from the pilot study and the data analysis from the formal research.

3.4.1 Preliminary Research

The implementation of preliminary research was in October 2017 before the main study. The pilot research examined the wording of the questionnaires and assessed the time required to answer the questionnaires (Van & Hundley, 2001). After collecting data of the preliminary research, the researcher adopted procedures to evaluate the feasibility of implementing the study as follows:

First, the analysis included data from forty-one students and excluded uncompleted answer sheets from two students. SPSS ran all collected data to analyze the three research questions. Exploratory factor analysis indicated that certain variables called components existed in the collected data. It was difficult to identify the components of the exploratory factor analysis because

of the too-small sample size (see Appendix B). However, the results of Kaiser-Meyer-Olkin (KMO), Bartlett Test of Sphericity (see Appendix A), and Total Variance Explained (see Appendix B) justified the employment of questionnaires. The reason is that the values of KMO were higher than .50; those of Bartlett Test less than .05 (IBM, 2019); those of components of Total Variance Explained also validated the collected data of this study.

The data analysis was complicated but necessary. One reason to perform the data analysis of the pilot study was to prove the validity of questionnaires, as mentioned in the last paragraph. Another reason for data analysis of pilot research was to reduce problems and conduct the main study. Cronbach's alpha for the pilot study was to check the reliability of questionnaires with a coefficient of .969, which indicated that the reliability of the questionnaire report was high and appropriate.

3.4.2 Main Study

The formal research data on students' learning strategies used and their English self-efficacy beliefs came from 324 primary school students. Participants in this study rated their answers on a Likert five-point scale. In other words, to complete the questionnaires, they had to answer their status of English learning on a five-point scale. The five levels about learning strategy use and self-efficacy beliefs in this study were: 1) Never or rarely, 2) Generally not the case, 3) Sometimes, 4) Often, 5) Always or almost always (Gunning, 1997).

The investigator used SPSS to analyze the data collected from the questionnaires. The use of three statistical methods analyzed the collected data. First, descriptive statistics such as mean (M) and standard deviations

(SD) could answer the first research topic. Second, the analysis of Pearson correlation coefficients could then answer the second research topic. In the end, the independent sample t-test results could answer the third research topic.

After the data analysis of this study, this section determines and explains the strength of the collected data. The definition of the frequencies of learning strategy use and self-efficacy beliefs are as follows: high (3.5–5.0), medium (2.5–3.4), and low (1.0–2.4) (Oxford, 1990). Furthermore, the strength of the Pearson correlation is as follows: extensive (0.5–1.0), intermediate (0.3–0.5), and miniature (0.1–0.3) (Lard, 2019). Finally, the result of the t-test is significant if the p-value is less than .05.

3.4.3 Summary of Data Analysis

Tables 3.3 and 3.4 summarize the data analysis of the preliminary research and the formal research.

Table 3.3

Summary on Data Analysis of Preliminary Research

Participants	43 students
Methods of Analysis:	Validity <ol style="list-style-type: none"> 1. Exploratory Factor Analysis 2. Kaiser-Meyer-Olkin (KMO) and Bartlett Test of Sphericity 3. Total Variance Explained Reliability: Cronbach's alpha

Table 3.4*Summary on Data Analysis of Main Research*

Participants	324 students
Methods of Analysis:	RT1: Descriptive Statistics RT2: Pearson Product-Moment Correlations RT3: Independent Sample t-test
Strength of Results	RT1 & 3: Low Frequency (1.0–2.4) Medium Frequency (2.5–3.4) High-Frequency (3.5–5.0) RT2: Small (0.1–0.3) Medium (0.3–0.5) Large (0.5–1.0) RT3: Significant (p-value <.05)

Note. RT1=the first research topic; RT2=the second research topic; RT3=the third research topic.

CHAPTER FOUR

RESULTS

This chapter presents quantitative data analysis, including three segments. The first segment displays the results of the language learning strategy questionnaire. The second focuses on the correlation between students' language learning strategies and self-efficacy beliefs. The third shows the gender differences in learning strategies and self-efficacy beliefs.

4.1 What Are the Main Learning Strategies for Primary EFL Students?

The results of six major learning strategies (categories) and five individual learning strategies used by students can answer this question.

4.1.1 Six Major Learning Strategies

This section presents the results of the six major learning strategies for the first research question. The answers to the first research topic were averages and ranking of the learning strategies (Table 4.1). The mean score of overall learning strategies ($M=3.035$) revealed that children were users of medium learning strategies. The range of learning strategies used by students was from 2.835 to 3.393. Learners used compensation strategies most often ($M=3.393$), followed by metacognitive strategies ($M=2.888$).

Table 4.1*Ranking and Means of Six Major Learning Strategies*

Learning Strategies	Mean	SD	Degree	Ranking
Compensation	3.393	0.973	Medium	1
Metacognitive	3.288	1.016	Medium	2
Affective	3.047	0.976	Medium	3
Social	3.032	1.048	Medium	4
Memory	2.891	0.907	Medium	5
Cognitive	2.835	0.911	Medium	6
Total	3.035	0.815	Medium	

4.1.2 Five Individual Strategies

Table 4.2 shows the results of the five most frequently used individual learning strategies for EFL students in primary school. The first most used was Item 18, a compensation strategy (*asking for help to know a word in English*) ($M=4.05$). In addition, students used Items 18, 22, 5, 28 in high-frequency ($M=4.05, 3.81, 3.65, 3.64$), and Item 24 in medium-frequency ($M=3.49$).

Table 4.2*Five Individual Learning Strategies*

Item No.	Strategy	Category	Mean	Ranking
18	asking for help to know a word in English	Compensation	4.05	1
22	listening attentively to others speaking in English	Metacognitive	3.81	2
5	reviewing English lesson	Memory	3.65	3
28	asking others to speak slowly or clarify in English	Social	3.64	4
24	analyzing the errors and avoiding repeating them	Metacognitive	3.49	5

4.2 What Is the Link Between Primary EFL Students' Learning Strategies and Their Beliefs of Self-Efficacy?

This section explains the association between primary school students' learning strategies and their sense of self-efficacy. First, different ways analyze relationships between learning strategies and self-efficacy beliefs (Tables 4.3~4.11). Then the correlations between learning strategies and self-efficacy beliefs are summarized to answer this research question.

4.2.1 Detailed Results

The researcher analyzed relationships between learning strategies and self-efficacy beliefs from different perspectives. They were overall learning strategies and general self-efficacy; six major strategies and general self-efficacy; overall learning strategies and five senses of self-efficacy; and six major strategies and five self-efficacy beliefs. The detailed results of the second research question are as follows:

Overall Learning Strategies and General Self-Efficacy

Students' overall learning strategy use correlated to general self-efficacy (Table 4.3). The correlation between them was high ($r=.804$). This result also registered that the more learning strategies students used, the stronger self-efficacy beliefs.

Table 4.3

Links Between Overall Learning Strategies and General Self-Efficacy

	Overall Learning Strategies	General Self-Efficacy
Overall Learning Strategies	1	.804**
General Self-Efficacy	.804**	1

** $p<.01$ (significant correlation, with an error of .01)

Six Major Strategies and General Self-Efficacy

Table 4.4 shows the correlations between the students' six major learning strategies and their general self-efficacy. The associations between

six major learning strategies and general self-efficacy revealed significant results. Students' general self-efficacy was correlated with six major learning strategy use as follows: memory ($r=.691, p<.01$), cognitive ($r=.793, p<.01$), compensation ($r=.604, p<.01$), metacognitive ($r=.729, p<.01$), affective ($r=.471, p<.01$), and social ($r=.604, p<.01$).

As stated by the results (Table 4.4), students' using the five learning strategies highly connected with general self-efficacy (.604 to .793) except that affective strategies had a medium association with general self-efficacy ($r=.471, p<.01$) (Lard, 2019).

Table 4.4

Correlations Between Learning Strategies and General Self-Efficacy

Variables	General Self-Efficacy
Memory Strategies	.691**
Cognitive Strategies	.793**
Compensation Strategies	.604**
Metacognitive Strategies	.729**
Affective Strategies	.471**
Social Strategies	.604**

** $p<.01$ (significant correlation, with an error of .01)

Overall Learning Strategies and Five Senses of Self-Efficacy

Overall learning strategies were related to five senses of self-efficacy, ranging from .673 to .770 (Table 4.5). These learning strategies had the highest relationship with SRL efficacy ($r=.770, p<.01$). The correlations

between overall learning strategies and four self-efficacy beliefs were:
reading ($r=.755, p<.01$), listening ($r=.716, p<.01$), writing ($r=.688, p<.01$),
and speaking ($r=.673, p<.01$).

Table 4.5

Correlations Between Overall Learning Strategies and Five Senses of Self-Efficacy

Variables	Listening	Speaking	Reading	Writing	SRL
Overall Learning Strategies	.716**	.673**	.755**	.688**	.770**

** $p<.01$ (significant correlation, with an error of .01)

Six Major Strategies and Five Self-Efficacy beliefs

Table 4.6 shows the correlations between memory strategies and the five senses of self-efficacy. The correlation scores were high, from .586 to .650. The strongest association with memory strategies was SRL efficacy ($r=.650, p<.01$).

