

## Are More Proficient Readers More Strategic? A Case Study of Four Taiwanese EFL University Students

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### Abstract

The article presents the results, interpretations, and potential pedagogical implications of an experimental case study that explored the beliefs and actual use of reading strategies of four Taiwanese EFL university students. The emphasis of the qualitative analysis is put on what the participants effectively do rather than what they believe they do, something that many studies in the field overlook. In addition, the study investigated the interplay between reading strategy use and reading proficiency. The research triangulates the introspective data with the products of participants' task activity. The participants were asked to fill out a self-reporting questionnaire. After a few days, they performed a reading task accompanied by the think-aloud protocol, took a comprehension test, and were interviewed. The study revealed that participants' perceptions of their reading strategy use and the actual use were not always aligned. More importantly, the study findings indicate that the variety, frequency, and appropriateness of the actual use of reading strategies positively correlated with the participants' reading and general linguistic proficiency levels. Pedagogical implications and suggestions for further research are discussed, as well as the current study's limitations.

**Keywords:** Reading proficiency; Reading strategies; SORS; Taiwan EFL; Think-aloud protocol

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## INTRODUCTION

Reading comprehension is a cornerstone of academic success (Ghaith, 2018). This applies to students' reading proficiency in their first language (L1) (Brantmeier et al., 2014) but, perhaps even more importantly, to English as a Foreign Language (EFL) learners whose L1 is not the language of academic instruction (Bernhardt, 2011; Eskey, 2005; Mokhtari & Sheorey, 2002). These readers not only need to cope with the complex process of reading itself but also need to be able to activate the knowledge of and the ability to use the second language (L2) (Koda, 2007). They are also faced with a multitude of additional factors that L1 readers usually are not affected by, such as foreign socio-cultural references and linguistic peculiarities (e.g., idioms) (see Grabe, 2009; Marx et al., 2015). Snow (2002) points out that satisfactory overall linguistic proficiency in L2 may not guarantee success in academia and that L2 academic readers are still prone to experience comprehension difficulties due to the complexity of the reading material. At the same time, Taylor and his colleague (2006) maintain that reading comprehension is a strong predictor of academic success. This leads some authors (e.g., Dreyer & Nel, 2003; Grabe & Stoller, 2002) to conclude that a significant

number of L2 students may enter the academic linguistic environment underprepared and suffer frustration. This situation is commonplace in Taiwanese tertiary education (see Huang, 2006). Many scholars (e.g., Anderson, 2012; Bernhardt, 2011; Brevik, 2017; Grabe, 2009; Poole, 2012) point to the potential of reading strategies to address this issue in L2 reading comprehension. It is thus vital to explore the potential interplay between Taiwanese EFL students' reading comprehension, their perception of reading strategies, and the actual use thereof when on task.

Zwaan and Graesser (1998) posit that reading comprehension occurs when 'a coherent and appropriate model of the state of affairs denoted in the text' (p. 195) is constructed in the reader's mind. Cognitive psychologies (e.g., Stanovich, 1980) successfully combined analytic bottom-up (e.g., LaBerge & Samuels, 1974) and holistic top-down (e.g., Goodman, 1976) mental processes involved in reading into an interactive model utilised in L1 reading fluency studies (e.g., Doolittle & Welch, 1989). The model was subsequently adapted to L2 study (e.g., Brantmeier, 2001). Top-down processing contextualises the text content by enriching it with prior background knowledge, which enhances reading comprehension. These processes are governed by schema theory and its modern, pedagogical and linguistic refinements (Rumelhart, 1980; Vygotsky, 1978). In order to activate schematic background knowledge, a set of reading strategies can be deployed, such as inferring meaning, summarising, predicting, and skimming the text in search of schema activators. Bottom-up reading processing promoted by the Grammar Translation Method (Oxford, 2017) mainly involves work on decoding the text at the lexem-, word-, or sentence-level. It must be stressed that top-down and bottom-up processes should be construed as a continuum (Finkbeiner, 2005). Another conceptualisation of reading comprehension was proposed by Roe and Smith (2012). In their view, reading comprehension occurs at the literal and higher-order levels. Literal comprehension is constructed by processing the surface meaning of the text. Higher-order comprehension consists in analytical work involving analysis, synthesis, interpretation, and inference.

