

The Relationship Between Chinese EFL Learners' Reading Self-Efficacy  
and Use of Metacognitive Reading Strategies

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## **Abstract**

The promotion of self-efficacy and metacognitive strategies plays a decisive role in EFL learners' foreign language reading performance. This study investigated the relationship between Chinese adolescent EFL learners' current level of reading self-efficacy and their use of metacognitive reading strategies, and more specifically the differences in use of such strategies among learners with high, medium, and low self-efficacy. Findings indicated that the frequency of participants' use of metacognitive reading strategies was high, and participants felt confident in their English reading ability. Findings also revealed that the use of metacognitive reading strategies had a significantly positive correlation with English reading self-efficacy. Results suggest that self-efficacy is an influential factor that impacts learners' use of metacognitive reading strategies. Conclusions and implications drawn from the study emphasize the importance of Chinese EFL learners' use of metacognitive reading strategies and the reinforcement of self-efficacy in their reading performance.

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## CHAPTER ONE: INTRODUCTION

Reading is an important skill for foreign language learners to master in an academic context. For English as a Foreign Language (EFL) learners, reading plays an indispensable role in their English performance (Zare & Mobarakeh, 2011). Foreign language reading comprehension is influenced by different factors, including linguistic and cognitive factors, affective and motivational factors, and social and cultural factors (Zare & Mobarakeh, 2011). These factors are interrelated and interact with each other, which makes foreign language reading comprehension a complex and interactive process. According to Anderson (1999), EFL learners may make greater progress in their academic development if they can strengthen their reading skills; however, studies also reveal shortcomings in Chinese EFL learners' English reading performance even though reading has been emphasized in the Chinese educational context (Yang & Qian, 2017).

According to Yang and Qian (2017), Chinese EFL teachers are confronted with several problems in promoting learners' English reading performance. For instance, EFL learners' interest in reading is not high, students may lack cultural background when reading in English, and many students do not reflect on and evaluate their reading abilities. One of the causes of these problems is that Chinese EFL learners are deficient in autonomous learning abilities. Self-efficacy and metacognitive reading strategies have been found to have positive influences in strengthening learners' motivation and facilitating their autonomous learning (Montcalm, 1999; Schunk, 1991; Wenden, 1991; Zepeda et al., 2015). Hence, this research investigated the relationship between Chinese adolescent EFL learners' current self-efficacy levels and their use of metacognitive strategies.

## Research Background

As the effects of globalization deepen in China, the English language continues to become more important in every aspect of Chinese people's lives, which calls for improvements in English education. However, because English as a foreign language is not widely used in face-to-face communication among Chinese learners, language instruction relies more on classroom teaching and learners' reading. Hence, in the EFL teaching domain, helping English learners to enhance their reading performance has been a hot topic in Chinese education. Moreover, with the reformation of education, the focus of English teaching has shifted from "how to teach" to "how to learn" (China Ministry of Education, 2011). In studies related to improving English performance, more and more researchers focus on learner variables in the language learning process, such as learning strategies, learning motivation, and personal affective factors (Meniado, 2016; Mills et al., 2006; Naseri & Zaferanieh, 2012). While Grabe and Stoller (2019) found that EFL teachers and researchers paid considerable attention to linguistic and cognitive factors as well as social and cultural factors, research on the influence of affective and motivational factors remains limited. Grabe and Stoller identify metacognitive strategy as a linguistic and cognitive factor while self-efficacy is an affective and motivational factor. Currently, metacognitive strategies and self-efficacy have been studied extensively in foreign language learning as they have been found to be two indirect but influential factors in the reading process (Rastegar et al., 2017; Taghinezhad et al., 2015). Thus, it is worthwhile to investigate the relationship between self-efficacy and metacognitive strategies by integrating cognitive processes with motivational processes.

### **Significance of the Research**

Many studies have indicated that individuals' high self-efficacy and use of metacognitive strategies might positively influence their learning achievements (Ahmadian & Pasand, 2017; Ismail & Tawalbeh, 2015). Furthermore, English curriculum standards in China require students to learn and use different strategies and methods to improve their English proficiency (China Ministry of Education, 2011). In "learning strategies", metacognitive strategies brought forward explicitly are thought to contribute much to enhancing students' autonomous learning ability. However, the current situation of Chinese EFL learners' English reading performance is not satisfactory. According to Yang and Qian (2017), Chinese EFL learners currently face several sets of challenges in their English reading comprehension: difficulty in encountering new words, inability to find the relevance between original passages and provided questions, and lack of inferential abilities. These proposed challenges indicate that Chinese EFL learners are not using metacognitive strategies in their reading tasks efficiently and appropriately. Although the target group of Yang and Qian's (2017) study is college students, it may be inferred that young Chinese adolescents are facing similar obstacles in their English reading.

Being deficient in autonomous learning abilities may be one of the considerable contributors to the unsatisfactory results of EFL learners' reading performance. Although high reading self-efficacy and use of metacognitive strategies are the crucial embodiment of learners' better reading performance, the research on the relationship between reading self-efficacy and metacognitive reading strategies in Chinese adolescent EFL learners is lacking, which gives rise to the relevance to this research.

## Theoretical Framework

To analyze the relationship between self-efficacy and metacognitive reading strategies, this study adopted Bandura's self-efficacy theory as its main theoretical framework. As a crucial component of social cognitive theory, self-efficacy is referred to people's beliefs in their capabilities to fulfill their goals (Bandura, 1977). Notably, self-efficacy is concerned with individuals' conviction in their abilities rather than their real actions. Hence, Bandura (1994) asserted that self-efficacy was likely to contribute to the changes in people's behavior, cognition, and emotion. Bandura (1994) noted that people's beliefs in their competence might influence the situation they would choose and the coping strategies they would use. For example, in the EFL learning context, learners who have firmer beliefs in their English proficiency may persist in achieving their learning goals, while those with lower self-efficacy may diminish their efforts and give up learning English easily. Additionally, self-efficacy may influence individuals' thinking processes and emotional responses when they encounter and have interactions with the environment (Bandura, 1994). For instance, students who consider themselves incapable of reading in English may dwell on their inadequacies and envision English reading a daunting task they cannot cope with. These negative perceptions would increase learners' stress by generating internal difficulties that distract learners' attention from the task at hand. Thus, it should be noted that self-efficacy may have profound influences on people's behaviours, thoughts, and emotions. In the area of EFL learning and teaching, research on self-efficacy also indicates that self-efficacy has a great impact on learners' motivation (e.g., Schunk, 1991), learners' academic achievements (e.g., Zheng et al., 2017), and learners' behaviours (e.g., Schunk, 1989).

Concerning the importance of self-efficacy in language learning processes and outcomes, identifying the ways in which self-efficacy is developed is significant. Because the use of metacognitive strategies is found to be effective for EFL learners' learning performance, this study investigates differences in the use of metacognitive reading strategies among high-level, medium-level, and low-level self-efficacy learners.

### **Research Aims and Objectives**

Considering the background and significance of the research, there are obvious research gaps in previous studies. To remedy these gaps, the aim of this study is to explore and analyze the relationship between Chinese adolescent EFL learners' English reading self-efficacy and their use of metacognitive reading strategies. The study was underpinned by the following research questions:

1. What is Chinese adolescent EFL learners' current English reading self-efficacy level and their use of metacognitive strategies in their English reading?
2. What are the differences in the use of metacognitive reading strategies among the Chinese adolescent EFL learners in three different self-efficacy levels?
3. What is the relationship between reading self-efficacy and the use of metacognitive reading strategies?

### **Chapter Summary**

This study investigated the relationship between Chinese adolescent EFL learners' English reading self-efficacy and their use of metacognitive reading strategies. This document encompasses five chapters. Chapter 1 provided an overview of the thesis on reading self-efficacy and metacognitive reading strategies in the Chinese context, introduced the research project, described the background and significance of the study,

and outlined the specific research questions. Chapter 2 reviews the relevant literature on self-efficacy, metacognition, and metacognitive strategies and critically examines previous studies on reading self-efficacy and metacognitive reading strategies. Chapter 3 specifically presents the methodology of the entire study, including the description of the context, the introduction of the participants, data collection and analyses procedures, and ethical considerations. Chapter 4 presents the findings from the quantitative data analyses. Finally, Chapter 5 comprises a discussion of the major findings, pedagogical implications, and limitations of the research.

## CHAPTER TWO: LITERATURE REVIEW

This chapter reviews relevant literature related to foreign language reading abilities, self-efficacy, metacognition, and metacognitive strategies. Previous studies have found that self-efficacy and metacognitive strategies are two powerful factors that impact learners' academic performance, especially in foreign language learning. Furthermore, some scholars have conducted extensive research to examine the relationship between self-efficacy and metacognitive reading strategies; however, these studies predominantly focus on university students and lack an empirical analysis of the association between different kinds of reading self-efficacy and metacognitive reading strategies. Hence, this review critically evaluates the related studies in a bid to address these research gaps.

This chapter begins with a detailed overview of the concept of self-efficacy as well as a discussion of metacognition and metacognitive strategies in the context of foreign language reading. This is followed by a critical discussion of relevant research on reading self-efficacy and metacognitive reading strategies. Finally, based on the critical analysis of the relevant research, the gaps in the previous research on the relationship between reading self-efficacy and use of metacognitive reading strategies are identified.

### **The Concept of Self-Efficacy**

In 1977, psychologist Albert Bandura proposed the concept of self-efficacy, one of the most researched topics in various fields. A considerable number of studies (e.g., Bandura, 1994; Heslin & Klehe, 2006; Pajeras, 1997) have demonstrated that self-efficacy can influence individuals' lives from psychological states to their behaviours to their motivation. Furthermore, self-efficacy can be developed from external experiences and plays a decisive role in determining the outcomes of different events (Bandura, 1994,

2006). Considering the importance of self-efficacy, it is necessary to explore its impact in the field of education.

### **Definitions of Self-Efficacy**

In Bandura's (1994) social cognitive theory, self-efficacy is defined as "people's belief about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (p. 71). To better understand the term self-efficacy, Bandura (2006) addressed the necessity of purging misconceptions of constructs. Bandura (2006) challenged the misconception of perceiving self-efficacy as self-esteem or locus of control. In his perspective, self-efficacy is one's judgment of one's capabilities and self-worth and one's belief about one's competence to fulfill the goal and affect the situation. Moreover, Heslin and Klehe (2006) also drew a distinction between self-efficacy and self-confidence and self-esteem; they claimed that rather than regarding self-efficacy as either self-confidence or self-esteem, self-efficacy was a stronger predictor of people's performance. Therefore, self-efficacy has been found to be a significant factor that affects people's behavioural activities and task performance (Bandura, 1994; Heslin & Klehe, 2006; Pajeras, 1997).