Table 4.6

Links Between Memory Strategies and Five Senses of Self-Efficacy

Variables	Listening	Speaking	Reading	Writing	SRL
Memory Strategies	.606**	.586**	.630**	.601**	.650**

** $p<.01$ (significant correlation, with an error of .01)

According to Table 4.7, the correlations between cognitive strategies and five self-efficacy beliefs are significant. The correlation scores were high,

from .669 to .743. The association between cognitive learning strategies and reading efficacy was the highest ($r=.743, p<.01$). The association between cognitive learning strategies and speaking efficacy beliefs was the lowest ($r=.669, p<.01$).

Table 4.7

Links Between Cognitive Strategies and Five Senses of Self-Efficacy

Variables	Listening	Speaking	Reading	Writing	SRL
Cognitive Strategies	.728**	.669**	.743**	.695**	.713**

** $p<.01$ (significant correlation with an error of .01)

Table 4.8 presents the correlations between compensation strategies and five senses of self-efficacy. Four of the five correlations were extensive ($r=.540, .596, .538, .565, p<.01$), and the correlation between compensation strategies and speaking efficacy was medium ($r=.484, p<.01$). The strongest association was between compensation strategies and reading efficacy beliefs ($r=.596, p<.01$); however, the lowest association was between compensation strategies and speaking efficacy beliefs ($r=.484, p<.01$).

Table 4.8*Links Between Compensation Strategies and Five Senses of Self-Efficacy*

Variables	Listening	Speaking	Reading	Writing	SRL
Compensation Strategies	.540**	.484**	.596**	.538**	.565**

** $p < .01$ (significant correlation, with an error of .01)

According to Table 4.9, the correlation results are significant. The results ranged from .582 to .737. The correlations were significantly high between metacognitive strategies and five self-efficacy beliefs. However, the weakest correlation was between writing efficacy and metacognitive strategies ($r = .582, p < .01$). The results of correlations as follows: listening ($r = .618, p < .01$), speaking ($r = .633, p < .01$), reading ($r = .680, p < .01$), writing ($r = .582, p < .01$), and SRL ($r = .737, p < .01$) (Lard, 2019).

Table 4.9*Links Between Metacognitive Strategies and Five Senses of Self-Efficacy*

Variables	Listening	Speaking	Reading	Writing	SRL
Metacognitive Strategies	.618**	.633**	.680**	.582**	.737**

** $p < .01$ (significant correlation, with an error of .01.)

In Table 4.10, affective strategies have medium relationships with the five self-efficacy beliefs. The medium correlations of self-efficacy beliefs with affective strategies were as follows: listening ($r = .439, p < .01$), speaking ($r = .345, p < .01$), reading ($r = .450, p < .01$), writing ($r = .390, p < .01$), and SRL

($r=.498, p<.01$) efficacy. Among these correlation results, speaking efficacy ($r=.345, p<.01$) had the weakest relationship with affective strategies.

Table 4.10

Links Between Affective Strategies and Five Senses of Self-Efficacy

Variables	Listening	Speaking	Reading	Writing	SRL
Affective Strategies	.439**	.345**	.450**	.390**	.498**

** $p<.01$ (significant correlation, with an error of .01.)

In Table 4.11, the results show relationships between social strategies and five self-efficacy beliefs. These results indicated strong correlations between social learning strategies and self-efficacy beliefs, including listening ($r=.510, p<.01$), speaking ($r=.509, p<.01$), reading ($r=.556, p<.01$), writing ($r=.508, p<.01$), and SRL ($r=.631, p<.01$) efficacy. The correlation ranged from .508 to .631. The strongest association was between social strategies and SRL efficacy ($r=.631, p<.01$).

Table 4.11

Links Between Social Strategies and Five Senses of Self-Efficacy

Variables	Listening	Speaking	Reading	Writing	SRL
Social Strategies	.510**	.509**	.556**	.508**	.631**

** $p<.01$ (significant correlation, with an error of .01.)

4.2.2 Result Summary of the Second Research Question

The researcher applied diverse methods to analyze the correlations between students' learning strategies and self-efficacy beliefs. The results are as follows:

1. The association between overall learning strategies and general self-efficacy was strong (Table 4.3).
2. Students' cognitive strategy use had the strongest association with general self-efficacy (Table 4.4).
3. The correlation between SRL efficacy and overall learning strategies was the strongest (Table 4.5).
4. The six major learning strategies and five self-efficacy beliefs had two findings. First, students' reading efficacy correlated the strongest with their cognitive and compensation strategy use (Tables 4.7 and 4.8). Second, the correlations between students' SRL efficacy and their use of memory, metacognitive, affective, and social strategies were the strongest (Tables 4.6, 4.9, 4.10, and 4.11).

4.3 Do Boys and Girls Differ in Their Learning Strategies and Self-Efficacy?

The t-test results of learning strategies and self-efficacy beliefs answered the third question. The following section explains the gender differences of students in language learning strategies and self-efficacy.

4.3.1 Gender Differences in Learning Strategies

This segment displays male and female students' use of the six major learning strategies. Table 4.12 shows the results of the gender discrepancies in the six major learning strategies. Some male and female learning strategies showed significant discrepancies, but the other results were similar. In more detail, after the statistical results of t-tests, the learning strategies for significant discrepancies between males and females were compensation ($t_{(322)} = -2.520, p < .05$), metacognitive ($t_{(322)} = -2.532, p < .05$), and social ($t_{(322)} = -2.509, p < .05$). The learning strategies for similarity between males and females were memory ($t_{(322)} = -.730, p < .466$), cognitive ($t_{(322)} = -.888, p < .375$), and affective ($t_{(322)} = -1.315, p < .189$).

In addition, both males and females adopted compensation strategies the most often ($M=3.276$ & 3.549) but cognitive strategies the least ($M=2.796$ & 2.887). Generally, females adopted English learning strategies more often than males ($M=3.133, SD=0.806$; $M=2.962, SD=0.817$). Both male and female students were medium-frequency users.

Table 4.12*Gender Differences in Learning Strategies*

Learning Strategies	Boys			Girls			t	p
	N	Mean	SD	N	Mean	SD		
Compensation	185	3.276	0.993	139	3.549	0.926	-2.520*	.012
Metacognitive	185	3.165	0.991	139	3.452	1.029	-2.532*	.012
Social	185	2.906	1.041	139	3.199	1.038	-2.509*	.013
Memory	185	2.859	0.935	139	2.934	0.871	-.730	.466
Cognitive	185	2.796	0.910	139	2.887	0.913	-.888	.375
Affective	185	2.986	0.974	139	3.129	0.977	-1.315	.189
Total	185	2.962	0.817	139	3.133	0.806	-1.869	.062

* $p < .05$ **4.3.2 Gender Differences in Self-Efficacy Beliefs**

This part displays the t-test results of EFL learners' English self-efficacy beliefs. There were five senses of self-efficacy examined in this study. These five self-efficacy beliefs were listening, speaking, reading, writing, and SRL.

For EFL learners' gender differences in self-efficacy beliefs, Table 4.13 presents the statistical results, including means, standard deviations, gender groups, and t-tests. There are two findings of the self-efficacy beliefs of boys and girls. First, the SRL efficacy of both boys and girls had the highest average scores ($M=3.163$, $SD=0.965$; $M=3.558$, $SD=0.981$) but the lowest average speech performance ($M=2.436$, $SD=1.046$; $M=2.505$, $SD=1.108$). Second, boys and girls had similar self-efficacy beliefs in four English skills but a significant difference in SRL ($t_{(322)}=-3.619$, $p<.001$). This result indicated that girls had more SRL efficacy than boys.

Table 4.13*Gender Differences in Self-Efficacy Beliefs*

Self-Efficacy Beliefs	Boys			Girls			<i>t</i>	<i>p</i>
	N	Mean	SD	N	Mean	SD		
Listening	85	2.807	1.057	139	2.851	1.046	-.370	.712
Speaking	185	2.436	1.046	139	2.505	1.108	-.578	.564
Reading	185	2.661	0.981	139	2.845	0.995	-1.659	.098
Writing	185	2.465	1.080	139	2.608	1.281	-1.089	.277
SRL	185	3.163	0.965	139	3.558	0.981	-3.619	.000***
Total	185	2.706	0.913	139	2.863	0.973	-1.487	.138

*** $p < .001$



CHAPTER FIVE

DISCUSSION

This chapter will discuss three research foci in depth. The discussion consists of two parts, based on the results of Chapter Four and existing literature. In the beginning, the results of previous studies aim to respond to those of this study. Next, the section will discuss the possible factors of the research results. These factors are students' duration of English learning, strategy awareness, cultural background, and teachers' assistance.

5.1 Comparison of Similarities Among Studies

This section shows the comparison of similarities among studies to support the results of this study. The comparison of similarities is according to the order of the three research questions.

5.1.1 What Are the Main Learning Strategies for Primary EFL Students?

This study has shown the rankings and the average scores of the learning strategies used by students (Tables 4.1 & 4.2). Based on these two tables, the following two sections discuss students' use of six main and five individual learning strategies.