To facilitate reading comprehension in L1 and L2, readers are advised to utilise reading strategies (henceforth 'RS'). Oxford (2017) captures the essence of L2 RS as 'teachable, dynamic thoughts and behaviors that learners consciously select and employ in specific contexts to improve their self-regulated, autonomous L2 reading development for effective task performance and long-term proficiency' (p. 272). This paper adheres to this inclusive view.

It has been proposed to categorise RS as cognitive and metacognitive strategies (Phakiti, 2003). While cognitive strategies relate to language processing operations involving comprehension, memory, and retrieval, metacognitive strategies monitor and regulate cognitive strategies (Phakiti, 2008). Another taxonomy was proposed by education researchers (e.g., Richards & Rodgers, 2001), who perceive a task as a series of phases through which the learner progresses: from a preparatory pre-task through the actual task to a culminating post-task. Researchers particularly interested in reading comprehension processes (e.g., Paris et al., 1996; Saricoban, 2002) adapted these general observations and devised a model of RS specifically tailored to support comprehension at a particular phase of the reading task.

Many authors (e.g., Pintrich et al., 1994; Youlden & Chan, 1995) maintain that awareness of, or even utilisation of RS, fails to guarantee success in reading. Those who advocate 'strategic learning' (e.g., Borkowski et al., 1990; Ee & Chan, 1994) point out that learners must also be able to monitor, regulate, and optimise the selection and

the use of RS (Botsas & Padeliadu, 2003). It has been proposed (Weinstein & Mayer, 1986) that these tasks are facilitated by metacognitive strategies, for example, elaboration (Pintrich & De Groot, 1990). Empirical studies (e.g., Baker, 1985; Markman, 1979) suggest that monitoring the reading process and use of RS is essential to reading comprehension (Baker, 2001) and promotes successful performance (Schraw, 1994).

There is a massive research body dedicated to investigating the interplay between RS use and reading comprehension of EFL learners in various international settings (e.g., Anderson, 2008; Malcolm, 2009; Mokhtari & Sheorey, 2002; O'Malley & Chamot, 1990; Zhang, 2010). Ghaith and El-Sanyoura (2019) and Habok and Magyar (2019) conducted a meta-analysis of several studies concerned with the reported use of RS and their role in EFL comprehension. The picture emerging from this study is inconclusive. Some studies (e.g., Bakhshalinezhad et al., 2015; Han, 2018; Madhumathi & Ghosh, 2012; Meniado, 2016; Sheorey & Mokhtari, 2001; Zhang et al., 2008) found a statistically significant positive correlation between the use of RS and reading proficiency of the participants. The general tendency transpiring from the findings from those studies is that the more proficient EFL readers are aware of the usefulness of RS and use a variety of them more appropriately and more frequently than less proficient EFL readers do. This claim is especially relevant in relation to metacognitive strategies. Since these higher-order strategies govern the application of cognitive strategies, operational knowledge of metacognitive RS can be regarded as a predictor of success in reading (Grabe, 1991). However, other studies (e.g., Endley, 2016; Fitrisia et al., 2015; Guo & Roehrig, 2011; Zuledwi et al., 2018; partly also Saricoban, 2002) either did not identify any correlation or indicated a weak, statistically not significant link between the RS use and reading proficiency. Additionally, many studies relied purely on the participants' perception in relation to the frequency and accuracy of RS use without providing a measurable means to assess students' comprehension. The study by Nordin and his colleagues (2013) discovered that low- and high-achievers employed RS almost equally frequently. However, the repertoire of the RS differed significantly between the two groups of readers. This is in line with Ghavamnia and her colleagues (2013), who posit that learners at all levels of English proficiency are essentially 'active strategic readers' (p. 363), employing a variety of cognitive RS. However, they also claim that less proficient readers make use of these RS more 'haphazardly and unsystematically' (Ghavamnia et al., 2013, p. 370) than their more proficient peers do, or 'inappropriately' (Vann & Abraham, 1990, p. 177), which indicates that the differentiating factor is their stronger competence in employing metacognitive RS. However, McGrath and colleagues (2016) demonstrate that even highly proficient academic readers may not apply RS consistently.

