

An Investigation into Chinese College EFL Students' Metacognitive Awareness of Academic Reading Strategies

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Abstract

This study tries to explore Chinese EFL students' metacognitive awareness and perceived use of academic reading strategy in one south college. A total of 38 students responded to a 30-item Survey of Reading Strategies (SORS), which was adopted from Mokhtari and Sheorey (2002). The reading strategies were classified into three categories: Global, Problem-solving and Support strategies. The collected data showed students' relatively frequent uses of three categories of reading strategies, and high metacognitive awareness. A close relation between strategy uses and reading proficiency was also found. Students with high reading proficiency applied more strategies than the intermediate- and the low-proficiency group. Additionally, good readers displayed a higher frequent use of Global and Problem-solving strategies than poor readers. These findings might provide L2 reading researchers, reading curricula designers or practicing teachers with some insights into students' reading processes. Therefore, effective reading instruction can be adjusted to students' reading needs and designed to prepare students to be more strategic and independent readers.

Keywords

L2/EFL reading, metacognitive awareness, academic reading strategies, Chinese EFL readers.

1. Introduction

In the domains of first language (L1) and second language (L2) learning, reading has been recognized as a critical component input and a learning skill in academic contexts. Since the proposal of the psycholinguistic model of reading (Goodman, 1988), reading has been interpreted as an interactive process, which emphasizes the reader's ability to activate background knowledge and to make inferences from the text by applying appropriate reading strategies [1]. Current studies have therefore advocated that all students should be trained to be "constructively responsive" readers, and reflective language learners (Grabe, 2020) who are motivated and engaged in monitoring their reading process [2]. This learning goal certainly requires much more than students simply possessing fluent word-recognition skills, sufficient vocabulary knowledge and the ability to activate background knowledge. In fact, as Koda and Yamashita (2021) emphasize, 'Reading to learn' strongly demands readers' ability to make plans, monitor their comprehension process and flexibly adopt reading strategies whenever needed [3]. This kind of self-regulating ability is interpreted as metacognitive awareness (Zhang and Zhang, 2022), and its beneficial effect on reading performance, especially in academic contexts, has been extensively demonstrated by researchers [4].

2. Significance of the Study

In China, English has been regarded as a compulsory subject throughout the college curriculum and also a crucial requirement for tertiary education. Fluent reading in English is considered as one important skill of English language learning. However, it requires considerable time and

practices to facilitate, especially in more advanced academic context. In fact, most Chinese EFL students have experienced a wide range of reading problems, and this is especially true in colleges where advanced reading comprehension abilities are urgently required for more challenging authentic reading texts. Therefore, students with little metacognitive awareness of reading strategy uses appear to encounter much more reading failure. Faced with this problem, a profound reform of the English reading curriculum in college has been currently released. The introduction of this reform indicates the need to prepare EFL students with more advanced academic reading skills required for the college level, especially for “College English Test Band 4 and 6”. In other words, this reform encourages EFL students to meet expectations of tertiary education, which is to become a more independent, reflective and strategic reader. Based on this belief, it is therefore of great value to gain an in-depth understanding of what is going on in EFL students’ reading process, and what strategies they are applying, and how, in different reading contexts. In order to accomplish these above-mentioned research goals, our research question is designed as follows: What are EFL college students’ metacognitive awareness and perceived use of reading strategies?

3. Literature Review: Reading Strategies, Metacognitive Awareness and Reading Comprehension

It is not adequate for L2 readers to simply have a good knowledge of vocabulary, discourse structure and content-area information. Readers should also be equipped with various reading strategies in order to help them flexibly and appropriately address reading difficulties. They need to not only know effective reading strategies, but also learn why, when and how to apply them. Only when L2 readers make the most use of reading strategies in academic contexts, can they optimise reading outcomes.

Research has established the vital role of comprehension strategies in enhancing independent reading and maximizing reading efficacy both in L1 and L2 contexts. According to Grabe and Stoller (2018), a ‘reading strategy’ refers to the mental process that a reader consciously controls and deliberately selects with the aim of accomplishing particular reading goals [5]. Macaro and Erler (2020) see it as a wide range of purposeful actions that a reader undertakes to build coherent mental representations from text [6]. Therefore, the use of reading strategies might indicate how readers approach a task, and what response they make when misunderstandings occur. So far, various effective reading strategies which are frequently adopted by readers have been explored. These strategies, according to (Koda, 2019), range from more cognitive ones such as skimming, scanning and re-reading, to more advanced ones like predicting, activating background knowledge, recognizing discourse structure, checking understanding and critiquing the text, etc [7]. However, researchers (Macaro and Erler, 2020) emphasize that strategies themselves are not inherently effective or ineffective, and the effectiveness of strategies relies on various contextual factors, such as task types, reading purpose, language proficiency, L1 literacy skills and learning style [8].