### **Impacts of Self-Efficacy**

Bandura (1994) proposed that a strong sense of efficacy enhanced human accomplishment and personal well-being. The measurement of successful efficacy builders was individuals' self-improvement rather than the successful results. Successful efficacy builders may raise people's beliefs in their capabilities and create situations in which they may succeed instead of placing themselves in situations where they may fail. To be more specific, people with high self-efficacy tend to perceive difficult tasks as

challenges to be taken rather than as threats avoided, which enhances their motivation and maintains their strong commitment to the tasks. Furthermore, such an efficacious outlook may create self-accomplishment, moderate anxiety, and reduce vulnerability to depression. In contrast, people with low self-efficacy are more likely to lose confidence in their capabilities and dwell on their deficiencies, obstacles they encounter, and possible adverse outcomes. Hence, people with low self-efficacy are more prone to anxiety and depression (Bandura, 1994).

Extending from Bandura's (1994) ideas, Pajeras (1997) specified five impacts of self-efficacy. First, self-efficacy influences people's choices and actions because people tend to engage in activities in which they feel confident and competent. The second impact is effort. According to Pajeras (1997), people's beliefs about their personal competency will determine how much effort they will put into the tasks. Additionally, self-efficacy also has impacts on people's perseverance and resilience. It determines how long people will persevere and how resilient they will be when encountering demanding tasks. The final effect is the amount of anxiety experienced. As Bandura (1994) mentioned, people with higher levels of self-efficacy are more likely to moderate their stress while those with lower levels of self-efficacy are more likely to be victims of anxiety and depression. Thus, self-efficacy is thought to affect the level of anxiety that people experience when they engage in the activities.

### **Sources of Self-Efficacy**

Bandura (1994) addressed mastery experiences, vicarious experiences, social persuasion, and emotional states that play influential roles in people's self-efficacy development. First, mastery experiences are the most effective sources of creating a

strong sense of efficacy, through which people can build their efficacy by persevering to overcome difficulties. Second, vicarious experiences provided by social models are also effective sources of enhancing people's self-efficacy. The impact of modeling can be strong since it not only provides a social standard but also transmits knowledge and skills for managing similar difficult tasks. Social persuasion is the third way of boosting efficacy. People who are verbally persuaded that they are capable of pursuing success are more likely to make more efforts and pursue their goals rather than dwell on their deficiencies. According to Bandura (1994), physiological indicators of efficacy influence people's health functioning and physical activities. Hence, the final way of strengthening self-efficacy is moderating people's anxiety and managing their negative emotions and misinterpretations of their physical states. Pajares (1997) also listed four sources of self-efficacy that were similar to Bandura's (1994): mastery experience, vicarious experience, verbal persuasions, and physiological states. Combining Bandura's (1994) and Pajares's (1997) classifications, Peura et al. (2021) examined four potential sources of self-efficacy. The results reveal higher levels of mastery experiences, social persuasion, vicarious experiences, and lower levels of physiological arousal are positively related to the development of self-efficacy.

### **Measuring Foreign Language Reading Self-Efficacy**

Sound self-efficacy assessment tools (e.g., questionnaires, self-reports, interviews) assist people in understanding and predicting their behaviours. According to Bandura (2006), people's self-efficacy system is differentiated and related to different realms of functions. Thus, research on self-efficacy should be task-based and differ from context to context. Based on Bandura's (2006) guidelines of creating self-efficacy scales,

Piercey (2013) critically examined the validity of different reading self-efficacy measurements. According to Piercey, most reading self-efficacy measurements may be divided into two categories: general reading self-efficacy and self-efficacy for specific reading skills and purposes. Hence, extending from Piercey's classification and critical analyses, this study specifies the reading self-efficacy categories in the context of foreign language reading. Foreign language reading self-efficacy is characterized as general foreign language reading self-efficacy, foreign language reading test self-efficacy, foreign language reading self-efficacy for regulation, and foreign language reading skills self-efficacy (Piercey, 2013).

### **Metacognition**

Educational psychologists have long emphasized the importance of metacognition in promoting student learning. Metacognition describes the process of planning, monitoring, and assessing an individual's learning performance. Since the 1970s, numerous studies (e.g., Livingston, 2003; Schunk, 2008; Zepeda et al., 2015) have investigated the benefits of metacognition, including supporting students to be independent learners, promoting good academic performance, and stimulating students' motivation.

### **Definitions of Metacognition**

Metacognition plays a critical role in successful learning (Livingston, 2003; Veenman et al., 2006). Flavell (1976) first proposed that metacognition was people's knowledge of their cognitive processes, results, and other related constructs. From Flavell's perspective, metacognition can help people monitor their tactical tasks actively and adjust their cognitive processes continuously based on their ultimate cognitive

objectives. Based on Flavell's explanation of metacognition, Livingston (2003) defined metacognition as higher-order thinking involving people's active control over their cognitive learning process. However, Baker and Brown (1984) believed that the definition of metacognition should cover metacognitive knowledge and metacognitive monitoring. They proposed that metacognition was personal knowledge and control in cognitive processes. Furthermore, Chinese scholars continued to explore the components of metacognition. For example, Dong (1989) asserted that metacognition was individuals' self-consciousness and self-adjustment of their cognitive activities. Yang and Zhang (2002) deemed metacognition was a system that monitored cognition and made corresponding adjustments based on the cognitive processes and outcomes. Hence, metacognition is people's knowledge about their cognitive processes and the capability of monitoring and controlling their cognitive processes and outcomes.

### **Classifications of Metacognition**

The classification of metacognition is differentiated because of researchers' various perspectives. Some researchers considered that metacognition could be characterized into metacognitive knowledge and metacognitive regulation. Metacognitive knowledge refers to the knowledge that is closely related to individuals' cognitive tasks, experiences, and strategies (Flavell, 1979). Metacognitive knowledge is regarded as the basis of metacognitive regulation (Baker, 1994). That is to say, the foundation of metacognitive regulation is metacognitive knowledge while metacognitive regulation is the display of metacognitive knowledge. However, some scholars propose a different classification. For instance, Dong (1989) reported that metacognition was divided into metacognitive knowledge, metacognitive experience, and metacognitive strategy. In this

classification, metacognitive experience is regarded as emotional experience or cognitive experience in the process of cognition (Dong, 1989). Metacognitive strategy refers to learners' management and examination of their cognitive process (Wenden, 1991). According to Wenden (1991), individuals' use of metacognitive strategies is a conscious activity that ensures the effectiveness of their learning. To sum up, metacognitive knowledge is a crucial basis of cognition, while metacognitive strategies are effective measures to monitor and regulate learners' cognitive process and solve the arising problems based on people's learning objectives.

### **Metacognitive Strategies**

Metacognitive strategies are methods used to regulate learners' cognitive process, which promote their learning and help them to become self-regulated problem-solvers. Using metacognitive strategies also empowers learners to focus on their own learning process and manage their learning efficiently, regardless of their age, background, and achievements (Karpicke et al., 2009). Given the profoundly positive influences of metacognitive strategies, teaching students to use metacognitive strategies has been emphasized and studied in the educational field.

### **Definitions of Metacognitive Strategies**

Metacognitive strategies have been studied by many researchers and defined differently (Cohen, 1998; O'Malley & Chamot, 1990; Oxford, 1990). For example, O'Malley and Chamot (1990) considered metacognitive strategies as higher mental executive skills that assist learners' regulation and monitoring of their learning process. Oxford (1990) described metacognitive strategies as actions that provide learners with feasible approaches to coordinate their learning process. The former definition tends to

characterize metacognitive strategies as psychological essences in learning, while the latter emphasizes that metacognitive strategies are visible actions rather than purely cognitive devices. Combining the two definitions of metacognitive strategies, a more comprehensive understanding of metacognitive strategies can be developed. Hence, metacognitive strategies are effective mental skills and reliable visible actions that help learners to monitor and control their cognitive processes and outcomes.

### **Classifications of Metacognitive Strategies**

Oxford (1990) proposes a representative classification of metacognitive strategies that includes “centering your learning,” “arranging and planning your learning,” and “evaluating your learning.” Each category has its corresponding items. “Centering your learning” covers overviewing basic materials and connecting them with former knowledge, focusing on the global tasks and particular details, and concentrating on listening tasks by delaying speech production. “Arranging and planning your learning” covers six items: (a) finding out what is involved in language tasks, (b) organizing, (c) setting goals, (d) determining the purpose of language tasks, (e) preparing for language tasks, and (e) creating language practice opportunities. “Evaluating your learning” includes self-monitoring and self-evaluating.

However, in O’Malley and Chamot’s (1990) view, metacognitive strategies should be divided into planning for learning, monitoring, and evaluating the learning process. O’Malley and Chamot further explored their classification of metacognition strategies. They stated that planning, monitoring, and evaluating are three critical components of metacognitive strategies. The “planning” practices entail advance organizers, directed attention, selective attention, self-management, and functional

planning. “Monitoring” is self-monitoring, which means individuals’ regulation of their learning performance. “Evaluating” is considered as self-evaluating, which means checking the language learning outcomes against a standard. These two classifications provide a detailed overview of the components of metacognitive strategies. Both classifications address the importance of planning, monitoring, and evaluating. However, in Oxford’s (1990) perspective, monitoring and evaluating can be included in the same category, which is not feasible in O’Malley and Chamot’s classification. From my perspective, O’Malley and Chamot’s classification is preferable because it is more comprehensive and reasonable. Furthermore, this classification of metacognitive strategies can be applied to a specific learning activity, such as listening, speaking, reading, and writing (O’Malley & Chamot, 1990). Hence, O’Malley and Chamot’s classification becomes the basis of the questionnaire in this research.