Six Major Learning Strategies

The frequency of learning strategies used can reflect the strength of the learning strategies used by students. In the current study, the mean score of the learning strategies is medium ($M=3.035$) (Table 4.1), which is similar to

the results of previous studies (Lan & Oxford, 2003; Xue, 2015).

This research analyzed the ranking of learning strategies (Table 4.1).

Among the results of the six major learning strategies, there were two specific findings. Compensation strategies were the most commonly used in this research. This result is in line with the results of earlier studies (Lan & Oxford, 2003; Xue, 2015; Yilmaz, 2010). The other is that the cognitive strategies were the least minimally applied by participants in this study. This result is in line with Gunning's (1997) research.

Five Individual Learning Strategies

Table 4.2 shows the results of the five individual learning strategies most used by students. According to these results, two findings are consistent with earlier studies (Lan, 2005; Lan & Oxford, 2003; Stracke, 2016). First, the compensation strategy, Item 18 (*asking for help to know a word in English*), was the most commonly used by students. The reason may be that all the participants in these studies were primary school students. They understood some beginning English words and knowledge. They had to use the learning strategy (*asking for help to know a word in English*) to advance their English learning (Oxford, 1990). Another finding is that students rarely used cognitive strategies. The reason may be that these young learners were immature in developing their earlier cognitive skills (Moon, 2000).

5.1.2 What Is the Link Between Primary EFL Students' Learning Strategies and Their Beliefs of Self-Efficacy?

As shown by the answers to the questionnaires, all correlations were significant between students' learning strategies and their beliefs of self-efficacy ($p < .01$). The following section presents the similarities of results between the current and previous studies.

Self-Efficacy Beliefs and Learning Strategies

This study investigated the dependencies of learning strategies and beliefs of self-efficacy. The current study revealed a positive connection between them. In other words, the more learning strategies students used, the stronger their sense of self-efficacy. This result is consistent with earlier studies (Kargar & Zamanian, 2014; Magogwe & Oliver, 2007; Wong, 2005). In addition, the comparison between the current research and literature studies consists of three sections to support the relationships between learning strategies and self-efficacy beliefs. First, among the correlations, general self-efficacy scored the highest in cognitive ($r = .793, p < .01$) and metacognitive strategies ($r = .729, p < .01$) (Table 4.4). Learners believed that they could adopt more cognitive and metacognitive learning strategies when performing assignments. They favored both learning strategies (Pajares & Schunk, 2001). Second, the relationship between SRL efficacy and metacognitive strategies was the strongest (Table 4.9). This result is similar to that of Pajares and Schunk's (2001) study. This previous study showed that metacognitive strategies were affected by SRL efficacy related to student performance in class, homework, and exams. Finally, reading efficacy beliefs had the most frequent correlation with cognitive strategies ($r = .743, p < .01$)

(Table 4.7). This result is in line with earlier studies (Naseri & Zaferanieh, 2012; Zare & Mobarakeh, 2011).

5.1.3 Do Boys and Girls Differ in Their Learning Strategies and Self-Efficacy?

This section will focus on similarities among studies on gender differences in learning strategies and self-efficacy beliefs. In this study, the results of girls' learning strategies and self-efficacy beliefs had higher overall average levels than those of boys (Tables 4.12 and 4.13). The following two paragraphs will discuss the similarities among this study and previous research on gender differences in learning strategies and self-efficacy beliefs.

First, the overall average level of girls' learning strategies was higher than that of boys in this study. The results of females using learning strategies more frequently than males are similar to those of previous studies (Alhaisoni, 2012; Goh & Foong, 1997; Oxford, 1989; Xue, 2015). Oxford et al. (1988) showed that females were more capable than males in language learning, which supports the results of the present study that the language learning ability of girls is better than that of boys. In addition, some of the findings on gender differences are similar to those of previous studies. For example, the current research results of metacognitive, social, affective, and memory strategies are consistent with Xue's (2015) research. The research of Goh and Foong (1997) supports the current research results of compensation, memory, and cognitive strategies. The present research results of affective, memory, social, and cognitive learning strategies are consistent with Alhaisoni's (2012) research.

Second, self-efficacy beliefs are students' judgments of what they can

accomplish and are crucial arbiters of their academic achievements (Bandura, 1997). These judgments of confidence, or self-efficacy beliefs, are noted to work as mediators between their academic achievements and subsequent performance. The current research showed that boys and girls had similar self-efficacy beliefs in four English skills. These results are identical to previous research (Bonyadi et al., 2012). Additionally, the current study showed a gender difference in SRL efficacy. Females showed significantly higher SRL efficacy than their male counterparts. This result of SRL efficacy is identical to those of earlier investigations (Pajares & Graham, 1999; Pajares & Valiante, 2001; Pajares, 2002; Zimmerman & Martinez-Pons, 1990). The reason may be that females were better than males in establishing learning environments and organizational plans (Zimmerman & Martinez-Pons, 1990). Females enabled themselves to be self-regulated, and they realized their settings influenced them. Females self-monitored more frequently than males in primary schools (Pajares, 2002). Females in primary schools had higher SRL efficacy than males (Pajares & Graham, 1999).

5.2 Discussion of Possible Factors

This section discusses the factors that may affect the results of this study. There are two parts to these factors. First, the discussion includes causes that affected students' learning strategies and self-efficacy beliefs in this study. The determinants are students' duration of English learning and their strategy awareness. Second, the discussion contains possible causes of the current research context that affected students' learning strategies and self-efficacy beliefs. The factors include cultural background and teachers' assistance.

5.2.1 Duration of English Learning

Oxford (1989) believed that students' duration of English learning was one of the factors that affected their use of learning strategies. Students' duration of English learning sometimes implied their proficiency according to the course levels they had attended and years of language study. Course levels and years of studying English are the two points discussed in this section.

Course Level

Grade levels (course levels) have been one factor that affects learners' learning strategy use (Hsu, 2007; Lan, 2005; Oxford, 1989). As some researchers claimed, when students progressed to higher-level courses, they used different strategies. Higher-level students would use more active learning strategies than lower-level ones (Politzer, 1983). The subsequent section discusses learning strategies that vary with the course level.

Some findings also show that the curriculum level of students might affect their use of learning strategies. For example, Chamot (1987) found that due to the improvement of foreign language courses, the cognitive learning strategies used by students decreased, and the metacognitive learning strategies increased. In addition, Bonyadi et al. (2012) and Hsu (2007) found that students attended private English language institute courses more advanced than those of the school. Compared with those who had no attendance of these courses, they used more learning strategies, especially metacognitive strategies.

In the current study, the pattern of learning strategies used is different from those of previous studies because students attended different course levels. First, the participants of this study were dependent on basic knowledge

and words of English to learn. They had to use compensation strategies to advance their English learning. They needed to use compensation strategies to retrieve their lack of English knowledge through guessing, gestures, repetition, and note-taking (Oxford, 1990). Therefore, they used compensation strategies the most. Second, because of the course level beyond their English, the students of this study became more independent of learning and used metacognitive strategies the second-most. Third, the students in this study used cognitive learning strategies the least. One reason is that students' development of cognitive skills was at an early stage (Moon, 2000). The other reason is that the course level of the current study lacked improvement (Chamot, 1987).

Years of Studying English

Bonyadi et al. (2012) found that students' years of studying English had developed significant discrepancies in the use of metacognitive strategies. This study also showed that students' years of educational experience led them to prefer some strategies (e.g., Metacognitive strategies) over others. Students who tended to be independent understood how to apply metacognitive strategies to preserve their autonomy in learning (Atehortúa, 2010). In the current study, the participants had been learning English for six years. Their time to learn English was shorter than those of Bonyadi et al. Therefore, the students of the current study used the metacognitive strategies as the second most. The researcher of this study supposed that after years of studying English, students of the present research would become more independent, metacognitive strategies would become the learning strategies that these students most frequently used.

The affective domain impacts students' use of learning strategies (Brown, 2014; Oxford, 1989) and it is related to their periods of English learning. In other words, the duration of English learning affected students' use of affective strategies (Shi, 2018). In the beginning, students could maintain positive attitudes by using affective learning strategies in failures. After using these strategies and skills, they could have a stronger belief in self-efficacy than before. The more years of studying English the students had, the less they used affective strategies (Shi, 2018). The more years they had learned in English, the stronger their self-efficacy beliefs (Bonyadi et al., 2012). In the current study, the affective learning strategy used had a medium relationship with students' self-efficacy beliefs (Table 4.4). After using affective learning strategies to assist their English learning for years, the students in the current study had more confidence in their English performance than before. It can be supposed that after a long period of English learning, these primary school students would use less affective strategies in the future.

Previous studies had confirmed significant differences in students' learning strategies due to years of studying English (Bonyadi et al., 2012; Oxford & Nyikos, 1989). These previous studies claimed that learners who had studied English for a long time used specific learning strategies than those who had studied English for a short time. In Hsu's (2007) study, the gender difference of participants in learning strategies was similar. This result was different from that of the current research. In the present study, boys and girls had significant differences in compensation, metacognitive, and social strategies. This result was likely that participants' duration of English language study affected their learning strategies. Compared with third and fourth-graders, sixth-graders had developed different learning strategies used

after two years of English learning.