Many studies conducted in Taiwan concerned with the interplay between RS use and reading proficiency relied on participants' perceptions of the use of RS (e.g., Chen & Chen, 2015; Chou, 2021; Kung, 2013; Shang, 2010, 2011, 2017). Only a few (e.g., Hu, 2012; Shang, 2017b; Shih et al., 2018; to some degree also, Huang et al., 2009) measurably tested the participants' comprehension. The current study is localised in Taiwan's tertiary education environment. As Huang (2006) reports, a characteristic of this EFL academic setting is that English is taught at the primary and secondary education level mainly to satisfy the requirements of examinations, ultimately the university joint entrance examinations. Reading comprehension tasks constitute an integral part of the exams, but Taiwanese EFL readers are believed to possess poor knowledge of and thus insufficient control over RS (Chen & Chen, 2015), resulting in

their inappropriate selection and application (Shang, 2011). After the first year of compulsory general English courses, most university students are no longer required to continue their linguistic L2 development. In reality, however, many courses utilise specialised, domain-specific material written in English (Huang, 2006). When confronted with more advanced and complex English text, students tend to struggle at the lexical level and revert to low-level, bottom-up text processing involving cognitive strategies (Cheng, 2000). Thus, Taiwanese students can be regarded as unsuccessful learners with low English reading proficiency (Ko, 2002; Kung, 2013).

The wealth of scholarly work on the interplay between reading proficiency and RS reviewed above points to some tendencies in patterns of use; particularly, problem-solving RSs are reported as the most preferred by participants (Ghaith & El-Sanyoura, 2019). However, a wide range of variables underpinning the analysed studies blur the picture. The list of these variables is long: participants' L1 and L2 linguistic and reading proficiency, ethnicity and cultural background, education setting, text difficulty and complexity, and intensity of prior RS instruction (or lack thereof). Additionally, the analysed studies vary greatly in terms of the design: small-scale qualitative case-study projects are juxtaposed with large-scale qualitative ones. In addition, many studies relied on participants' perception of their RS use and did not assess their performance in relation to reading comprehension.

This study takes participants' perception in relation to the variety and use frequency of RS into account. However, more importantly, it looks at the actual use of RS and assesses participants' performance when using RS. In doing so, this study aims to understand better Taiwanese university students' theoretical knowledge and perception of RS and field-test their viewpoints. The study seeks to draw patterns of actively used RS and maps them on the English reading proficiency levels. Knowledge in that field can benefit students themselves, classroom teachers, and education administrators. The reported project was conducted in order to investigate:

1. What RS Taiwanese university students report using?
2. Whether there is a discrepancy between the self-reported and the actual use of RS?
3. Whether a relationship exists between frequency of use and variety of the applied RS and students' English proficiency level?

## METHOD

The current project is designed as a small-scale qualitative study. The research triangulates the introspective data (Grotjahn, 1987) with the products of participants' task activity that subsequently underwent reflexive thematic analysis (henceforth 'TA') (Braun & Clarke, 2006; Terry et al., 2017). The study draws on and methodologically extends the study conducted by Vann and Abraham (1990). The data were collected using four instruments, briefly introduced below.

### Research design

Four students, two females and two males, participated in the study. They were students at a university in central Taiwan where I used to teach. Based on their final marks in the General English course I taught, they were carefully selected to represent the spectrum of English proficiency from the advanced, through high- and pre-intermediate, to elementary level. The course contained an interactive component, but reading was emphasised. The participants were initially approached by my Taiwanese research assistant (henceforth 'RA')<sup>i</sup> and invited to participate in the study.

They were informed that their participation would be voluntary, anonymous, and it would not affect their formal in-class assessment. Individual 90-minute sessions with each of the four participants were scheduled on separate days. The participants were asked to sign a confidentiality agreement (Kaiser, 2009). The sessions followed the following order of tasks:

1. Background Questionnaire developed by Oxford (1990),
2. the Survey of Reading Strategies (henceforth 'SORS') adapted from Sheorey & Mokhtari (2001),
3. a reading task followed by a comprehension test, conducted as the think-loud protocol (henceforth 'TAP'),
4. a semi-structured interview.