Therefore, other than knowing various strategies, it is also important for a reader to learn how to apply strategies in an appropriate and flexible way. This kind of ability or awareness is interpreted as metacognition or metacognitive awareness (Koda and Yamashita, 2021) [3]. In the L2 reading context, one’s metacognitive awareness has also been found to be crucial in skilled reading, as it boosts student self-efficacy and reading motivation. Proficient readers are found to be more aware of strategy uses and able to flexibly and appropriately apply them, compared with less proficient readers. This significant finding further implies that the key to the strategic reading is a reader’s understanding of how to apply one specific strategy appropriately and integrate its use with other strategies effectively, rather than simply knowing a number of strategies.

4. Research Design: A Small-sample Case Study

This current study was designed as a case study, which is an effective research strategy for accessing perspectives and trends in the field of applied linguistics. This study was conducted in one college A in Jingdezhen city, which was located in the southeast part of China. The standard of English education in this college is ranked in the intermediate level in China, and therefore the research sample is more representative and typical of the general population in China. The participants were 38 Chinese EFL students aging from 19 to 21, and they were in their second academic year. There were 22 females (57.9%) and 16 were males (42.1%). After enrolling in this school, students are required to attend five or 4 compulsory English classes every week, with each extensive class lasting about 45 minutes. They need to read various demanding academic materials (textbooks and English learning journals) for homework and examinations.

This study adopts Survey of Reading Strategies (SORS) questionnaires to investigate whether an EFL student is or not aware of a wide range of processes occurred in reading and to learn about the plans or goals he or she has during reading tasks. The questionnaire was developed by Mokhtari and Sheorey (2002) to explore EFL students' metacognitive awareness and perceived uses of academic reading strategies [9]. The SORS consists of thirty items, each of which uses a five-point Likert scale ranging from 1 ("I never or almost never do it") to 5 ("I always or almost do it"). Students are required to carefully read every statement and circle the number which indicates the frequency of their strategy uses. The higher the number students choose the more frequent use of reading strategy concerned.

SORS broadly measures 3 categories of reading strategy uses, which are Global Reading Strategies (GLOB), Problem-solving Strategies (PROB) and Support Strategies (SUP). Global Reading Strategies can be defined as these intentional and carefully planned strategies through which EFL readers can effectively regulate their reading comprehension process. It contains 13 items and examples include "I have a purpose in mind when I read", "I try to guess what the content of the content of the text is about when I read" and so on. Problem-solving Strategies (PROB) refer to localized and repaired strategies. These strategies appear to be oriented action plans or procedures, which enable readers to skillfully address comprehension difficulties when the written information becomes challenging. PROB contains 8 items and examples include picturing information to help remember what have been read, and adjusting reading speed to improve understanding. Support Strategies (SUP) contain 9 items and mainly involve the use of note-taking, dictionaries and other reference materials.

In short, all three types of reading strategies (GLOB, PROB and SUP) interact closely with each other. In this study, SORS serves as a simple but effective tool, enabling researchers to have an in-depth understanding of students' preferences of strategy use. Generally, over or under-relying on one particular reading strategy might indicate how the student approaches the reading task. Therefore, the data obtained from the SORS can assist teachers in adjusting strategy instruction to individuals' needs.

5. Research Findings

5.1. Metacognitive Awareness in EFL Academic Reading: High Frequency of Problem-Solving Strategies and Moderate Global Strategy Use

Based on the descriptive statistics of the overall mean frequency of EFL students' perceived reading strategy use. The results show that EFL students on the whole reported employing reading strategies at a medium to high level.

More than seven-eighths EFL students (89%) self-reported a relatively frequent use of reading strategy, while only 4 students, which accounts for 11% of the total, were found to be at a low

use of strategy. Besides, the overall use of reading strategies ($M=3.61>3.50$) is relatively frequent, revealing students' high metacognitive awareness of academic reading activities. More specifically, Problem-solving Strategies were found to be applied at a high level ($M=3.82 \geq 3.5$), followed by the use of global strategies with mean values of 3.58. Interestingly, the least used strategies were identified to be support strategies ($M=3.13$). Therefore, it can be inferred that Problem-solving Strategies are EFL students' prime choice to facilitate reading efficiency, followed by Global Strategies. Support Strategies are much less popular compared with the other two, probably because of students' unwillingness to use such time-consuming strategies to solve problems.

The main findings indicate that most EFL students in School A demonstrate high abilities of strategically employing comprehension strategies. They display conscious reading behaviours and are able to adopt different comprehension strategies to enhance reading efficiency, based on context requirements. All these research evidence has accumulated that compared with native-speaking readers who typically possess a more tacit knowledge of their native language, L2 readers appear to develop greater metacognitive awareness of their reading process, and use strategies to solve comprehension difficulties frequently and purposely.