Based on the review of the above two classification systems of metacognitive strategies, metacognitive reading strategies refer to planning before reading (previewing the reading materials to be learned and making study plans, focusing on the reading purpose, linking with the already known reading methods), monitoring during reading (purposeful use of efficient reading methods, adjusting the reading speed, revising previous forecasts according to the read materials), and evaluating after reading (evaluating the entire reading process, reflecting on the weakness in reading, determining the progress individuals have made in reading and seeking more suitable reading strategies; O’Malley & Chamot, 1990; Oxford, 1990). Furthermore, O’Malley and Chamot (1990) put forward that planning strategy can be further divided into advance organizers and selective attention. “Advance organizers” refers to previewing the reading

materials and preparing before reading, while “selective attention” refers to being ready to pay attention to particular details of the entire reading materials in advance.

### **Relevant Research**

As two powerful factors that affect learning outcome and performance, self-efficacy and metacognitive strategies have been hot topics in education and related disciplines. This section provides insights into the research on reading self-efficacy, metacognitive reading strategies, and the relationship between reading self-efficacy and metacognitive reading strategies.

#### **Relevant Research on Reading Self-Efficacy**

Because self-efficacy is a decisive factor that fosters people’s well-being and achievement, researchers have investigated self-efficacy from various perspectives. One popular research direction is exploring the relationship between learners’ self-efficacy and academic performance. For example, Schunk (1991) identified that self-efficacy was useful for promoting students’ academic motivation. Later, Schunk (2003) discovered that learners’ self-efficacy and achievement could be fostered through instructions that incorporate modeled strategies, goal setting, and self-evaluation. In the area of reading, Mills et al. (2006) examined the relationship between self-efficacy, anxiety, and French learners’ reading and listening proficiencies. The results reveal that self-efficacy is positively correlated with learners’ reading proficiencies but not correlated with anxiety. Solheim (2011) discovered that self-efficacy could positively predict students’ reading comprehension scores. Many studies reveal that self-efficacy is positively correlated to learners’ academic achievement and reading performance.

More specifically, researchers pay attention to the effect of self-efficacy on foreign language reading. Zare and Mobarakeh (2011) investigated the relationship

between senior high school students' self-efficacy and their reading strategies use. The results show that self-efficacy levels are positively related to students' reading strategies use. Similarly, Naseri and Zaferanieh (2012) also found a relationship between EFL learners' self-efficacy, their reading strategies use, and their reading comprehension abilities. Raofi et al. (2012) analyzed 32 empirical studies of self-efficacy in second/foreign language learning to identify the factors that influence learners' self-efficacy beliefs. According to Raofi et al., three key factors may influence foreign language learners' self-efficacy: learning strategies, contextual variables and sources of self-efficacy, and learning styles. Through reviewing the relevant research, the importance of self-efficacy in foreign language reading is evident. Furthermore, learning strategies are pivotal factors that may influence learners' self-efficacy, which underscores the importance of this research.

### **Relevant Research on Metacognitive Reading Strategies**

Metacognitive reading strategies have been studied since the 1990s. Phakiti (2003) regarded reading comprehension as a kind of linguistic communicative ability. His comparative research focused on the relation of students' reading comprehension ability, cognition, and metacognition. His findings reveal that metacognitive strategies have a close and positive relationship with students' reading performance. Ismail and Tawalbeh (2015) examined the effectiveness of metacognitive reading strategies instruction on EFL learners' reading performance. Based on the results, the researchers addressed the importance of metacognitive reading strategies in EFL learners' foreign language reading competency. However, Meniado (2016) presented the idea that metacognitive reading strategies and reading motivation were important in successful learning. Meniado found that there was no relationship between metacognitive reading strategies and reading

performance, which contradicts other similar research (Bećirović et al., 2017; Rastegar et al., 2017). To sum up, most studies demonstrate that using metacognitive strategies can foster learners' reading proficiency and improve their reading comprehension performance. However, Meniado's different result should be taken into account and investigated further.

### **Research on the Relationship Between Reading Self-Efficacy and Metacognitive Reading Strategies**

Since considerable research has investigated the effects of self-efficacy and metacognitive strategies on learners' reading performances, some researchers attempted to examine the relationship between self-efficacy and metacognitive strategies using different methods. For example, Taghinezhad et al. (2015) set up an experiment to determine if teaching metacognitive strategies influenced Iranian EFL learners' reading self-efficacy beliefs. Their results indicate that teaching metacognitive strategies is positively correlated with learners' self-efficacy. Ahmadian and Pasand (2017) used questionnaires to test the relationship between EFL learners' metacognitive reading strategies and their self-efficacy in online reading. Their study revealed that self-efficacy might influence learners' employment of metacognitive reading strategies. Similarly, Shehzad et al. (2020) also examined the relationship between reading self-efficacy beliefs and metacognitive reading strategies in EFL learning. Moreover, they found that self-efficacy beliefs could mediate the relationship between self-efficacy sources and metacognitive reading strategies. Overall, these studies have examined the association between reading self-efficacy and metacognitive reading strategies. Furthermore, the positive relationship between reading self-efficacy and metacognitive reading strategies has been tested and evaluated.

## Chapter Summary

The literature review provided an insight into the importance of reading self-efficacy and metacognitive reading strategies in the context of foreign language learning. In the reviewed literature, both self-efficacy and metacognitive strategies significantly correlated with EFL learners' reading performance. Currently, researchers are paying attention to the relationship between self-efficacy and metacognitive strategies. Much of the literature on reading self-efficacy and metacognitive reading strategies is extensive and focuses particularly on the EFL learners over the age of 18. Previous studies have failed to find a link between young teenagers' self-efficacy and their use of metacognitive reading strategies in their EFL reading. Additionally, studies on different types of self-efficacy and metacognitive reading strategies are lacking in the main literature. Therefore, the relationship between the role of self-efficacy in English reading and metacognitive strategies merits serious exploration.

## **CHAPTER THREE: METHODOLOGY**

This study investigated adolescent Chinese EFL learners' current reading self-efficacy level and their use of metacognitive reading strategies, as well as the relationship between reading self-efficacy and metacognitive reading strategies use. One hundred middle school students participated in this project, and 81 valid questionnaires were collected. This research adopted quantitative approaches to collect numeric data of EFL learners' reading self-efficacy level and their frequency of metacognitive reading strategies use when reading in English. This chapter discusses the study's participants, research instruments, process of data collection and analysis, and ethical considerations.

### **Participants**

This study selected students from a middle school in Zhejiang province. One hundred students in Grades 7 and 8 were involved in this research, regardless of their genders. Recruitment for participating in the quantitative research was conducted through a Letter of Invitation sent via WeChat to prospective participants and their guardians. The Letter of Invitation outlined the research purpose, the expected duration of the research, and the foreseen benefits of the project. All participants have learned English for more than 6 years. Participants were taking not only the English courses of Grades 7 and 8 but also taking reading courses in additional reading materials in school. However, outside the class, students have no opportunities to communicate with native speakers and have no direct interactions with Western culture.

### **Research Instruments**

This study adopted quantitative methods to gather rich and numeric data (Muijs, 2010). Two questionnaires were used to explore the current level of Chinese EFL learners' reading self-efficacy and their current use of metacognitive reading strategies. The collected data also were used to discover the differences between learners with

different levels of self-efficacy in their use of metacognitive reading strategies. The quantitative instruments include: (a) Chinese EFL Learners' Use of Metacognitive Reading Strategies Questionnaire (see Appendix A), and (b) Chinese EFL Learners' English Reading Self-Efficacy Questionnaire (see Appendix B).

### **Chinese EFL Learners' Use of Metacognitive Reading Strategies Questionnaire**

This questionnaire is constructed based on O'Malley and Chamot's (1990) classification of metacognitive strategies to investigate Chinese EFL learners' current employment of metacognitive strategies in their English reading, which contains 20 questions in total. For example, the questionnaire investigates participants' use of scanning the structure of the passage before reading English, highlighting the important points by underlining or making marks while reading English, and making an evaluation on the progress in the reading skills after reading. The answers are based on participants' personal experiences of their English reading in response to each item. The questionnaire was based on a 5-point scale: never (1), seldom (2), sometimes (3), often (4), and always (5). The frequencies can be converted into numbers from 1 to 5. Based on Oxford's (1990) classification criteria, each item can be classified into three levels concerning the frequency number: low frequency (1.0–2.4), medium frequency (2.5–3.4), and high frequency (3.5–5.0). Details are reported in Table 1.

Grounded in O'Malley and Chamot's (1990) classification of metacognitive strategies, items in this questionnaire are divided into three categories of strategies: planning, monitoring, and evaluating. O'Malley and Chamot further classify planning strategies into advance organizers and selective attention. Hence, the questionnaire is divided into four parts: advance organizers (Items 1–4), selective attention (Items 5–11), monitoring (Items 12–15), and evaluating (Items 16–20).

**Table 1***Rank of Metacognitive Strategies Use Frequency*

Mean	Evaluation	Frequency
1.0–1.4	Never	Low
1.5–2.4	Seldom	Low
2.5–3.4	Sometimes	Medium
3.5–4.4	Often	High

### **Chinese EFL Learners' English Reading Self-Efficacy Questionnaire**

Referring to Piercey's (2013) critical examination of different types of reading self-efficacy questionnaires, this study uses a questionnaire on Chinese EFL learners' English reading self-efficacy by specifying the reading self-efficacy categories. All items are classified into four parts: reading self-efficacy for skills (Items 1–6; e.g., “While reading in English, I can understand all words of the content”); reading self-efficacy for tests (Items 7–9; e.g., “I am confident about my English reading comprehension ability”); reading self-efficacy for regulation (Items 10–14; e.g., “While reading in English, I can check whether I understand what I have read”); and general reading self-efficacy (Items 15–25; e.g., “In English reading, I try to do better than I have done before”).

Twenty-five items with a 5-point scale are set up in the questionnaire, ranging from “strongly agree” to “strongly disagree.” The response continuum is as follows: strongly disagree (1), disagree (2), undecided (3), agree (4), and strongly agree (5). When dealing with those positively worded statements, the scores higher than 3 indicate that participants have higher efficacy (Items 1–14, Items 17–25). In contrast, in those negatively worded statements, scores lower than 3 reports higher self-efficacy (Item 15, Item 16). Thus, all negatively worded statements are reversely scored for the convenience of calculation. Theoretically, the final scores are range from 25 to 125. Hence, participants with higher scores mean they have higher self-efficacy in English reading and vice versa.

Although the reading self-efficacy scale is based on Piercey's (2013) identification, the questionnaire is used for the first time. Hence, tests for validity and reliability of the reading self-efficacy questionnaire are conducted. To examine the validity of the questionnaire, the study employed Kaiser-Meyer-Olkin (KMO) and Bartlett's Test. Results show that the KMO value is 0.807 (see Table 2), which indicates the validity of the scale.