## **Participants**

All four participants were first-year students at a university in central Taiwan. They took the General English course which I taught. The course is compulsory for all first-year students. Aside from the in-class language exposure, students were required to complete two reading tasks a semester (four in the course of the academic year), amounting to a total of 120,000 words read. The tasks consisted in reading graded readers online ([www.xreading](http://www.xreading)) and constituted 40% of the semester final mark.

### ***Advanced level***

Anita<sup>ii</sup> is a 20-year-old female, native speaker of Mandarin, first-year International Business student. She began learning English at the age of five by attending a kindergarten offering English classes, and since then, she has been continuously learning. She frequently visits her relatives living in English-speaking countries, with whom she maintains contact in English daily over the internet. She has achieved native-like proficiency in reading, speaking, lexis, and phonology. She communicated with me exclusively in fluent English.

### ***High-intermediate level***

Vanessa is a 19-year-old female, a native Mandarin speaker, first-year Finance major. She reported having learnt English for about ten years. Her contact with English was limited to courses within public education. After entering the university, she was intensively exposed to written materials in English related to her major. English thus has become a tool used for her studies. She maintained fluent English communication with me with prolonged stances of language and only sporadic breakdowns and inaccuracies.

### ***Pre-intermediate level***

Sam is a 19-year-old male, a native speaker of Mandarin, first-year student of Urban Landscaping. He reported eight years of formal English instruction. His language production has been frequently disrupted due to an apparent lack of lexis, which he tried to compensate for by code-switching. His sentences were short, semantically and grammatically simplistic, lacking fluency and cohesion.

### ***Elementary level***

Ken is a 19-year-old male, a native speaker of Taiwanese Hokkien, first-year student of Mechanical Engineering. He reported over five years of English instruction. Ken can be classified as a case of early-stage fossilisation. He could barely utter a few

syntactically unconnected English words, mostly mispronounced, with severe problems understanding the instructions, and showed overwhelming reading comprehension difficulties. The phases of the TAP and the interview were conducted in Mandarin by my RA.

## **Data collection**

### ***Background Questionnaire***

It was devised by Oxford (1990). It contextualises the research by providing participants' basic personal information, such as the first language, the period of time they have been learning English or any other second language, and their attitude towards language learning.

## **SORS**

SORS is a self-report questionnaire in which participants report their perception of what RS they think they use when working with text and at what frequency rate. SORS was designed by Sheorey & Mokhtari (2001) to assess the metacognitive awareness of RS used by ESL/EFL readers.<sup>iii</sup> My RA translated SORS into Mandarin. It includes 30 items rated on the 5-point Likert scale ranging from 1 ('never or almost never') up to 5 ('always or almost always'). All items are divided into three categories: Global Reading Strategies (GLOB), Problem Solving Strategies (PROB), and Support Strategies (SUP). GLOB (13 items) can be categorised as metacognitive strategies. PROB (8 items) includes cognitive strategies and compensation strategies for situations when the text's difficulty hinders the reading process. Finally, SUP (9 items) includes external resources such as dictionaries and self-support techniques performed by the readers, such as highlighting, underlining, and note-taking. The creators of the survey (Mokhtari & Reichard, 2002) propose to calculate the mean for each category and interpret it as low (mean of 2.4 or lower), medium (2.5-3.4) and high (3.5 and above).

SORS, analogically to other self-reporting devices like the Strategy Inventory for Language Learning (SILL) (Oxford, 1990) and the Metacognitive Awareness of Reading Strategies Inventory (MRSI) (Mokhtari & Reichard, 2002), inherently suffers from the fact that it refers to subjectively perceived reality. In order to compensate for this limitation, the quantitative data were triangulated with the observational data collected during a think-aloud protocol that was deployed and confronted with the results of the comprehension test and the follow-up semi-structured interview.