5.2.2 Strategy Awareness

This section will discuss how students' strategy awareness affects their English learning. Metacognitive awareness will affect students' use of learning strategies. In other words, students' understanding of themselves and learning processes such as their English levels, feelings, aptitude, physical states, and more will affect their use of English learning strategies (Wenden, 1986).

Strategy Awareness of Learning Strategies Used by Students

Participants in this study used cognitive strategies the least. This result is different from the study of Wong (2005), in which students used cognitive learning strategies the most. Wong's research results showed that pre-service teachers had indeed made efforts in using cognitive learning strategies, and they had increased their strategy awareness because of more advanced English levels (Mendesohn, 1986). Pre-service teachers sent and received English information; read and wrote English texts; watched TV, movies, and news in English; listened to English songs; and communicated with others in English. Students in this study might lack sufficient knowledge of English to understand how to use cognitive strategies. They rarely used cognitive learning strategies (repetition, analysis, and summary) to learn English. They also seldom used cognitive learning strategies to learn new languages, think logically or understand the main points of paragraphs (Oxford, 1990).

Regarding learning strategies, the previous section discussed strategy awareness concerning students in the current study and pre-service teachers

in the earlier study (Wong, 2005). After that, the discussion will be children's strategy awareness in the present and earlier studies (Lan, 2005; Lan & Oxford, 2003).

Lan and Oxford (2003) investigated learning strategies used in Taiwanese primary school students. They found that primary school students used to ask for help when learning English. Students made a guess based on context. When their communication encountered obstacles, they found new forms of expression. Compared with the above statement, primary school students' strategy awareness has changed and developed in Taiwan. For example, the learning strategy, Item 28 (*asking others to speak slowly or clarify in English*), belonged to social learning strategies (Table 4.2). The ranking of Item 28 in this study is lower than those of previous studies (Lan, 2005; Lan & Oxford, 2003). The reason for this finding could be that the sixth-graders were more fearful of asking others for help than the middle-graders. Some students had experienced refusal by others to clarify their requests. Even if they often used this strategy, this experience had become an obstacle to their progress. In addition, the only individual compensation strategy was Item 18 (*asking for help to know a word in English*) (Table 4.2). In the current and earlier study (Lan & Oxford, 2003), students favored this learning strategy (*asking for help to know a word in English*), which means that students seek help to understand words. This learning strategy was similar to a social learning strategy, which needed clarification. The difference from social learning strategies was that when getting help, students would use this item of compensation strategy. They hoped that others would only provide the meaning of words beyond their understanding (Oxford, 1990).

Among the five individual strategies, Item 24 (*analyzing the errors and avoiding repeating them*) belonged to metacognitive strategies in the current study (Table 4.2). Lan (2005) believed that Taiwanese students had a strong sense of avoiding repeated mistakes that stemmed from the traditional test-oriented English teaching and the Grammar-Translation teaching. For many years, these two methods have dominated English teaching in Taiwan. Due to the dominance of these English teaching methods, Lan also believed that, for most learners, metacognition failed to be the focus of their cognition. The reason may be that the education system seldom promoted initiative, self-direction, or self-regulation throughout the learning process. Here, the researcher slightly modified this reason to explain the results of the current study. The learning strategy (*analyzing the errors and avoiding repeating them*) was the fifth in this study (Table 4.2), which students used the most often in Lan's (2005). Students in this study had gradually changed their strategy awareness to take the initiative differently from those in Lan's (2005) research. At least, instead of the traditional test-oriented English teaching and the Grammar-Translation method to promote students' initiative, teachers in Taiwan have made efforts to use student-centered teaching in these years to help students use metacognitive strategies.

Strategy Awareness on Students' Learning Strategies and Reading Efficacy

Students' strategy awareness also can be identified by the relationship between learning strategies and self-efficacy beliefs. Among the relationships of the current study, students' reading efficacy correlated highly in cognitive and compensation learning strategies (Tables 4.7 and 4.8). Students could more effectively reach their learning goals if they employed English learning

strategies more frequently in their reading process (Chamont, 2005; Naseri & Zaferanieh, 2012). Naseri and Zaferanieh (2012) showed that students with high reading efficacy used cognitive strategies the most and compensation strategies the least. However, because of strategy awareness, the students in the current study used cognitive learning strategies the least but compensation strategies the most, which are different from Naseri and Zaferanieh (2012). This finding indicated that the students' reading efficacy in the present study was weaker than those of Naseri and Zaferanieh's (2012) study. The students in the current study used compensation strategies to help their comprehension of English reading more frequently than those in Naseri and Zaferanieh (Zhang, 1993). For example, children read stories with pictures (Lan & Oxford, 2003). Students could guess the meaning of the story by context. In school, reader theaters and chants helped pupils enjoy reading and confidence in English. In the performance of the reader theater, students' physical motion helped them understand the content of reader theater (Oxford, 1990).

Strategy Awareness of Learning Strategies Used by Boys and Girls

According to previous studies, strategy awareness may affect learning strategies by males and females. For example, in Xue's (2015) research, males relied mainly on compensation strategies to learn English. Compensation strategies were the most favored strategies of males. Compensation strategies helped them communicate with others even though their English knowledge was limited, as noted by a male interviewee. He described that it was unnecessary to pay attention to the way natives spoke once his partners could understand him. He could express himself in his way and language. He also believed that body language could help him

communicate with others when he spoke English (Xue, 2015). This statement offered evidence that students' strategy awareness impacted their learning strategies used.

In addition, previous studies (Bonyadi et al., 2012; Shmais, 2003) have shown that participants' strategy awareness might make gender discrepancies similar in their learning strategies. The college students of earlier research (Bonyadi et al., 2012; Shmais, 2003) understanding of the English learning processes reduced the gender differences. They understood how to improve their English through learning strategies. However, in the present study, the gender difference in compensation strategies was significant. Males used compensation strategies less than their female counterparts. They failed to understand the English learning process as much as university students. Children's awareness of English learning processes influenced the gender effect in the current study.

5.2.3 Cultural Background

This research showed a positive correlation between participants' learning strategies and self-efficacy beliefs. From a perspective of the relationship between learning strategies and self-efficacy beliefs, the following section will discuss how the cultural background of this research and earlier research affected students' English learning.

Students' cultural backgrounds impact their English learning strategies used and self-efficacy beliefs. For example, the research of Bonyadi et al. (2012) revealed that their cultural backgrounds failed to offer the participants sufficient skills to learn English. Educators and researchers lacked new information about this field. Therefore, students neither had information

about English learning strategies from teachers nor understood how to use learning strategies. Bonyadi et al. (2012) revealed no link between learning strategies and the strength of self-efficacy beliefs. However, there was a connection between students' learning strategies and their self-efficacy beliefs in the current study. The current cultural background of the research provided more opportunities for sixth-grade students to learn English. They could make use of English skills in an authentic context. In this context, they had information about English learning strategies and beliefs in self-efficacy. Both learning strategies and self-efficacy beliefs helped them use English skills.

Another example of affecting students' use of learning strategies and self-efficacy beliefs to learn English because of cultural background is the research conducted by Shi (2018) in the United States. In Shi's study, the participants immersed themselves in English in their daily lives. They rarely used learning strategies to learn English. Because of the background of English as an official language, the link between learning strategies and self-efficacy beliefs was weak in Shi's study. On the contrary, in the current study, children failed to immerse themselves in a learning environment where English was the official language. Learning strategies of participants frequently had strongly linked with self-efficacy beliefs when learning English. In short, the cultural backgrounds studied affected students' use of learning strategies and their self-efficacy beliefs.

5.2.4 Teachers' Assistance

Teachers play a crucial role in the process of students learning English. They acted as guides making learning easier for students. When teachers

played facilitating roles, students followed teachers' guidance to find their path to success (Brown & Lee, 2015).

Teachers Helping Students Use Learning Strategies

To help students succeed in English learning, teachers should learn how to apply learning strategies (Lan, 2005). Teachers started showing students how to use learning strategies when teachers incorporated them into regular language teaching. This teaching method could help students use learning strategies to deal with the challenges in English learning (Lan, 2005). The following section discusses teachers' assistance on students' affective, social, memory, and cognitive strategies.

First, teaching affective strategies helps students have greater motivation and a more positive attitude towards English learning (Wong, 2005). Teachers have to be sensitive to the existing mindsets of some learners because affective strategies are to be novel and unnatural to students (Xue, 2015). In the current study, teachers taught students to use affective strategies to help them learn English. Affective strategies were the third most frequently used learning strategies for students in this study. This result is different from previous studies, which revealed that affective strategies minimally were used by students (Wong, 2005; Xue, 2015). Teachers have to encourage students to use affective strategies and help students learn English. In this way, students decreased their negative feelings caused by parents' expectations, academic performance, and peer pressure (Lan & Oxford, 2003). Students, who could understand how to use affective strategies, maintain their emotions, motivations, values, and attitudes effectively with teachers' help. Students learned to encourage themselves by making positive statements. For example,

teachers could tell students “losing means try again” when they failed to win in games or competitions. Teachers helping students take calculated risks improved students’ sense of achievement (Oxford, 1990). After students’ achievement improved, the joy of learning increased, and the nervousness of English learning subsided. Students rewarded themselves when their performance improved. They would be full of confidence and motivation in the learning process.