The study also used Cronbach Alpha Coefficient to measure the Likert scale of reading self-efficacy. As is reported in Table 3, the Cronbach Alpha Coefficient is 0.918, which is higher than the minimum internal consistency coefficient of 0.70. It means that this questionnaire is of high reliability and the research results are convincing.

### **Data Collection**

In May 2021, I submitted the application for Brock University Ethical Review of Research Involving Human Participants. As soon as I got the ethical approval, I started the recruitment in early June. After receiving the consent from the participants and their guardians, questionnaires were then distributed in accordance with the standards reported in the application for ethical clearance. These two questionnaires were both translated into Chinese to make participants fully understand the meaning of each item.

### **Data Analysis**

After removing the invalid questionnaires, the data of 81 questionnaires were inputted into the computer. Statistical Package for Social Science (SPSS) was then used to analyze the data. The statistical analysis procedures were as follows:

1. Descriptive statistics, including maximums, minimums, means, and standard deviations were used to summarize the participants' responses to their English reading self-efficacy and the use of metacognitive reading strategies.
2. Linear regression analysis was employed to identify whether reading self-efficacy had an impact on EFL learners' metacognitive reading strategies use and estimated the relationship between reading self-efficacy and metacognitive reading strategies.
3. Pearson correlation analysis was conducted to examine whether reading self-efficacy is positively related to metacognitive reading strategies use.

**Table 2***Validity Test*

KMO* measure of sampling adequacy	Bartlett's test of sphericity		
	Approx. chi-square	df	Sig.
.807	1124.159	300	.000

\* Kaiser-Meyer-Olkin

**Table 3***Reliability Test*

Cronbach's Alpha	No. of items
.918	25

### **Ethical Considerations**

This research received ethical clearance from Brock University Research Ethics Board (File # 20-343-HOOPER) in early June before the recruitment began. Before the application for ethical clearance and approval, I contacted my middle school English teacher and principal of the middle school. He provided positive feedback about this project and helped me conduct research with his students. Under the unusual COVID-19 context, China was COVID-19 free, and schools have been open without restrictions since September 2020 (the beginning of the 2020–2021 school year). Therefore, all participants were involved in the in-person questionnaires. Since human participants under age 18 engaged in the questionnaires, students' and parental consent, potential risks and foreseen benefits, as well as the maintenance of confidentiality were taken into consideration.

To get consent from the students and their guardians, I gave all Grade 7 and 8 students a 10-minute lecture, briefly introducing my research purpose and what participants needed to do in this research. Students who were willing to participate in this project were provided with the Informed Consent Form and Parental Consent Form. Both consent forms described the research purposes and the process of data collection, outlined potential benefits and risks, and provided the approaches taken to maintain confidentiality. The Parental Consent Form was translated into Chinese for parents' better understanding. Additionally, participants and their guardians were reminded of their volunteer status and their rights of withdrawal at each stage of this research. After 10 days, students who submitted the two consent forms were gathered in a big lecture room to do the questionnaires at a time they were all available. Two sessions were provided for participants to choose based on their willingness.

To protect the confidentiality of the participants, participants' names were not included or, in any other way, associated with the data collected in this research. Both questionnaires and students were numbered so that participants could access their results conveniently. Furthermore, as my interest was in the average responses of the entire group of participants, participants would not be identified individually in any way in written reports of this research. Data collected during this study were stored by the researcher. All collected questionnaire papers were stored and locked in a locked file cabinet in my home. After entering paper-based data into the computer, all questionnaire papers were locked in that locked file cabinet again, and all digital data were secured on my laptop in password-protected files. After the submission, paper-based questionnaires were shredded. Digital data will be retained on a secured USB flash disk for 5–7 years in case that I might submit my manuscript to a conference or journal. In summary, all data collection was processed in accordance with the standards required by Brock University's Research Ethics Board.

### **Chapter Summary**

This quantitative study utilized two questionnaires and Statistical Package for Social Science (SPSS) software to analyze the three research questions. This chapter offered a detailed description of the research instruments: Chinese EFL Learners' Use of Metacognitive Reading Strategies Questionnaire and Chinese EFL Learners' English Reading Self-Efficacy Questionnaire. This research involved 100 student participants. The process of data collection and data analysis was explained as well. Moreover, ethical considerations were addressed in each step of this research.

## CHAPTER FOUR: RESEARCH RESULTS

This chapter presents and describes the quantitative results in a detailed and systematic way. This study explored the relationship between Chinese adolescent EFL learners' reading self-efficacy and their use of metacognitive reading strategies. The study was grounded on three research questions:

1. What are Chinese EFL learners' current English reading self-efficacy level and their use of metacognitive strategies in their English reading?
2. What are the differences in the use of metacognitive reading strategies among the Chinese EFL learners in three self-efficacy levels?
3. What is the relationship between reading self-efficacy and metacognitive reading strategies use?

This chapter presents results related to the three research questions, each in its own subsection. The first subsection provides information on the descriptive analysis of Chinese EFL learners' reading self-efficacy and their use of metacognitive reading strategies. The second part discusses the differences of metacognitive reading strategies between EFL learners with different reading self-efficacy levels. The final subsection offers a detailed analysis of the relationship between English reading self-efficacy and metacognitive reading strategies.

### Research Question 1

Based on the collected data, descriptive analyses of the two questionnaires are presented individually.

#### Chinese EFL Learners' Current English Reading Self-Efficacy

In this part, a descriptive analysis of the data collected from the questionnaire on reading self-efficacy is presented to calculate the general level of participants' reading

self-efficacy in their English reading. Referring to Table 4, the range of the participants' English reading self-efficacy is from 61.00 to 121.00, and the mean is 94.64 with a standard deviation of 13.205. Hence, on average, the participants felt confident about their English reading performance.

### ***Reading Skills Self-Efficacy***

In this research, reading self-efficacy is divided into reading skills self-efficacy, reading test self-efficacy, reading self-efficacy for regulation, and general reading self-efficacy. Items 1 to 6 correspond to reading skills self-efficacy. Table 5 presents that the mean of reading skills self-efficacy items ranges from 3.27 to 4.12, which indicates that the participants have confidence in their English skills, especially for the skills of finding essential information and the main ideas of the reading materials.

### ***Reading Test Self-Efficacy***

Table 6 provides an overview of the descriptive statistics of reading test self-efficacy. The results indicate that the participants felt relatively confident about their success in the English reading test. The participants also were convinced that they would be successful English readers.

### ***Reading Self-Efficacy for Regulation***

Table 7 presents the mean of each reading self-efficacy for regulation item. The range of these items is from 3.90 to 4.43, indicating that the participants felt rather confident about their self-regulation on English reading. The participants were confident in monitoring and regulating themselves when they read in English.

**Table 4***Descriptive Statistics of English Reading Self-Efficacy Level*

Total score				
N	Min.	Max.	Mean	Std.
81	61.00	121.00	94.64	13.205

**Table 5***Descriptive Statistics of Each Reading Skills Self-Efficacy Item*

Item	Reading skills self-efficacy	N	Mean
1	While reading in English, I can understand all words of the content.	81	3.27
2	While reading in English, I can find important information in the article.	81	4.12
3	While reading in English, I can work out the meaning of unknown words.	81	3.40
4	While reading in English, I can recognize the ideas explained in the article.	81	3.93
5	While reading in English, I can make predictions about what I am reading.	81	3.73
6	While reading in English, I can break big words into smaller parts (e.g., prefixes and suffixes).	81	3.72

**Table 6***Descriptive Statistics of Each Reading Test Self-Efficacy Item*

Item	Reading test self-efficacy	N	Mean
7	I think that I can get high scores on the important English reading test.	81	3.47
8	I am confident about my English reading comprehension ability.	81	3.41
9	I believe I will become a good English reader.	81	3.70

**Table 7***Descriptive Statistics of Each Reading Self-Efficacy for Regulation Item*

Item	Reading self-efficacy for regulation	N	Mean
10	I can get back on the track with my English reading if I am distracted.	81	4.10
11	I can focus all my concentration on the reading content when I read in English.	81	4.14
12	While reading in English, I can check whether I understand what I have read.	81	3.90
13	I can get help with my English reading when I need it.	81	3.91
14	I can finish my English reading assignment on time.	81	4.43

### ***General Reading Self-Efficacy***

In Table 8, the mean of each item of general reading self-efficacy is provided, ranging from 2.85 to 4.37. Item 23 gets the lowest score, being 2.85, suggesting that the participants have little confidence in their English teacher's perception of their English reading success. Items 15 and 16 are reversely calculated, and the means of both items are above 4. The results indicate that the participants feel stressed and anxious when they are asked to read in English. Additionally, comparing the results of Items 18 and 19, it can be seen that the participants hold the view that the power of peer example is greater than the adult example, and both examples have positive impacts on their success of English reading.

### **Chinese EFL Learners' Use of Metacognitive Strategies in English Reading**

This part provided a detailed description of the participants' metacognitive strategies use and the current situation of three categories of metacognitive reading strategies' use. Specifically, the analysis on planning strategy use is divided into advance organizers and selective attention, which contributes to a detailed understanding of the participants' metacognitive reading strategies use.

#### ***Planning Strategy***

According to O'Malley and Chamot's (1990) classification, Items 1–11 belong to planning strategy. Table 9 presents that the mean of planning strategy items ranges from 2.81 to 4.37. No item falls into the low level; the fourth item is the only one that belongs to the medium level; the rest are all at the high level.