## ***Think-aloud protocol***

Think-aloud protocol (henceforth 'TAP') is an introspective verbal report whereby the participant orally informs the researcher of the cognitive processes in the reader's mind that are triggered by the reading process. TAP was successfully employed in numerous studies on the reading comprehension process (e.g., Abraham & Vann, 1987; Alsheikh & Mokhtari, 2011; Lai et al., 2008; Vann & Abraham, 1990).

I used reading passages from the General English Proficiency Test (henceforth 'GEPT') for the reading task and the following comprehension test. The GEPT was commissioned by the Ministry of Education in Taiwan and developed in 1999 by the Language Training and Testing Center (LTTC). It assesses listening, speaking, reading, and writing competence at five levels: Elementary, Intermediate, High-Intermediate, Advanced, and Superior. The participants were given two excerpts from

the reading section from the GEPT at the intermediate and high-intermediate levels, regarded as the equivalent of IELTS Band 5.0-5.5 and 6.0-6.5, respectively (LTTC, 2016).

An orientation preceded the actual TAP task. The emphasis was on explaining that the participants should behave naturally and articulate without delay what thoughts came to their mind when working with the text, even if they may appear not relevant to the text or reading process in general. The participants were informed that they could use the language of their choice to communicate with me or my RA. Observations made during the procedure allowed for developing ad hoc questions to be asked in the ensuing interview. Each session was recorded, of which the participants were informed and to which they agreed. The recordings were subsequently transcribed<sup>iv</sup> and coded to TA.

### *Interview*

Immediately after the TAP, the participants were interviewed. I had prepared three initial questions that were asked in every interview:

1. Have you been taught RS?
2. Do you think you have used any of the RS you reported on in the survey?
3. What part of the reading task did you find the most difficult?

Additionally, I asked the ad hoc questions constructed based on the observation of the TAP. The interview length varied considerably: from just under three minutes to almost twenty. Each interview was recorded, of which the participant was aware and to which they agreed. The recording was subsequently transcribed and coded according to TA.

### **Data analysis**

The results from the SORS questionnaire and the products of participants' task activity were coded according to reflexive TA (Braun & Clarke, 2006; Terry et al., 2017). The results were fed into MAXQDA which is a proprietary computer program designed for computer-assisted qualitative textual data analysis developed by VERBI Software from Germany ([www.maxqda.com](http://www.maxqda.com)). The labels of the SORS strategies constituted the initial codes related to the questionnaire. The reading task sessions were recorded, to which the participants consented, and were subsequently transcribed into text. The transcriptions were then imported into MAXQDA. The reiterative process of close reading allowed me to construct additional codes and categories.

## **RESULTS AND DISCUSSION**

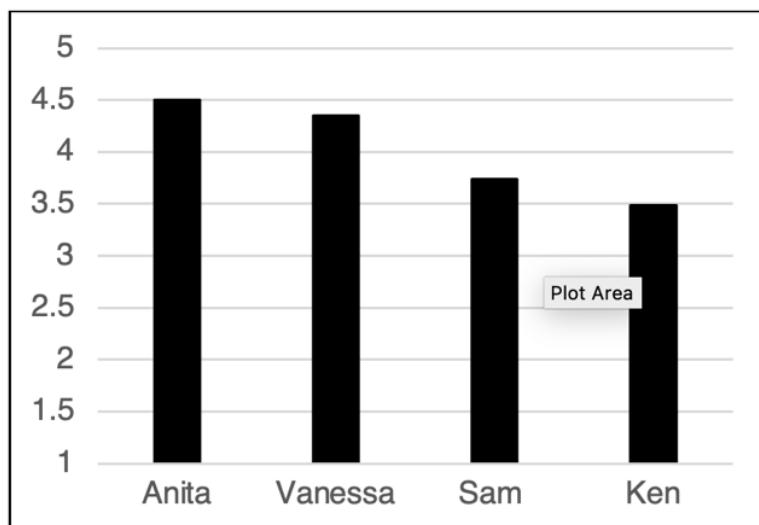
### **SORS**

Table 1 and Figure 1 reveal that all four participants reported a high frequency of the use of RS included in SORS.<sup>v</sup> However, a pattern can be discerned. The individual frequency means reported by Anita, Venessa, Sam, and Ken drop with the decrease in the proficiency level (4.5, 4.35, 3.74, 3.49, respectively). While the decrease between Anita and Venessa is minuscule (.15), the other two respondents lag behind (.61 and .86, respectively), with the difference between them diminishing (.25), as visualised in Figure 1. That means that a division line can be drawn between the participants exceeding the mean of 4 (Anita and Venessa) and the other two (Sam and