In addition, when teachers acted as facilitators in the classroom, their teaching of social strategies helped students’ English learning success. The “scaffolding” provided by the teacher during the learning process contained various supports to promote and enhance learning (Scarcella & Oxford, 1992). In other words, educators can teach students new social strategies and help them improve the social learning strategies used. After that, without the support of teachers, learners can adapt their social learning strategies and continue their learning process. Students can learn English without teachers’ help after using social learning strategies (Oxford & Nyikos, 1989). In this study, students frequently used social learning strategies, which was the fourth most used strategy. Students needed more effort to use social learning strategies if they had a competitive spirit. To help learners, teachers have to use and teach social learning strategies to understand others’ perspectives. Students could support each other inside or outside the classroom by applying social learning strategies. In short, teachers can help students realize that social learning strategies involve amounts of human contact and interaction. This understanding could help students communicate better with others and learn more English than before (Lan & Oxford, 2003; Oxford, 1990).

Moreover, students can use memory strategies to learn English with the

help of teachers because memory strategies could help learners store a new language they had learned and retrieve information from memory. A way to use memory strategies is through the teaching method of “Total Physical Response.” Teachers use this teaching method and let students move different actions to remember English. Oxford (1990) believed that the physical movement helped engrave a new target language in students’ memory. However, Lan & Oxford’s (2003) study showed that Kinesthetic learners, who used significantly memory-related methods, rarely used memory strategies. The reason may be that students in Lan and Oxford’s study still needed teachers’ help to use memory strategies because of their limited vocabulary. In this study, students had overcome the limitation of words with the help of teachers. These students used memory strategies slightly better than Lan and Oxford’s students.

Finally, schools can provide an English learning environment for children with teachers’ help because students used the least cognitive strategies in this study. Teachers could create a learning environment for children to learn cognitive learning strategies (Moon, 2000). After developing the learning environment, students can learn English both inside and outside the school. In this learning environment, cognitive strategies play a role in the students’ minds. Students could transfer cognitive learning strategies that they had learned to their interactions. After teachers teach cognitive learning strategies, students build language knowledge (Wikipedia, 2019).

Teachers’ Self-Efficacy Beliefs Affecting Students’ English Learning

Teachers’ self-efficacy beliefs affected their teaching practice and students’ academic achievement (Tschannen-Moran et al., 1998). If educators

were aware of the benefits of self-efficacy beliefs, students' second language acquisition could be affected by strengthening their self-efficacy beliefs (Kargar & Zamanian, 2014). To achieve this purpose, teachers could supply the resources of self-efficacy beliefs to train and develop students. Teachers developing educational programs can provide knowledge of self-efficacy beliefs and cause students to develop them further through meaningful tasks and activities (Pajares, 2003). Educators, for example, could convey their self-efficacy beliefs by facilitating, encouraging, and supporting their students. After that, students could learn to control their emotions through meaningful activities. Students could understand learning materials and have a strong sense of belief in themselves (Mills & Clyde, 1991).

In addition, teachers need to receive regular training to face the changeable world and help students learn English. In Stanikzai's (2019) study, the exchange program provided teachers with opportunities to apply these practices in the classroom. These trained teachers ultimately helped males to adjust their learning by themselves. Therefore, the results of Stanikzai's (2019) study lacked significant gender discrepancies in SRL efficacy. However, the students in the current study showed a significant gender discrepancy concerning SRL efficacy. Females had higher SRL efficacy than their male counterparts. This result may be due to the lack of the necessary educational skills and training for teachers in the current study. This kind of education and training, which may have improved the teaching skills of teachers, provided males with better English learning than before and could help males obtain better SRL efficacy.

CHAPTER SIX

CONCLUSION

This chapter begins by summarizing the research findings. Next, the implications of this research are to focus on the field of primary education to refine the study of students' learning strategies and their self-efficacy beliefs. The last part of this chapter includes the limitations of this study and suggestions for further research.

6.1 Review of Research Findings

The key results of this study showed primary school students' learning strategies and self-efficacy beliefs. Concerning the use of learning strategies, its frequency was medium. Students' learning strategies were related to their English self-efficacy beliefs. Meanwhile, students had gender discrepancies in social, compensation, metacognitive strategies, and SRL efficacy.

After the main results of the current study, this section shows more detailed results. In the beginning, the detailed results involved students' use of learning strategies. Compensation strategies were the most often used learning strategies; metacognitive strategies were the second most often used; cognitive strategies were the least frequently used by students. As the results of the questionnaires, then a clear correlation existed between learning strategies and self-efficacy beliefs. All the results of the correlations were at the .01 level ($p < .01$). Among the six major learning strategies, cognitive strategies strongly correlated with general self-efficacy; among the five self-efficacy beliefs, reading efficacy strongly correlated with cognitive

strategies. This study probed students' gender differences in learning strategies and self-efficacy beliefs. Girls adopted learning strategies more frequently and had stronger self-efficacy beliefs than boys. The results showed that boys and girls had significant discrepancies in their (social, compensation, and metacognitive) learning strategies and SRL efficacy. Moreover, males and females were similar in learning strategies (memory, affective, and cognitive) and self-efficacy beliefs (speaking, listening, reading, and writing).

6.2 Pedagogical Implications

The findings of this study provide implications by reviewing the earlier studies in Taiwan. Some Taiwanese studies (Lin, 1999; Shieh, 1995; Wang, 2002; Yang, 1999) proved the correlation between learning strategy use and language achievements. These earlier studies showed that higher English achievers were more inclined to use learning strategies than lower achievers. Therefore, educators need to integrate learning strategy disciplines in the second language classroom in primary schools to ensure a positive learning environment (Chamot & El-Dinary 1999).

In this study, the association between children's learning strategies and self-efficacy beliefs was positive and significant. These results also have some pedagogical implications. These implications are that students' self-efficacy beliefs and learning strategies impacted each other. The more learning strategies students use, the stronger self-efficacy beliefs they have. In brief, the current study offers a better understanding of children's self-efficacy beliefs and their learning strategies used than previous studies.

6.3 Limitations

Although the given goals of this study are valid, the designs may still have some unavoidable limitations. For example, in preliminary research, the sample size of participants was too small to identify data through exploratory factor analysis. Furthermore, the participants of this study were from only two primary schools. The external validity and generalization of the current research are uncertain. In other words, this study may show different results when investigators conduct the questionnaires in other locations.

In addition, researchers usually exclude questionnaire items to bolster the validity of their studies. However, because the questionnaires of this study had validity and reliability, the researcher maintained complete questionnaires to explore information about children's English learning strategies and their self-efficacy beliefs.

6.4 Suggestions for Further Research

Despite the limitations of questionnaires, the focus and methods of this study provide opportunities for further research. Future studies on learning strategies and self-efficacy beliefs could investigate diverse backgrounds. The background of future research may focus on indicative variables of students' English learning competence, such as socioeconomic backgrounds, English achievements, and age (Oxford, 1989). Moreover, most relevant studies on children's learning strategies and self-efficacy beliefs were temporary. Therefore, longitudinal studies of them may become a crucial topic in the future.

Zeldin et al. (2008) investigated learners' self-efficacy beliefs and their relationships with mathematics and technology careers. This earlier study

showed that compared with males, females preferred social persuasions and vicarious experiences, while males preferred mastery experience. Language research can focus on these facets of self-efficacy beliefs in the future to provide references for language learning.

The collected data in this study was through the children's self-report questionnaires. After quantitative analysis in this study, additional properties of qualitative methods are necessary for further research (Stracke, 2016). Properties of qualitative research can be classroom observations and semi-structured interviews after class (Nunan, 1992). Researchers may adopt these qualitative methods in future investigations to gain in-depth information on language learning.

Finally, most of the self-efficacy belief scales apply to adolescents or adults. In this study, the SRL efficacy scale is the only scale that aims for children. Few studies have targeted children's self-efficacy beliefs. Therefore, future studies can develop instruments of children's self-efficacy beliefs.

REFERENCES

- Alhaisoni, E. (2012). Language learning strategy use of Saudi EFL students in an intensive English learning context. *Asian Social Science*, 8(13), 115.
- Atehortúa, J. N. A. (2010). COGNITIVE STYLES: AN APPROACH TO AUTONOMOUS LEARNING IN L2 ADULT STUDENTS. *Revista Q*, 4(8).
- Bandura, A. (1984). Recycling misconceptions of perceived self-efficacy. *cognitive therapy and research*, 8, 231-255.
- Bandura, A. (1997). *Self-efficacy : the exercise of control* / Albert Bandura. W.H. Freeman.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual review of psychology*, 52(1), 1-26.
- Bandura, A. (2006). Guide for constructing self-efficacy scales. *Self-efficacy beliefs of adolescents*, 5(1), 307-337.
- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (2001). Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child development*, 72(1), 187-206.
- Bolitho, R., & Tomlinson, B. (1995). *Discover English: (a language awareness workbook)*.
- Bonyadi, A., Nikou, F. R., & Shahbaz, S. (2012). The Relationship between EFL Learners' Self-Efficacy Beliefs and Their Language Learning Strategy Use. *English Language Teaching*, 5(8), 113-121.