**Table 8***Descriptive Statistics of Each General Reading Self-Efficacy Item*

Item	General reading self-efficacy	N	Mean
15	I feel upset as soon as I begin to read in English.	81	4.37
16	I feel overwhelmed when I think about having to read in English.	81	4.27
17	I believe I am successful at English reading in class.	81	3.93
18	Seeing adults who are good at English reading motivates me to be a better reader.	81	3.89
19	Seeing students who are better than me in English reading motivates me to be a better reader.	81	4.02
20	When I see how others read, I can read in the same way.	81	3.89
21	I can improve my reading comprehension abilities by practicing every day.	81	3.31
22	I imagine that I can read difficult English articles successfully.	81	3.53
23	My English teacher believes that I am good at reading in English.	81	2.85
24	In the reading class, I am willing to answer the questions posed by teachers.	81	3.09
25	In English reading, I try to do better than I have done before.	81	4.35

**Table 9***Descriptive Statistics of Each Planning Strategy Item*

Item	Planning strategy	N	Mean
1	Before reading in English, I will think about the reading purposes (e.g., to improve reading comprehension, to obtain information, and to pass time).	81	3.57
2	I will select reading materials which is suitable for my reading proficiency and in accordance with my reading purpose.	81	3.77
3	I will use different types of reading methods when I read different kinds of passages.	81	3.52
4	I will make reading plans (e.g., to specify the number of reading materials or the reading time in a period).	81	2.81
5	I will scan the structure of the passage before reading it.	81	3.58
6	While reading, I will link former background knowledge with the content of the passage.	81	3.81
7	While reading, I will pay attention to the topic sentence of each paragraph to guess the general idea of the passage.	81	4.21
8	While reading, I will highlight the important points by underling or making marks.	81	3.96
9	While reading, I will refer to the notes in the passage to help myself understand the content.	81	4.37
10	While reading, I will pay attention to those important signal words to analyze the logical relations among sentences.	81	4.06
11	Before reading, I will predict the content of the passage through the title.	81	4.02

**Advance Organizers.** Through a further analysis on planning strategy items, Items 1 to 4 are classified into the “advance organizers.” Table 9 illustrates that the participants sometimes or often use “advance organizers” strategies before reading. Items 1, 2, and 3 are at the high level, which indicates that the participants often think about their reading purposes before reading, choose reading materials suitable for their reading proficiency based on their reading goals, and use different reading methods in different reading materials. Item 4, which gets the lowest points, suggests that the participants sometimes make reading plans in their English reading tasks.

**Selective Attention.** Items 5 to 11 are classified into “selective attention.” As shown in Table 9, the frequency of “selective attention” strategies use is high. The frequency of all selective attention items is above 3.5, especially Item 9, which reaches 4.37. This suggests that the participants sometimes use the two strategies in English reading. Although Item 5 is at the lowest score in “selective attention,” its score indicates that participants often scan the passage to find the structure before their English reading.

To sum up, the frequency of participants’ use of planning strategies is at the high level. Participants often use planning strategies before their English reading, except making reading plans. The mean of making reading plans indicates that participants only sometimes use this strategy before reading.

### ***Monitoring Strategy***

Table 10 provides the results of each item of monitoring strategies. As can be seen in the table, the mean of monitoring strategies using frequency ranges from 3.30 to 4.25. The highest score is gained by Item 13, reaching 4.25, which suggests that the participants often make modifications to their previous predictions considering the content having been read.

**Table 10***Descriptive Statistics of Each Monitoring Strategy Item*

Item	Monitoring strategy	N	Mean
12	While reading, I will check whether I can understand what I have read.	81	4.06
13	While reading, I will modify my previous prediction based on the words that I have already read.	81	4.25
14	While reading, I will check in time whether my reading strategies used in the reading process are proper.	81	3.30
15	While reading, I will adjust my reading speed according to the time limit.	81	3.98

Additionally, the mean of Item 12 is high, reaching 4.06, which indicates that the participants often check whether they understand what they have read. Item 14 has the lowest score, being 3.30, which indicates that the participants sometimes check the property of their used reading strategies in time. The mean of Item 15 indicates that the participants often adjust their reading speed concerning the time limit. Therefore, it can be concluded that most monitoring strategies are employed by the participants in high frequency. However, when reading in English, the participants check their used reading strategies in medium frequency.

### ***Evaluating Strategy***

The results of the frequency of evaluating strategies use are set out in Table 11. The mean ranges from 2.75 to 3.62. The means of Items 16, 17, 19, and 20 are lower than 3.5, suggesting that the participants sometimes use these strategies in English reading. Specifically, the participants sometimes check their development in the reading process, think about whether their used reading strategies would contribute to a better understanding of the material, reflect on the obstacles raised in the reading process to explore weaknesses, and evaluate the progress they have made in their reading skills after reading. Additionally, only one item has points that are higher than 3.5; the frequency of that evaluating strategy use is at a high level, manifesting that the participants often create their own perspectives on the reading materials. Accordingly, the results obtained from the descriptive analysis suggest that only one evaluating strategy is frequently used which indicates that the participants do not often or always use evaluating strategies after reading.

**Table 11***Descriptive Statistics of Each Evaluating Strategy Item*

Item	Evaluating strategy	N	Mean
16	After reading, I will summarize what I have gained in the reading process and reflect whether I have achieved the reading goals or not.	81	2.75
17	After reading, I will check whether the reading methods engaged are beneficial for a better understanding of the passage.	81	3.12
18	After reading, I will think about my own views about the passage.	81	3.62
19	After reading, I will continuously make self-reflection to find out the problems arising in the reading process and discover the weaknesses.	81	3.49
20	After reading, I will make an evaluation on the progress I have made in the reading skills.	81	3.05

### ***Summary of Metacognitive Reading Strategy***

Based on the descriptive statistics on the three categories of metacognitive reading strategies, Table 12 summarizes the participants' use of metacognitive reading strategies. The total mean of metacognitive reading strategies is 3.66, suggesting the participants' use of metacognitive reading strategies is at the high level. The means of planning strategies and monitoring strategies are all within the range from 3.5 to 4.4, which indicates that the two types of metacognitive strategies are often used by the participants. However, the mean of evaluating strategies is within the range of 2.5–3.4, indicating that participants sometimes use evaluating strategies in their English reading. More specifically, Table 12 below shows that the frequency of “selective attention” strategy use, gaining the highest score, is at the high level. Therefore, the frequency of the participants' metacognitive reading strategies use is selective attention>monitoring strategy>advance organizers>evaluating strategy.

### **Research Question 2**

To examine the general level of the participants' reading self-efficacy, the statistics are divided into groups below. The participants whose English reading self-efficacy score is higher than 100 (including 100) are within the high self-efficacy group, while the participants whose score is lower than 80 (including 80) are considered as the low self-efficacy group. The rest belong to the medium self-efficacy group. Through grouping, the population in the low self-efficacy group is 11 and in the high self-efficacy group is 25. The results presented in Table 13 convey that the participants are rather confident about their English reading performance, which is in accordance with the findings presented in the first subsection (Research Question 1).

**Table 12***Descriptive Statistics of Metacognitive Reading Strategies*

Type	N	Min.	Max.	Mean
<b>Planning</b>				
Selective attention	81	2.14	5.00	4.00
Advance organizers	81	2.00	5.00	3.42
Monitoring	81	2.25	5.00	3.90
Evaluating	81	1.60	4.80	3.21
<b>Total:</b>	<b>81</b>	<b>2.15</b>	<b>4.75</b>	<b>3.66</b>

**Table 13**

*Descriptive Statistics of Metacognitive Reading Strategies Use Among Three Groups with Different Reading Self-Efficacy Levels*

	Group self-efficacy level		
	Low	Medium	High
N	11	45	25
Mean	63.73	70.80	82.08

Table 13 illustrates the difference in metacognitive reading strategies use among the three groups of participants with different reading self-efficacy levels. Apparently, the frequency of metacognitive reading strategies use of the group with a high level of reading self-efficacy is the highest while the group with low reading self-efficacy is the lowest. Hence, the results reveal that highly self-efficacious participants reported higher overall metacognitive reading strategy use than low self-efficacious participants.

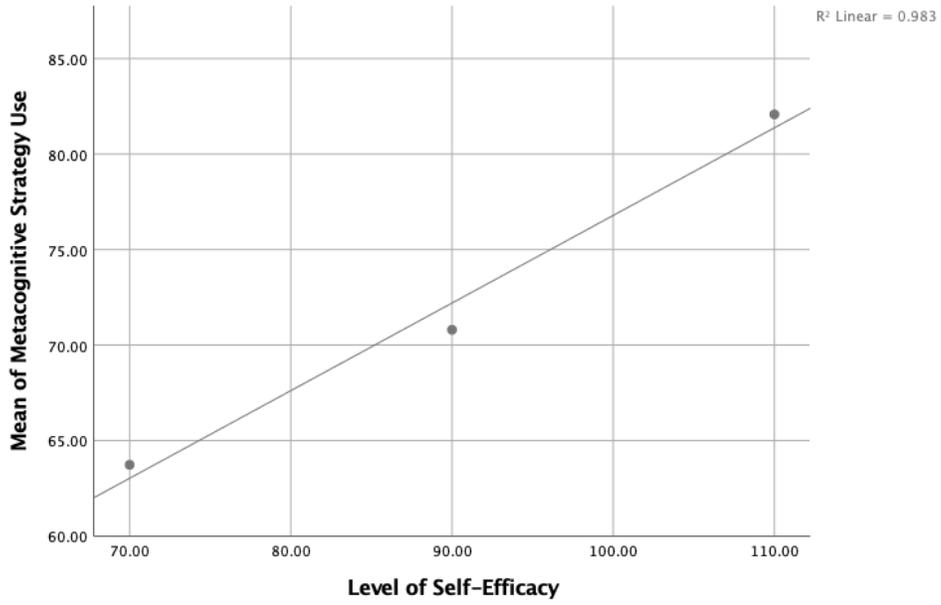
Figure 1 shows that the mean of the participants' metacognitive reading strategies use distributes from the bottom left to the top right in a line as the level of reading self-efficacy gradually increases. Therefore, Figure 1 firstly demonstrates that the increase of reading self-efficacy may promote participants' use of metacognitive reading strategies.

### **Research Question 3**

To investigate the relationship between reading self-efficacy and metacognitive reading strategies, this study conducted a Pearson correlation analysis. Table 14 shows an overview of the correlation between the participants' English reading self-efficacy and their metacognitive reading strategies use. As shown in Table 14, reading self-efficacy level is closely related to metacognitive reading strategies using frequency with Pearson correlation coefficient being 0.664 and the correlation is significant with 0.000 ( $0.000 < 0.05$ ). Consequently, there is a significantly positive relation between English reading self-efficacy and metacognitive reading strategies use.

Table 15 presents the results of Pearson correlation analysis between reading self-efficacy and four subcategories of metacognitive reading strategies. All four types of metacognitive strategies are positively correlated to reading self-efficacy.