5.2. Cross-Linguistic Transfer of L1 Literacy Skills: Catalyzing Metacognitive Awareness in Chinese EFL Reading

In this study, the possible transfer of L1 (Chinese) literacy skills might be a compelling explanation for Chinese EFL students' high degrees of metacognitive awareness and active uses of comprehension strategies. Research evidence has demonstrated that the reading processing experience of L1 can exert a far-reaching effect on L2 reading activities (Koda, 2019) [7]. This means that L1 reading skills can be consciously transferred into L2 settings in order to maximize reading comprehension. In China, students normally approach English reading after at least 9 years of Chinese learning, during which L1 literacy skills and content knowledge have been sufficiently developed. Consequently, Chinese EFL readers tend to have a clear awareness of how they have learned to read, and what reading strategies can effectively work for them to solve comprehension difficulties.

5.3. Age and Pedagogical Context: Drivers of Strategic Metacognitive Engagement in Chinese EFL readers

Additionally, most of these EFL learners are older than L1 learners. This means that a well-developed understanding of the world might have been established, and older EFL learners are able to make more elaborate logical inferences from the text. It could be further said that older EFL learners seem to be more experienced at making the most use of metacognitive strategies to support their learning, making them more productive language learners. Moreover, English learning in the Chinese context can also facilitate students' awareness of English learning. This is mainly because that Chinese traditional English teaching methods usually give explicit and direct explanations on vocabulary, syntax and discourse, which can effectively promote students' metacognitive awareness of strategy uses. As a result, students appear to consciously apply this awareness to their academic reading contexts.

5.4. Prevalence of Problem-Solving Strategies in EFL Reading: Anxiety Mitigation and Self-Monitoring in L2 Contexts

Another significant finding noticed in this study is the prominent application of Problem-solving Strategies among EFL students. A similar result can be found in previous research on the domain of L2 reading strategy uses, such as Koda and Yamashita (2021) [3] with Japanese learners engaged in academic reading tasks and Zhang (2022) with Chinese EFL learners in academic settings [10]. The reason why Problem-Solving Strategies are frequently adopted might be explained by Pekrun and Linnenbrink-Garcia (2021), who suggest that L2 readers

often face heightened anxiety and reduced motivation when encountering comprehension challenges [11]. However, with the assistance of Problem-solving Strategies like rereading, adjusting reading rate, and paying closer attention to the text, L2 readers manage to self-monitor their reading process and efficiently address reading problems.

5.5. Limited Use of Support Strategies in EFL Reading: Contextual Demands and Strategic Flexibility

On the other hand, it is interesting to observe that Support Strategies (e.g., using outside reference material like dictionaries; going back and forth in text; taking notes) are reported as the least popular. A similar result can also be found in Zhang and Zhang's (2021) study conducted with Chinese EFL learners in academic settings [12]. The reason for the limited use of these strategies, according to Grabe (2020), might be their contextualized characteristics [2]. In other words, the effectiveness of Support Strategies depends on various reading contexts. Translation from the target language to the native language can be a time-consuming task. Thus, it might greatly reduce processing efficiency but help to clarify text meanings to some extent. Considering this, it is not surprising that Chinese EFL students use Support Strategies less frequently. The limited use of Support Strategies also demonstrates students' flexible selection of comprehension strategies based on context requirements.

5.6. Proficiency Drives Strategy Use: Skilled vs. Novice EFL Readers in Metacognitive Practice

A vital difference between reading strategy choices and reading abilities has also been identified in this study. Chinese EFL students with high self-rated reading proficiency appear to apply reading strategies more frequently ($M=3.66$) than intermediate readers ($M=3.51$) and beginners ($M=3.31$). This finding is in accordance with Teng and Zhang's (2022) [13] claim that a high degree of metacognitive awareness towards reading strategy use is a hallmark of skilled readers. Similarly, Koda and Yamashita (2021) [3] prove that successful readers tend to perform reading activities with some general similarities. Normally, skilled readers often engage in reading tasks with tentative plans, reflective thinking, and combined strategy use. In contrast, novice readers appear to possess less knowledge about strategy use; they are less experienced at regulating their reading process and often fail to resolve inconsistencies in comprehending the text.

6. Conclusion

This study has provided some valuable pedagogical implications for EFL reading teachers. Firstly, it is important to improve the professional education and development of reading teachers. They should be trained to be skilled experts with special knowledge and abilities, in order to teach reading. More specifically, they should be aware of what strategies to teach and how to teach them; they must be able to build reasonable goals for strategy instruction; they must be able to flexibly modify their explanations by critically analysing students' responses; they must be able to design various interactive and reader-based activities to enhance students' reading performance. However, what should be emphasized here is the need for teachers to analyse their own classroom environment and access students' reading needs before implementing any teaching activities. In fact, there is no perfect or one-size-fits-all teaching approach to all L2 reading contexts, and therefore teaching priorities should be determined based on student needs, institutional expectations and resource constraints.

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