- Brown, H. D. (2014). *Principles of language learning and teaching: a course in second language acquisition*. Pearson.
- Brown, H., & Lee, H. (2015). *Teaching by principles: An interactive approach to language pedagogy*. Pearson.
- Chamot, A. U. (1987). *A Study of Learning Strategies in Foreign Language Instruction*. First Year Report.
- Chamot, A. U. (2005). Language learning strategy instruction: Current issues and research. *Annual review of applied linguistics*, 25, 112-130.
- Chamot, A. U., Barnhardt, S., El-Dinary, P., & Robbins, J. (1996). Methods for teaching learning strategies in the foreign language classroom. *Language learning strategies around the world: Cross-cultural perspectives*, 175-187.
- Chamot, A. U., & El-Dinary, P. B. (1999). Children's Learning Strategies in Language Immersion Classrooms. *Modern Language Journal*, 319-338.
- Chen, T. (2014). Analyses of Technical University Students' Learning Strategies, Self-efficacy, and Language Proficiency. *應用英語期刊*, (7), 147-161.
- Ching, L. C. (2002). Strategy and self-regulation instruction as contributors to improving students' cognitive model in an ESL program. *English for Specific Purposes*, 21(3), 261-289.
- Cohen, A. D., & Macaro, E. (2007). *Language learner strategies: thirty years of research and practice* (No. Sirsi) i9780194422543).
- Goh, C., & Foong, K. (1997). Chinese ESL students' learning strategies: A look at frequency, proficiency, and gender. *Hong Kong Journal of Applied Linguistics*, 2(1), 39-53.

- Griffiths, C. (2015). What have we learnt from ‘good language learners’?. *Elt Journal*, 69(4), 425-433.
- Gunning, P. (1997). *The learning strategies of beginning ESL learners at the primary level* (Doctoral dissertation, Concordia University).
- Hsu, Y. J. (2007). Elementary school EFL students’ learning style preferences and strategy use and their relationship with the students’ English learning achievement. *Unpublished master’s thesis, Providence University, Taiwan*.
- IBM. (2019) “KMO and Bartlett's Test”, IBM Knowledge Center
https://www.ibm.com/support/knowledgecenter/en/SSLVMB_25.0.0/statistics_casestudies_project_ddita/spss/tutorials/fac_telco_kmo_01.html
- Kargar, M., & Zamanian, M. (2014). The relationship between self-efficacy and reading comprehension strategies used by Iranian male and female EFL learners. *International Journal of Language Learning and Applied Linguistics World*, 7(2), 313-325.
- Lan, R. L. (2005). *Language learning strategies profiles of EFL elementary school students in Taiwan* (Doctoral dissertation).
- Lan, R., & Oxford, R. (2003). Language learning strategy profiles of elementary school students in Taiwan. *IRAL, International Review of Applied Linguistics in Language Teaching*, 41(4), 339-379.
- Lard Statistics. (2019). “Pearson Product-Moment Correlation”
<https://statistics.laerd.com/statistical-guides/pearson-correlation-coefficient-statistical-guide.php>
- Lenth, R. V. (2001). Some practical guidelines for effective sample size determination. *The American Statistician*, 55(3), 187-193.

- Lin, S. H. (2000). A study of English listening comprehension strategies used by senior high school students in Taiwan. *Unpublished Master's thesis, National Kaohsiung Normal University.*
- Little, D. G. (1991). *Learner autonomy: Definitions, issues and problems.* Authentik Language Learning Resources.
- Magogwe, J. M., & Oliver, R. (2007). The relationship between language learning strategies, proficiency, age and self-efficacy beliefs: A study of language learners in Botswana. *System, 35*(3), 338-352.
- Mendelsohn, D. (1986). Student needs: Cognitive as well as communicative. *TESL Canada journal, 171-183.*
- Mills, H., & Clyde, J. A. (1991). Children's success as readers and writers: It's the teacher's beliefs that make the difference. *Young Children, 46*(2), 547-59.
- Moon, J. (2000). *Children learning english.* Oxford: Macmillan Heinemann English Language Teaching.
- Naseri, M., & Zaferanieh, E. (2012). The relationship between reading self-efficacy beliefs, reading strategy use and reading comprehension level of Iranian EFL learners. *World Journal of Education, 2*(2), 64.
- Nyikos, M. (1987). *The effect of color and imagery as mnemonic strategies on learning and retention of lexical items in German* (Doctoral dissertation, Purdue University).
- Nunan, D. (1992). *Research methods in language learning.* Cambridge University Press.
- Olivares, F., Fidalgo, R., & Torrance, M. (2016). Differences in reading self-efficacy between school years and according to gender. *Revista de Psicodidáctica, 21*(1), 45-63.

- Oxford, R. L. (1989). Use of language learning strategies: A synthesis of studies with implications for strategy training. *System*, 17(2), 235-247.
- Oxford, R. L. (1990). *Language learning strategies-What every teacher should know*. Heinle & Heinle.
- Oxford, R. (2011). Teaching & Researching: Language Learning Strategies. *Applied Linguistics*.
- Oxford, R. L., Ehrman, M., & Nyikos, M. (1988). Vive la difference? Reflections on sex differences in use of language learning strategies. *Foreign Language Annals*, 21(4), 321-329.
- Oxford, R. L., & Gkonou, C. (2018). Interwoven: Culture, Language, and Learning Strategies. *Studies in Second Language Learning and Teaching*, 8(2), 403-426.
- Oxford, R., & Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. *The modern language journal*, 73(3), 291-300.
- Oxford, R., & Su, Min-hsun (2007). *Language learning strategies-What every teacher should know*. (Thomson Asia PTE LTD., Trans.; 1st ed.). (Original work published 1990)
- Pajares, F. (2002). Gender and perceived self-efficacy in self-regulated learning. *Theory Into Practice*, 41, 116-125.
- Pajares, F. (2003). Self-efficacy beliefs, motivation and achievement in writing. *Reading and Writing Quarterly*, 19, 139-158.
- Pajares, F. (2008). Motivational role of self-efficacy beliefs in self-regulated learning. *Motivation and self-regulated learning: Theory, research, and applications*, 111-139.

- Pajares, F., & Graham, L. (1999). Self-efficacy, motivation constructs, and mathematics performance of entering middle school students. *Contemporary Educational Psychology*, 24, 124-139.
- Pajares, F., & Schunk, D. H. (2001). Self-beliefs and school success: Self-efficacy, self-concept, and school achievement. *Perception*, 11, 239-266.
- Pajares, F., & Valiante, G. (2001). Gender differences in writing motivation and achievement of middle school students: A function of gender orientation? *Contemporary Educational Psychology*, 26, 366-381
- Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory, research, and applications*. Prentice Hall.
- Politzer, R. L. (1983). An exploratory study of self-reported language learning behaviors and their relation to achievement. *Studies in second language acquisition*, 54-68.
- Purdie, N., & Oliver, R. (1999). Language learning strategies used by bilingual school-aged children. *System*, 27(3), 375-388.
- Radwan, A. A. (2011). Effects of L2 proficiency and gender on choice of language learning strategies by university students majoring in English. *The Asian EFL Journal*, 13(1), 115e163
- Scarcella, R. C., & Oxford, R. L. (1992). The tapestry of language learning: The individual in the communicative classroom.
- Shi, H. (2018). English Language Learners' Strategy Use and Self Efficacy Beliefs in English Language Learning. *Journal of International Students*, 8(2), 724-741.
- Shieh, S. (1995). Taiwanese junior college students' use of FLL strategies. *Ji-Li Report*.

- Shmais, W. A. (2003). Language learning strategy use in Palestine. *TESL-EJ*, 7(2).
- Spencer-Oatey, H., & Franklin, P. (2009). *Intercultural interaction: A multidisciplinary approach to intercultural communication*. Springer.
- Stanikzai, M. I. (2019). Self-Regulated Learning: An Exploratory Study (Level and Gender Difference). *Research Review International Journal of Multidisciplinary*, 04(03), 57–62.
- Stat Trek (2021) “Teach yourself statistics” StatTrek.com
<https://stattrek.com/sampling/sampling-distribution.aspx>
- Stracke, E. (2016). Language learning strategies of Indonesian primary school students: In relation to self-efficacy beliefs. *System*, 60, 1-10.
- Thought Co. (2019, August) “Social Cognitive Theory: How We Learn from the Behavior of Others”
<https://www.thoughtco.com/social-cognitive-theory-4174567>
- Trinder, R. (2013). Business students’ beliefs about language learning in a university context. *English for Specific Purposes*, 32(1), 1-11.
- Tschannen-Moran, M., Woolfolk-Hoy, A., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68, 2027248.
- Van Teijlingen, E. R., & Hundley, V. (2001). The importance of pilot studies. *Social research update*, 35(4), 1-4.
- Wang, C., Schwab, G., Fenn, P., & Chang, M. (2013). Self-Efficacy and Self-Regulated Learning Strategies for English Language Learners: Comparison between Chinese and German College Students. *Journal of Educational and Developmental Psychology*, 3(1), Journal of Educational and Developmental Psychology, 01/06/2013, Vol.3(1).