Figure 1. Mean plot of metacognitive reading strategy



**Table 14**

*Pearson Correlation Between English Reading Self-Efficacy and Metacognitive Reading Strategies Use*

		Metacognitive reading strategies use
Self-efficacy level	Pearson correlation	.664**
	Sig.(2-tailed)	.000
	N	81

\*\* Correlation is significant at the 0.01 level (2-tailed)

**Table 15**

*Pearson Correlation Between Reading Self-Efficacy and Planning, Monitoring, and Evaluating Strategies*

		Self- efficacy	Advance organizers	Selective attention	Monitor	Evaluate
Self-efficacy	Pearson correlation	1	.413**	.581**	.500**	.569**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	81	81	81	81	81
Advance organizers	Pearson correlation	.413**	1	.511**	.406**	.433**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	81	81	81	81	81
Selective attention	Pearson correlation	.581**	.511**	1	.616**	.450**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	81	81	81	81	81
Monitor	Pearson correlation	.500**	.406**	.616**	1	.554**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	81	81	81	81	81
Evaluate	Pearson correlation	.569**	.433**	.450**	.554**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	81	81	81	81	81

\*\* Correlation is significant at the 0.01 level (2-tailed).

Among the four types of metacognitive reading strategies, the “selective attention” strategy is most positively associated with English reading self-efficacy, with Pearson correlation coefficient reaching 0.581, and its correlation is significant at the 0.01 level. Evaluating strategy is also closely correlated to reading self-efficacy, with the correlation coefficient being 0.569. Monitoring strategy is positively related to reading self-efficacy with a Pearson correlation coefficient of 0.500, and the correlation is significant with  $p=0.000$  ( $0.000<0.01$ ). The Pearson correlation coefficient of the “advance organizers” strategy is the lowest, being 0.413 with  $p=0.000$  ( $0.000<0.01$ ). Hence, it is apparent that advance organizers, selective attention, monitoring strategy, and evaluating strategies are significantly positively correlated with English reading self-efficacy based on the results presented in Table 15.

More specifically, linear regression analyses were used to determine the predictive validity of the reading self-efficacy on the participants’ metacognitive reading strategies use. Based on the regression analysis, the 17th and 78th groups of statistics are exceptional data points, which should be excluded. Table 16 presents the overview of the regression model. After excluding the two groups of data, the Durbin-Watson value of the regression model is 2.012, approaching 2, indicating a high probability that reading self-efficacy and metacognitive reading strategies are independent of each other.

Figure 2 presents the scatterplot of the regression model, which indicates that this model has equal variance. Since reading self-efficacy and metacognitive reading strategies are two independent variables and equal variance exists in this model, a normal P-P plot of regression residual is conducted. As is shown in Figure 3, the data is normal distributed as the distribution of points in this graph is close to the diagonal. Hence, there is a linear relationship between reading self-efficacy and metacognitive reading strategies.

**Table 16***Regression Model Summary*

Model summary					
Model	R	R square	Adjusted R square	Std. error of the estimate	Durbin-Watson
1	.768	.589	.584	6.820	2.012

Figure 2. Scatterplot

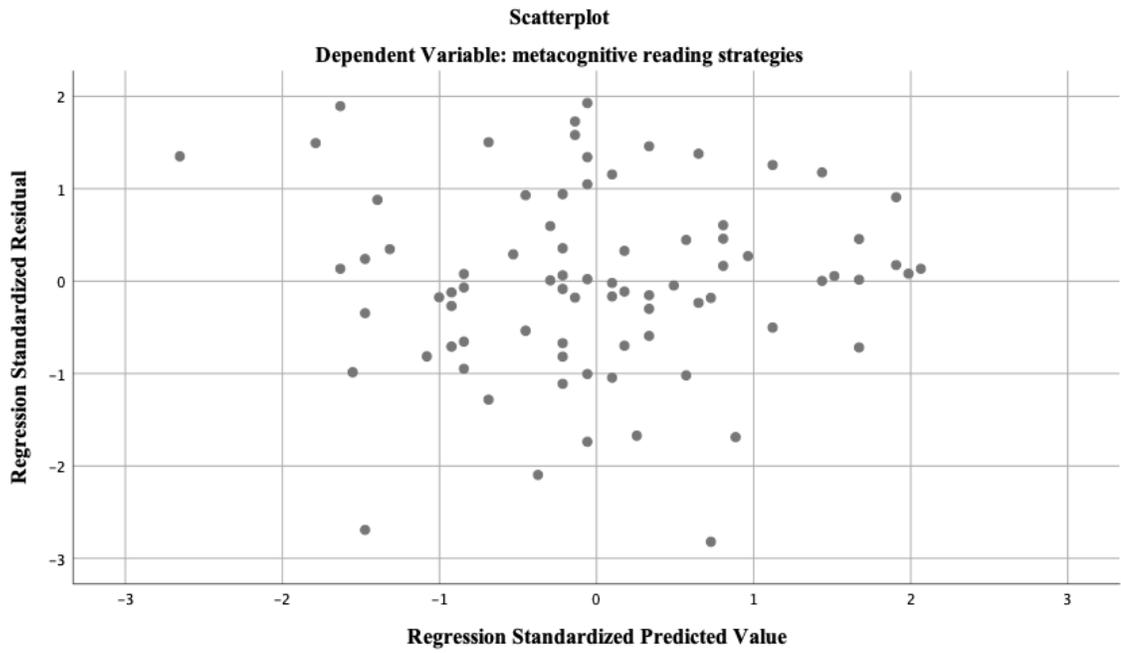
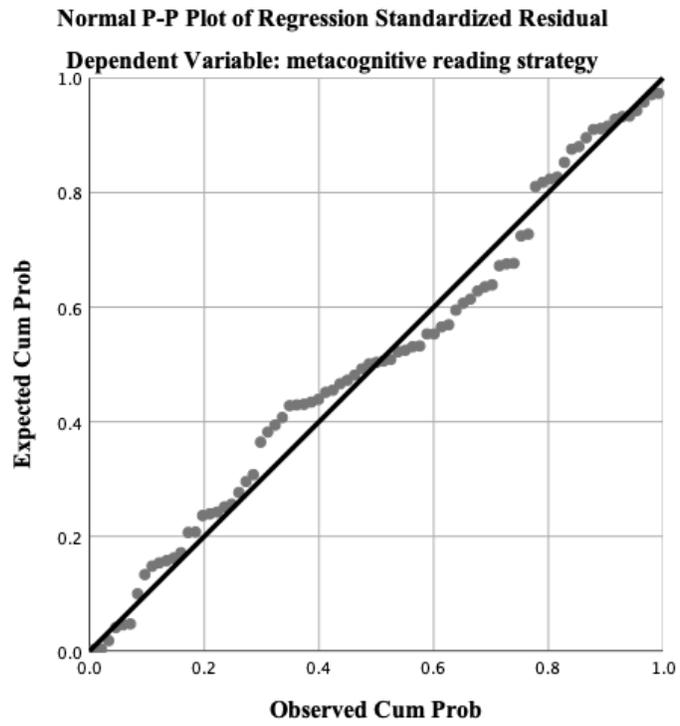


Figure 3. Normal P-P plot of regression standard residual



## Chapter Summary

This chapter provided a detailed insight into the three research questions by the systematic analysis of the quantitative data. For the first research question, descriptive statistics of each item in the two questionnaires were elaborated for a full understanding of Chinese EFL learners' current level of reading self-efficacy and their metacognitive reading strategies in English reading. The results indicated that the participants felt confident about their English reading performance and their use of metacognitive reading strategies was at a high level. For the second research question, the differences in metacognitive reading strategies use among learners with different levels of reading self-efficacy were addressed through grouping and making a graph of the mean plot. Through the analysis, highly self-efficacious English readers were likely to use metacognitive reading strategies more frequently, while low self-efficacious English readers would use metacognitive reading strategies less. For the final research question, Pearson correlation analysis and regression analysis were adopted to identify the relationship between the participants' reading self-efficacy and their metacognitive reading strategies use. The results showed that reading self-efficacy was positively correlated with metacognitive reading strategies.

## **CHAPTER FIVE: DISCUSSION, IMPLICATIONS, AND CONCLUSION**

This research explored Chinese adolescent EFL learners' current reading self-efficacy and metacognitive strategies use. Pearson correlation analysis and regression analysis were employed to examine the correlations between self-efficacy and metacognitive strategies use. Guided by Bandura's (1994) self-efficacy theory and O'Malley and Chamot's (1990) framework of metacognitive strategies, the results related to the three research questions indicate the general situation of EFL learners' self-efficacy and metacognitive strategies use, and the correlational analyses on the two independent variables. This chapter presents a discussion of the Chinese EFL learners' self-efficacy and metacognitive reading strategies, pedagogical implications based on the findings, as well as the limitations of the study and future directions.

### **Discussion**

This study conducted two questionnaires to investigate the relationship between EFL learners' reading self-efficacy and their metacognitive reading strategies use. The presented results manifest the validity and reliability of the two instruments for assessing learners' self-efficacy and metacognitive strategies use. Referring to the findings, this section discusses Chinese EFL learners' current reading self-efficacy level and their metacognitive reading strategies use, as well as the correlations between the two independent variables.

#### **Chinese EFL Learners' Current Reading Self-Efficacy Level**

Based on the results provided in Chapter 4, the level of Chinese EFL learners' reading self-efficacy is relatively high ( $M=94.64$ ), which indicates that they feel rather

confident in their English reading performance. The results align with Li and Wang's (2010) findings that Chinese EFL learners felt confident in their English reading abilities.

Through further investigation on each item of English reading self-efficacy, several issues were found. First, Chinese EFL learners suffer from English reading anxiety. The findings presented in Chapter 4 reveal that the level of Chinese EFL learners' reading anxiety is at a high level. Shi and Liu (2006) found that Chinese EFL learners were burdened with reading anxiety because of the traditional reading teaching models, substantial English tests and assignments, and the lack of interactions with Western culture. Grounded in the conditions of the chosen middle school, teachers still use traditional reading instruction models to teach students due to the large classroom size. Students have no chances to have direct interactions with foreigners and foreign cultures. Although English teachers in that school assign their students multiple reading tasks and activities to stimulate their interests in English reading, learners still suffer from a great deal of English reading anxiety.