- Wang, W. Y. (2002). Effects of gender and proficiency on listening comprehension strategy use by Taiwanese EFL senior high school students: A case from Changhua, Taiwan. *Unpublished master's thesis, National Changhua University of Education.*
- Wenden, A. L. (1986). What do Second-Language Learners Know about their Language Learning? A Second Look at Retrospective Accounts¹. *Applied linguistics*, 7(2), 186-205.
- Wikipedia (2019) "Cognitive strategy", the free encyclopedia
https://en.wikipedia.org/wiki/Cognitive_strategy
- Wong, Mary Siew-Lian. (2005). Language Learning Strategies and Language Self-Efficacy: Investigating the Relationship in Malaysia. *RELC Journal: A Journal of Language Teaching and Research*, 36(3), 245-269.
- Xue, S. (2015). Language Learning Strategy Use of Chinese EFL Students in Relation to Gender. *Sociology and Anthropology*, 3(5), 259-268.
- Yang, Nae-Dong (1992). (1999). The relationship between EFL learners' beliefs and learning strategy use. *System* 27: 515-535.
- Yang, P. L., & Wang, A. L. (2015). Investigating the Relationship among Language Learning Strategies, English Self-Efficacy, and Explicit Strategy Instructions. *Taiwan Journal of TESOL*, 12(1), 35-62.
- Yılmaz, C. (2010). The relationship between language learning strategies, gender, proficiency and self-efficacy beliefs: A study of ELT learners in Turkey. *Procedia - Social and Behavioral Sciences*, 2(2), 682-687.
- Zare, M., & Mobarakeh, S. D. (2011). The relationship between self-efficacy and use of reading strategies: The case of Iranian senior high school students. *Studies in Literature and Language*, 3(3), 98.

- Zeldin, A. L., Britner, S. L., & Pajares, F. (2008). A comparative study of the self-efficacy beliefs of successful men and women in mathematics, science, and technology careers. *Journal of Research in Science Teaching*, 45(9), 1036-1058.
- Zhang, Z. (1993). Literature Review on Reading Strategy Research.
- Zimmerman, B. J. (1990). Self-regulating academic learning and achievement: The emergence of a social cognitive perspective. *Educational psychology review*, 2(2), 173-201.
- Zimmerman, B. J., Bandura, A., & Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American educational research journal*, 29(3), 663-676.
- Zimmerman, B. J., & Martinez-Pons, M. (1986). Development of a structured interview for assessing student use of self-regulated learning strategies. *American educational research journal*, 23, 614-628.
- Zimmerman, B. J., & Martinez-Pons, M. (1990). Student differences in self-regulated learning: Relating grade, sex, and giftedness to self-efficacy and strategy use. *Journal of Educational Psychology*, 82(1), 51.

APPENDICES

Appendix A KMO and Bartlett Test

English Learning Strategies

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.597
Bartlett's Test of Sphericity	Approx. Chi-Square	846.867	
	df	435	
	Sig.	.000	

Self-Efficacy Beliefs (Four English Skills)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.666
Bartlett's Test of Sphericity	Approx. Chi-Square	1119.861	
	df	496	
	Sig.	.000	

SRL Efficacy

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.666
Bartlett's Test of Sphericity	Approx. Chi-Square	1119.861	
	df	496	
	Sig.	.000	

Appendix B Total Variance Explained

Learning Strategies

Com- ponent	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.947	36.490	36.490	10.947	36.490	36.490
2	2.366	7.886	44.376	2.366	7.886	44.376
3	2.093	6.978	51.354	2.093	6.978	51.354
4	1.937	6.458	57.812	1.937	6.458	57.812
5	1.690	5.633	63.445	1.690	5.633	63.445
6	1.463	4.876	68.322	1.463	4.876	68.322
7	1.265	4.216	72.538	1.265	4.216	72.538

Extraction method: Principal component analysis

Self-Efficacy Beliefs (Four English Skills)

Com- ponent	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.958	46.745	46.745	14.958	46.745	46.745
2	2.164	6.761	53.507	2.164	6.761	53.507
3	1.879	5.872	59.379	1.879	5.872	59.379
4	1.694	5.294	64.673	1.694	5.294	64.673
5	1.400	4.374	69.046	1.400	4.374	69.046
6	1.194	3.731	72.778	1.194	3.731	72.778
7	1.078	3.369	76.147	1.078	3.369	76.147

Extraction method: Principal component analysis

SRL Efficacy

Com- ponent	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.928	39.280	39.280	3.928	39.280	39.280
2	1.269	12.693	51.973	1.269	12.693	51.973
3	1.148	11.478	63.451	1.147	11.478	63.451

Extraction method: Principal component analysis

Appendix C The Children's SILL

(Gunning, 1997): English version

Instructions: Read the questions and then choose an answer for each question.

- 1) Never or almost never
- 2) Generally not the case
- 3) Sometimes
- 4) Often
- 5) Always or almost always

example. Question: I try to find opportunities outside of school (sports, extracurricular activities, etc.) to practice my English.

Answer 4

There are no wrong answers. We're only trying to know how you learn English.

Part A

1. I associate new English words with what I already know.
2. I make a drawing in my head to help me remember a new word.
3. I associate the sound of a new English word with a sound or a word that I already know.
4. I mime words to remember them.
5. I review my English lesson.

Part B

6. I often repeat new expressions that I have learned.
7. When I speak in English, I try to imitate English-speaking people, in order to pronounce the words correctly.
8. I often practice English alphabet sounds.
9. I often watch TV in English or I listen to English radio.
10. I read books or I play computer games in English.

11. I try to find opportunities outside of school (sports, extracurricular activities, etc.) to practice my English.
12. I practice what I learn with my parents or siblings.
13. I find similarities between Chinese and English (example: table/table).
14. I try to understand what I read or what I hear without translating word for word.
15. I try to discover grammar rules of the English language.

Part C

16. I guess the meaning of unfamiliar words that I hear or read from the context.
17. When I have trouble making myself understood in English, I use gestures to express what I want to say.
18. When I don't know a word in English, I ask for help.
19. When I can't find an expression in English, I try to find another way to say what I mean (synonym, description, etc.)

Part D

20. I organize my time to study English (not just when there is a test).
21. Eagerly I look for occasions to speak English.
22. When someone speaks to me in English, I listen attentively.
23. I evaluate my progress in learning English.
24. I analyze the errors, which I have made, and try not to repeat them.

Part E

25. Whenever I am stressed by the idea of speaking English, I try to relax.
26. I am ready to take risks: guess the meaning of a word or sentence, try to speak English even if I make mistakes.
27. When I succeed, I congratulate myself.

Part F

28. If I don't understand what is said to me in English, I ask the person to speak slowly, to repeat, or to clarify what has been said.

29. I work with my classmates to practice my English.

30. I try to find out about English culture.



ANSWER SHEET

Your name: _____

Date: _____

Language _____ Age _____

Put your answer for each "question" (1, 2, 3, 4, or 5) next to the question" number.

Make the total of each column and enter the result at the end of each column.

Part A	Part B	Part C	Part D	Part E	Part F	
1. _____	6. _____	16	20. _____	25. _____	28. _____	
2. _____	7. _____	_____ 1	21. _____	26. _____	29. _____	
3. _____	8. _____	18. _____	22. _____	27. _____	30. _____	
4. _____	9. _____	19. _____	23. _____			
5. _____	10. _____		24. _____			
	11. _____					
	12. _____					
	13. _____					
	14. _____					
	15. _____					
Total: _	Total: _	Total: _	Total: _	Total: _	Total: _	Total: _
/5 =	/10 =	/4 =	/5 =	/3 =	/3 =	/30 =

Adaptation of the **Strategy Inventory for Language Learning (SILL)** developed in 1989 by Rebecca Oxford; adapted for Francophone children in 1996 by Pamela Gunning

Appendix D Self-Efficacy Beliefs

(English Equivalent of the German Version)

Listening Efficacy:

Item 1: Can you understand stories told in English?

Item 3: Can you understand American English TV programs?

Item 9: Can you understand radio programs in English speaking countries?

Item 10: Can you understand English TV programs?

Item 15: If your teacher gives you an audio-recorded English dialogue about school life, can you understand it?

Item 22: Can you understand English movies without German subtitles?

Item 24: Can you understand English songs?

Item 27: Can you understand telephone numbers spoken in English?

Speaking Efficacy:

Item 4: Can you introduce your university in English?

Item 6: Can you tell the directions to your classroom from your home/dormitory in English?

Item 8: Can you tell a story in English?

Item 17: Can you ask your teachers questions in English?

Item 19: Can you introduce your English teacher in English?

Item 20: Can you discuss some interesting English topics with your classmates?

Item 23: Can you answer your teachers' questions in English?

Item 30: Can you introduce yourself in English?

Reading Efficacy:

Item 2: Can you finish your English reading homework independently?

Item 12: When you read English articles, can you guess the meaning of unknown words?

Item 16: Can you understand the English news on the Internet?

Item 21: Can you read English short novels?

Item 25: Can you read English newspapers?