Second, Chinese EFL learners have little confidence in teachers' positive evaluation of their English reading competence. Compared with the scores of other items, Item 23 gets the lowest score, being 2.85. Compared with their own perspectives of English reading performance, learners have little confidence in gaining teachers' positive comments on their English reading performance. Considerable researchers have conducted research on the effect of teacher encouragement on student academic performance. For example, Tuckman and Sexton (1991) explored the influence of teacher encouragement on students' self-efficacy and motivation for learning. They reported that students with teacher encouragement were higher in self-efficacy and motivation than

those with no encouragement. Cheo (2017) did an experiment to examine the healthy role of teachers' encouragement in students' academic performance and found that encouragement could foster student performance continuously. Grounded in Tuckman and Sexton's reports and Cheo's research, this finding reveals the importance of teacher encouragement to students' self-efficacy and motivation, which may provide pedagogical implications for Chinese English teachers.

Third, according to the result of the reading self-efficacy questionnaire, Chinese EFL learners believe that the influence of peer examples of being proficient English readers is more powerful than adult examples. This may provide insights for EFL teachers to use peer examples to activate and promote learners' motivation for English reading.

To sum up, concerning the four sources of self-efficacy illustrated by Bandura (1994), the reading self-efficacy of Chinese EFL learners is influenced by mastery experience, vicarious experience, and verbal persuasion. Combining the founded problems with Bandura's (1994) identification of self-efficacy, English learners' self-efficacy can be boosted if teachers can make engaging activities in meaningful contexts and provide students with encouraging and effective feedback in the process of the entire reading activities. Additionally, mastery and vicarious experience should be created for EFL learners since it plays an inevitable role in enhancing learners' self-efficacy.

### **Chinese EFL Learners' Current Use of Metacognitive Reading Strategies**

According to the results presented in Chapter 4, the following findings emerge. First, Chinese EFL learners understand the importance of "advance organizers" and will think out the reading purposes based on the text types before their English reading.

However, they have little idea of making reading plans concerned with their English reading proficiency in practice. Therefore, Chinese EFL learners know the importance of “advance organizers” but are not good at making appropriate reading plans before they read in English. Second, based on the findings that the average of participants’ “selective attention” strategies use is 4.00, it may be inferred that Chinese EFL learners often employ “selective attention” strategies in English reading. For example, the presented results show that learners often scan the title and structure of the reading material before reading. Additionally, they often highlight the keywords by an underling and making some marks to understand the reading materials better. Third, Chinese EFL learners often use monitoring strategies to obtain useful information in their English reading process. However, the results of the medium level of Item 14 indicate that learners are not skilled in using monitoring strategies to enhance their deep processing of information. Fourth, the employment of Chinese EFL learners’ evaluating strategies is better, compared with the former research (Zhang & Seepho, 2013 [M=2.98]). However, compared with the planning strategy and monitoring strategy, the use of evaluating strategies is far from satisfactory. Although EFL learners have an awareness of self-reflection, they have no ideas of using reflective methods in practice, especially practicing self-reflection related to the reading purposes and goals after English reading.

To sum up, the frequency of Chinese EFL learners’ metacognitive reading strategies use is at the high level, which is greater than findings of other studies (Li & Wang, 2010 [M=3.28]; Zhang & Seepho, 2013 [M=3.27]), indicating that they are quite proficient in using metacognitive strategies when reading English now. Chinese EFL learners can consciously use “selective attention” strategies and monitoring strategies in the reading process, especially the easy strategies, such as referring to the notes and

highlighting the important points in the materials. Although Chinese EFL learners make great progress in their metacognitive reading strategies, problems still exist. One of the most significant problems is that EFL learners have little global consciousness of analyzing the reading material as a whole, which therefore contributes to their difficulty in exploring the structure of the passage (Phakiti, 2003; Wu et al., 2019). This obstacle requires students to use overall views when reading in English, which is a critical planning strategy according to O'Malley and Chamot (1990). Therefore, their ability to make plans and employing "selective attention" from the perspective of the whole passage need to be cultivated and improved. Chinese EFL learners have far more space to develop their abilities to use evaluating strategies after English reading. Additionally, they still have the potential to use "advance organizers," "selective attention," and monitoring strategies more often.

### **Relationship Between Reading-Efficacy and Metacognitive Reading Strategies**

Results of correlational analysis and regression analysis show that there are reciprocal relationships between English reading self-efficacy and metacognitive reading strategies. Learners with high self-efficacy tend to use metacognitive reading strategies more frequently. Likewise, English learners who use metacognitive reading strategies may be more self-efficacious. These results are in accordance with Li and Wang's (2010) findings of the positive relationships between self-efficacy and reading strategies. As is mentioned in Chapter 2, metacognitive strategies are the effective skills and actions used to monitor and regulate people's cognitive processes. Therefore, this finding also echoes the argument of the positive correlations between self-efficacy and self-regulation in English learning settings (Su et al., 2018).

More specifically, in view of the results of the analysis on the correlations between English reading self-efficacy and three categories of metacognitive reading strategies, the positive correlations between English reading self-efficacy and monitoring strategies, English reading self-efficacy and evaluating strategies, as well as English reading self-efficacy and planning strategies are significant.

### **Pedagogical Implications**

The research findings offer insights into the influence of self-efficacy and metacognitive strategy on EFL learners' English reading performance. According to the discussion, self-efficacy has positive impacts on learners' use of metacognitive reading strategies. Therefore, several pedagogical suggestions are proposed for EFL teachers to promote learners' English reading performance.

First, as the positive role of metacognitive strategies is examined in EFL learners' reading performance, teachers may enhance students' acquisition of metacognitive strategies in their English learning process. Concerning the research findings, teachers have the responsibility of validating the discrepancy between students' understanding of metacognitive strategies and their actual practices. The development of metacognitive awareness is as crucial as the authentic actions taken in the language learning process, both of which facilitate students to become strategic and self-regulated learners (Iwai, 2011). Furthermore, when training students to use metacognitive strategies, psychological factors such as motivation, efficacy, and confidence should be taken into consideration to ensure students' effective employment of metacognitive strategies (Zhang & Seepho, 2013).

Second, teachers may foster students' understanding and practices of evaluating strategies. Referring to the findings, Chinese EFL learners have little awareness of using evaluating strategies after their reading. To solve this problem, teachers may first develop learners' reflective skills and promote their understanding of reflective practices. Reflective practices should be associated with social, political, and ethical contexts occurring in the teaching and learning process, rather than focusing mainly on learning outcomes. In other words, students are encouraged to practise critical reflection rather than surface reflection. For example, teachers can encourage students to do self-evaluations and peer evaluations after they have accomplished one piece of reading. Su et al. (2018) argue that self-evaluation plays an important role in enhancing learners' self-efficacy. Therefore, as one type of metacognitive strategy, the self-evaluating practices can boost students' self-efficacy in English reading and cultivate their confidence in learning English.

Third, teachers may provide effective feedback for students to help them build and foster their self-efficacy in reading English. Considering the findings, Chinese learners are not confident in teachers' positive views of their English reading performance. According to Bandura (1994), people who are verbally persuaded that they are capable of fulfilling the goal may make more efforts and get success. Hence, it is feasible that teachers can offer encouragement and provide effective feedback to boost students' efficacy. An excellent approach for teachers to make effective comments and feedback on students' learning is formative assessment, "a process used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning process to improve students' achievement of intended instructional outcomes"

(McManus, 2008, p. 3). By using formative assessment, students' reading performance can be elicited, interpreted, and used to adjust the next steps of teaching and learning. Teachers can determine whether students have reached the intended criteria and adjust their instructions based on the results of formative assessment.

In summary, it is essential that EFL learners develop a better understanding of metacognitive strategies and use metacognitive strategies in an appropriate and constant way. As self-efficacy plays a positive role in metacognitive strategies, teachers are provided with a new perspective of activating students' self-efficacy to increase their use of metacognitive reading strategies. There are multiple practical strategies for improving EFL learners' reading self-efficacy. For example, English teachers can set specific and achievable goals to help students gain mastery experiences in English reading. Additionally, cultural background of the designated language teaching should be strengthened to moderate students' reading anxiety. Moreover, teachers can set examples for students to motivate them to be good English readers.

### **Limitations and Future Study**

This research used a quantitative method to examine the relationship between self-efficacy and metacognitive strategies use in Chinese EFL learners' reading. Because of the timeline and nature of the study, several limitations should be addressed.

First, although this research provided quantitative evidence regarding the correlations between self-efficacy and metacognitive strategies, the fact that all participants were students from one middle school limits the generalizability of the results. Additionally, all participants resided in China, which may influence the findings due to the Chinese socio-cultural context. This may influence the accuracy of the results

and conclusions drawn in this research. Future research could collect data from young EFL learners living in different parts of China to ensure adequate representation of the data.

Second, self-report questionnaire results are insufficient for exploring the dynamic relationship between self-efficacy and metacognitive strategies deeply. In the future, researchers may use multiple methods to investigate the situation of Chinese EFL learners' self-efficacy and metacognitive strategies, such as interviews, observations, and case studies. In-depth qualitative research using interviews and observations can help researchers and educators gain fuller understandings of EFL learners' self-efficacy and metacognitive strategies in English reading.

Third, this study only focuses on young EFL learners' self-efficacy and metacognitive strategies. Future studies may contribute to the study of adult EFL learners' self-efficacy and metacognitive strategies. Comparative research on self-efficacy and metacognitive strategies in English reading between young EFL learners and adult EFL learners can be conducted to explore whether age is a predictable factor of self-efficacy and metacognitive reading strategies.

### **Conclusion**

The purpose of this quantitative research was to investigate Chinese EFL learners' reading self-efficacy and their metacognitive reading strategies, as well as examine the relationship between reading self-efficacy and metacognitive reading strategies. The results of the study led to a conclusion that sheds light on the positive relationship between self-efficacy and metacognitive strategies. The research findings are as follows: First, Chinese EFL learners felt quite confident in their English reading performance, and

their use of metacognitive reading strategies is at a high level. Second, Chinese EFL learners are lacking the ability to use general views on the entire reading materials and self-reflection. Third, there is a positive linear relationship between self-efficacy and metacognitive strategies in English reading.

Furthermore, pedagogical implications are presented grounded in the research findings. It is necessary to address the importance of self-efficacy cultivation and metacognitive strategies training in EFL teaching. Although metacognitive strategies and the establishment of self-efficacy cannot solve all problems existing in Chinese EFL learners' reading, they do have positive impacts on learners' awareness of using metacognitive reading strategies and their reading abilities.