Item 26: Can you find the meaning of new words by using English-English dictionaries?

Item 29: Can you understand English articles about German culture?

Item 32: Can you understand new reading materials (e.g., news from the Time magazine) selected by your instructor?

Writing Efficacy:

Item 5: If you have access to the Internet, can you release news on the Internet (e.g., **Facebook, Twitter**, blogs)?

Item 7: Can you write English compositions assigned by your teachers?

Item 11: Can you leave a message to your classmates in English?

Item 13: Can you make new sentences with the words just learned?

Item 14: Can you send emails in English?

Item 18: Can you make sentences with English idiomatic phrases?

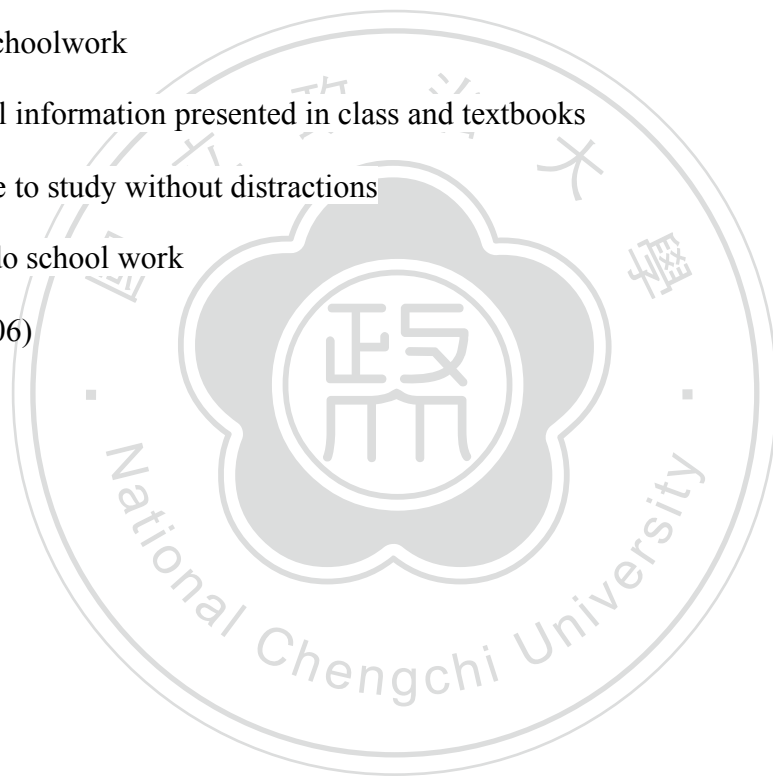
Item 28: Can you write diaries in English?

Item 31: Can you write an article about two pages about your English teacher in English?
(Wang et al., 2013)

Appendix E Self-Regulated Learning

1. Finish my homework assignments by deadlines
2. Get myself to study when there are other interesting things to do
3. Always concentrate on school subjects during class
4. Take good notes during class instruction
5. Use a library to get information for class assignments
6. Plan my schoolwork for the day
7. Organize my schoolwork
8. Remember well information presented in class and textbooks
9. Arrange a place to study without distractions
10. Get myself to do school work

(Bandura, 2006)



Appendix F Chinese Questionnaire

「國小自我效能感與英語學習策略關係」問卷

題目分為兩部分，第一部分【學習英語方式】共 30 題；第二部分【學習英語自我效能】

共 42 題。請將基本資料及答案(如下 1-5 項)擇一答案寫在答案紙上

1. 從不如此
2. 很少如此
3. 有時如此
4. 通常如此
5. 總是如此

第一部分【學習英語方式】

- | 編號 | 調查項目 |
|-----|----------------------------|
| 1. | 我會把新的英文單字和學過英文單字聯想在一起。 |
| 2. | 我會在我的頭腦裡畫出單字的圖案，幫助我記住新單字。 |
| 3. | 我會將新的英文單字發音跟學習過的單字發音做連結。 |
| 4. | 我用肢體語言幫助我記單字。 |
| 5. | 我會複習英文。 |
| 6. | 我會重複練習剛剛學習過的英文單字。 |
| 7. | 當我說英文時，我試著模仿外國人說話，幫助我發音正確。 |
| 8. | 我經常練習英文字母的發音。 |
| 9. | 我會看英語電視節目（或聽英文收音機節目）。 |
| 10. | 我讀英文書籍或是玩英文電腦遊戲。 |

11. 放學後(運動時、課外活動等)我會試著找機會練習英文。
12. 我和我的父母或兄弟姊妹練習我所學的英文。
13. 我看到英文單字時，會想一想中文裏哪一個字有類似的意思。
14. 我會試著(以不逐字翻譯方式)了解聽到及讀到的英文。
15. 我試著發現英文的文法規則。
16. 我會根據前後文的內容猜測英文生字的意思。
17. 當我使用說英語有困難時，我會比手畫腳來表達我的意思。
18. 當我不了解英文的生字時,我會尋求幫忙。
19. 如果我找不到我想要使用英語的單字，我會尋找另一種方法說出我的意思(同義字，描述，等)。
20. 我會安排時間，以便我可以經常學習英語。(不僅是為了考試)
21. 我很想找機會練習英文。
22. 當別人用英文跟我說話時，我會仔細聽。
23. 我會評估自己在英語方面的進步。
24. 我會分析所犯的英文錯誤且不再犯同樣錯誤。
25. 當說英語會給我造成壓力時，我試著放鬆。
26. 即使我犯錯誤，我會嘗試猜出單詞或短語的意思，試著用英語說話。
27. 當我學習英文有成效時，我會慶祝一下。
28. 當我不懂別人說的英文時，我會要求別人說慢一點或重複說一次。
29. 我會跟同學練習英文。
30. 我試著去了解英語的文化。

第二部分【學習英語自我效能】

編號 調查項目

1. 我能聽懂英文故事。

2. 當作業包括英語閱讀時，我能獨立完成作業。
3. 我能了解美國英文電視節目的內容。
4. 我能用英語描述我的學校給其他人。
5. 我能使用網路（如臉書、推特、博客等）撰寫英文訊息。
6. 我能用英語描述如何從我家到學校。
7. 我能用英文寫短訊。
8. 我能用英語講故事。
9. 我能了解全英文的廣播節目。
10. 我能了解台灣製作的英語電視節目。
11. 我能用英語留下一張字條給另一名同學。
12. 我在閱讀英語時能猜測不認識英文單字的含義。
13. 我能從剛學的單字，組成一個新的句子。
14. 我能用英語寫電子郵件(e-mail)。
15. 我能了解關於日常學校事務（影音檔如 CD 或影片中）的英語對話。
16. 我能瞭解網路上的英文資訊或消息。
17. 我能用英語向老師提出問題。

18. 我能用英語片語造句子。
19. 我能用英語向別人介紹我的老師。
20. 我能用英語跟同學討論感興趣的話題。
21. 我能讀短篇英語故事。
22. 我能明白沒有中文字幕的英文電影。
23. 我能用英語回答老師的問題。
24. 我能聽懂英文歌曲。
25. 我能閱讀英文報紙。
26. 我能使用英英字典找出單字的含義。
27. 當別人用英語說電話號碼時，我能明白。
28. 我能用英語寫日記。
29. 我能了解關於臺灣文化的英語文章。
30. 我會用英語介紹我自己。
31. 我能用英語寫一篇關於老師短文的(約 40 個字)。
32. 我能了解老師提供的閱讀資料（例如，從《時代》雜誌的新聞）。
33. 我會準時完成我的英文作業。

- 34. 當有其它有趣的事發生時，我可以繼續專心學英文。
- 35. 我能在英文課堂上始終保持專心。
- 36. 在英文課時，我會做好英文筆記。
- 37. 在做英文作業時，我能善用圖書館來取得資訊。
- 38. 我會計畫如何在今天完成我的功課。
- 39. 我會安排好我的英文功課。
- 40. 我會記得英語課堂上和英文課本上的內容。
- 41. 我會安排一個地方專心學習英文。
- 42. 我會激勵自己去做好英文功課。



親愛同學您好，
這是一份學術性問卷，目的在探討「國小自我效能感與英語學習策略關係」，您的回答內容基於學術倫理絕對保密，請放心填答。謝謝！

【基本資料】

1.學校名稱:_____ 2 性別: ☐男性 ☐女性

3.班級: _____年 _____班 _____號 姓名:_____

請將基本資料及答案(如下 1-5 項)擇一答案寫在答案紙上

1. 從不如此
2. 很少如此
3. 有時如此
4. 通常如此
5. 總是如此

第一部分【學習英語方式】

1.	6.	11.	16.	21.	26.
2.	7.	12.	17.	22.	27.
3.	8.	13.	18.	23.	28.
4.	9.	14.	19.	24.	29.
5.	10.	15.	20.	25.	30.

第二部分【英語學習自我效能】

1.	7.	13.	19.	25.	31.	37.
2.	8.	14.	20.	26.	32.	38.
3.	9.	15.	21.	27.	33.	39.
4.	10.	16.	22.	28.	34.	40.
5.	11.	17.	23.	29.	35.	41.
6.	12.	18.	24.	30.	36.	42.