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## Appendix A

### EFL Learners' English Reading Self-Efficacy Questionnaire

Dear students,

This questionnaire is designed to measure your judgements of English reading capabilities, so there are no right or wrong answers. This survey is only used for research. This questionnaire survey is anonymous. It will not have any negative influence on your life and study. Thanks for your participation!

- Multiple choices.

Strongly Disagree (SD) Disagree (D) Undecided (U) Agree (A) Strongly Agree (SA)

0% ————— 25% ————— 50% ————— 75% ————— 100%

Items	SD	D	U	A	SA
1. While reading in English, I can understand all words of the content.	1	2	3	4	5
2. While reading in English, I can find important information in the article.	1	2	3	4	5
3. While reading in English, I can work out the meaning of unknown words.	1	2	3	4	5
4. While reading in English, I can recognize the ideas explained in the article.	1	2	3	4	5
5. While reading in English, I can make predictions about what I am reading.	1	2	3	4	5
6. While reading in English, I can break big words into smaller parts (e.g., prefixes and suffixes).	1	2	3	4	5
7. I think that I can get high scores on the important English reading test.	1	2	3	4	5
8. I am confident about my English reading comprehension ability.	1	2	3	4	5

9. I believe I will become a good English reader.	1	2	3	4	5
10. I can get back on the track with my English reading if I am distracted.	1	2	3	4	5
11. I can focus all my concentration on the reading content when I read in English.	1	2	3	4	5
12. While reading in English, I can check whether I understand what I have read.	1	2	3	4	5
13. I can get help with my English reading when I need it.	1	2	3	4	5
14. I can finish my English reading assignment on time.	1	2	3	4	5
15. I feel upset as soon as I begin to read in English.	1	2	3	4	5
16. I feel overwhelmed when I think about having to read in English.	1	2	3	4	5
17. I believe I am successful at English reading in class.	1	2	3	4	5
18. Seeing adults who are good at English reading motivates me to be a better reader.	1	2	3	4	5
19. Seeing students who are better than me in English reading motivates me to be a better reader.	1	2	3	4	5
20. When I see how others read, I can read in the same way.	1	2	3	4	5
21. I can improve my reading comprehension abilities by practicing every day.	1	2	3	4	5
22. I imagine that I can read difficult English articles successfully.	1	2	3	4	5
23. My English teacher believes that I am good at reading in English.	1	2	3	4	5
24. In the reading class, I am willing to answer the questions posed by teachers.	1	2	3	4	5
25. In English reading, I try to do better than I have done before.	1	2	3	4	5

## 外语学习者英语自我效能问卷调查

亲爱的同学：

本问卷旨在衡量您对英语阅读能力的判断，因此没有正确或错误的答案。本调查只用于教学研究，每份问卷的回答情况都是保密的，也与你的学习成绩无关。请客观如实填写，谢谢你的合作！

● 单选题。

非常不同意    不同意                  中立意见                  同意                  非常同意

0%    —————    25%    —————    50%    —————    75%    —————    100%

题项	非常不同意	不同意	中立意见	同意	非常同意
1. 在英语阅读时，我能理解文章的所有单词。	1	2	3	4	5
2. 在英语阅读时，我可以在文章中找到重要信息。	1	2	3	4	5
3. 在英语阅读时，我能弄清楚生词的意思。	1	2	3	4	5
4. 在英语阅读时，我能理解文章的中心思想。	1	2	3	4	5
5. 在英语阅读时，我能预测所读文章的内容走向。	1	2	3	4	5
6. 在英语阅读时，我能将大词拆分成小词（前缀；后缀）来理解。（如：将 unbelievable 拆分成 un-, believe, -able）	1	2	3	4	5
7. 我认为我能在重要的英语阅读测试（如：期末考试；中考）中拿高分。	1	2	3	4	5
8. 我对自己的英语阅读理解能力很有信心。	1	2	3	4	5
9. 我坚信自己能成为一名优秀的英语阅读者。	1	2	3	4	5
10. 在英语阅读分心的时候，我能自己重新集中注意力。	1	2	3	4	5
11. 在英语阅读时，我能集中注意力在所读内容上。	1	2	3	4	5
12. 在英语阅读时，我能检测我是否理解所读内容。	1	2	3	4	5
13. 英语阅读遇到困难时，我能寻求别人的帮助。	1	2	3	4	5

14. 我能按时完成我的英语阅读作业。	1	2	3	4	5
15. 一旦开始英语阅读，我就心烦意乱。	1	2	3	4	5
16. 当我想到必须用英语进行阅读，我就不知所措。	1	2	3	4	5
17. 我相信我在英语阅读方面会取得成功。	1	2	3	4	5
18. 看到擅长英语阅读的成年人会激励我成为更好的阅读者。	1	2	3	4	5
19. 看到在英语阅读方面比我优秀的同学会激励我成为更好的阅读者。	1	2	3	4	5
20. 当我了解到别人的英语阅读方法时，我也能以同样的方式进行阅读。	1	2	3	4	5
21. 我会通过每天练习来提高英语阅读能力。	1	2	3	4	5
22. 我相信我能成功读懂难懂的英文文章。	1	2	3	4	5
23. 我的英语老师认为我很擅长英语阅读。	1	2	3	4	5
24. 英语阅读课上，我会积极回答老师提出的问题。	1	2	3	4	5
25. 在英语阅读方面，我努力做到比以前更好。	1	2	3	4	5

## Appendix B

### EFL Learners' Use of Metacognitive Reading Strategies Questionnaire

Dear students,

This questionnaire is designed to investigate the use of some learning strategies commonly used by English learners. Please answer these questions based on the methods and steps you adopt in the reading process, rather than your thoughts and others' practices. This survey is only used for research. This questionnaire survey is anonymous. It will not have any negative influence on your life and study. Thanks for your participation!

- Multiple choices.

never            seldom            sometimes            often            always  
 0% ———— 25% ———— 50% ———— 75% ———— 100%

Items	never	seldo m	some- times	often	alway s
26. Before reading in English, I will think about the reading purposes (e.g., to improve reading comprehension, to obtain information, and to pass time).	1	2	3	4	5
27. I will select reading materials which is suitable for my reading proficiency and in accordance with my reading purpose.	1	2	3	4	5
28. I will use different types of reading methods when I read different kinds of passages.	1	2	3	4	5
29. I will make reading plans (e.g., to specify the number of reading materials or the reading time in a period).	1	2	3	4	5
30. I will scan the structure of the passage before reading it.	1	2	3	4	5

31. While reading, I will link former background knowledge with the content of the passage.	1	2	3	4	5
32. While reading, I will pay attention to the topic sentence of each paragraph to guess the general idea of the passage.	1	2	3	4	5
33. While reading, I will highlight the important points by underling or making marks.	1	2	3	4	5
34. While reading, I will refer to the notes in the passage to help myself understand the content.	1	2	3	4	5
35. While reading, I will pay attention to those important signal words to analyze the logical relations among sentences.	1	2	3	4	5
36. Before reading, I will predict the content of the passage through the title.	1	2	3	4	5
37. While reading, I will check whether I understand what I have read.	1	2	3	4	5
38. While reading, I will modify my previous prediction based on the words that I have already read.	1	2	3	4	5
39. While reading, I will check in time whether my reading strategies used in the reading process are proper.	1	2	3	4	5
40. While reading, I will adjust my reading speed according to the time limit.	1	2	3	4	5
41. After reading, I will summarize what I have gained in the reading process and reflect whether I have achieved the reading goals or not.	1	2	3	4	5
42. After reading, I will check whether the reading methods engaged are beneficial for a better understanding of the passage.	1	2	3	4	5
43. After reading, I will think about my own views about the passage.	1	2	3	4	5
44. After reading, I will continuously make self-reflection to find out the problems arising in the reading	1	2	3	4	5

process and discover the weaknesses.					
45. After reading, I will make an evaluation on the progress I have made in the reading skills.	1	2	3	4	5

## 外语学习者英语元认知阅读策略问卷调查

亲爱的同学：

你好！本问卷旨在调查英语学习者常用的一些学习方法，请你根据平时你在课外阅读英语文章时所采取的方法和步骤（而不是你的想法或他人的做法）作答。

本调查只用于教学研究，每份问卷的回答情况都是保密的，也与你的学习成绩无关。请客观如实填写，谢谢你的合作！

单选题。

从不            很少            有时            经常            总是

0% ————— 25% ————— 50% ————— 75% ————— 100%

题项	从不	很少	有时	经常	总是
26. 阅读前，我会想想阅读的目的（如：为提高阅读理解能力、获取信息、消遣等）。	1	2	3	4	5
27. 我会根据自己的阅读目的选择适合自己水平的阅读材料。	1	2	3	4	5
28. 我会根据不同的文章采取不同的阅读方法。	1	2	3	4	5
29. 我会制定阅读计划（如规定自己在一段时间内的阅读数量或时间等）。	1	2	3	4	5
30. 阅读开始时，我会快速浏览一下文章的结构再进行阅读。	1	2	3	4	5
31. 阅读时，我会将已有的背景知识和文章的内容相联系。	1	2	3	4	5
32. 阅读时，我会注意文章段落的主题句，借此判断主旨或大意。	1	2	3	4	5
33. 阅读时，我会划线或作标记来突出重点。	1	2	3	4	5
34. 阅读时，我会注意文章的注释帮助自己理解内容。	1	2	3	4	5
35. 阅读时，我会注意重要的信号词，以帮助自己理解句子之间的逻辑关系。	1	2	3	4	5
36. 阅读文章前，我会通过标题预测文章的内容。	1	2	3	4	5
37. 阅读过程中，我会时时思考自己是否理解所读的内容。	1	2	3	4	5
38. 阅读过程中，我会根据所读的内容修正之前的预测。	1	2	3	4	5

39. 阅读过程中，我能及时检查所用的阅读方法是否恰当。	1	2	3	4	5
40. 阅读过程中，我会根据阅读时间调整自己的阅读速度。	1	2	3	4	5
41. 阅读后，我会总结自己有哪些收获，评价自己的阅读目的是否达到。	1	2	3	4	5
42. 阅读后，我会总结所使用的阅读方法是否有助于理解文章。	1	2	3	4	5
43. 阅读后，我会思考自己对文章的看法。	1	2	3	4	5
44. 阅读后，我会不断反思自己在阅读过程中出现的问题，了解自己的弱点与不足。	1	2	3	4	5
45. 阅读后，我会对自己在阅读技能上取得的进步进行评估。	1	2	3	4	5