Ken) who barely pass the threshold of 'high frequency'. Striking is the fact that both Anita and Vanessa rated their problem-solving strategy use as very high (4.75) with global and supporting RS falling behind. This is consistent with the meta-studies conducted by Ghaith and El-Sanyoura (2019) and Habok and Magyar (2019), who found a tendency of a high use of problem-solving and a moderate use of global and support RS by competent readers. Note that the less-successful readers (Sam and Ken) reported a reversed order. Therefore, I propose classifying Anita and Vanessa as 'proficient' and Sam and Ken as 'developing' RS users, since the within-group differences in mean are smaller than the between-group mean difference (.61).

**Table 1.** The mean values of each RS category reported by the participants

Category of RS	Participant			
	Anita	Vanessa	Sam	Ken
GLOB	4.54	4.31	3.77	3.85
PROB	4.75	4.75	3.75	3.63
SUP	4.22	4	3.67	3
Total	4.5	4.35	3.74	3.49



**Figure 1.** Self-reported total means of RS use frequency

The division into 'proficient' and 'developing' RS users appears to be confirmed by the results shown in Table 2. Table 2 shows the total number of all 30 SORS items rated by the participants on the Likert scale ranging from 1 ('never or almost never') up to 5 ('always or almost always'). With one outlier, practically all RS were rated by Anita and Vanessa '4' and more. However, another division can be proposed based on the results related to the rating '5'. Three participants (Anita, Vanessa, and Sam) assigned this rating to ten or more RS. Symptomatically, Ken, who was unable to perform the task as the only participant, is also the only one who did not assign '5' to any strategy. A similar conclusion was reached by Sutiyatno (2019), who found a correlation between metacognitive strategy use and reading achievement. The size of the dataset of the current study obviously does not allow for building scientifically sound hypotheses, but it would appear interesting to test with a larger dataset whether the total absence of '5s' might serve as a predictor of the inability to perform a reading task.

**Table 2.** Total number of all 30 SORS items rated by the participants on the Likert scale

Items of SORS	Participant			
	Anita	Vanessa	Sam	Ken
Items rated 5	19	16	10	0
Items rated 4	11	13	9	21
Items rated 3	0	0	9	8
Items rated 2	0	1	2	1
Items rated 1	0	0	0	0

**TAP**

Anita kept underlining words or phrases that she found difficult, unknown, or important. She would re-read sentences or phrases containing the underlined words and go back in the text to previously read sentences to find and confirm relationships between the underlined words or phrases. For example, the second, more challenging excerpt had a title that contained the word 'Oslob'. She underlined that word and all of its tokens appearing throughout the article, demonstrating that she must have scanned the entirety of the text. 'Ah, so that's a town in the Philippines', she concluded. This audible internal dialogue was Anita's hallmark. She would also stop reading for a short while and verbalise any logical connection found between parts of the text or after a successful guess in regard to previously unknown or ambiguous vocabulary. The Oslob passage was on the activity conducted by the locals of lurking sharks into the shallow water by dumping krill so that paying tourists could take photos of the sharks. The article refers to this activity as 'thoughtless'. Anita underlined this word and said: 'Why thoughtless? Stupid? They're feeding them!'. Only after having read the rest of the excerpt explaining that krill does not meet sharks' nutritional needs, she returned to 'thoughtless' with an exclamatory 'Ah, that's why "thoughtless"!'. She then paraphrased the excerpt to ensure herself of a proper understanding of the text and presented a brief evaluation. She initially did not know the word 'krill' but kept reading until she successfully reconstructed the meaning of the passage using context clues. Only at the end of the passage, she reached for her mobile phone and looked up 'krill' and 'propellers'. She answered the comprehension questions correctly and effortlessly.

A marked difference from Anita's performance was that Vanessa was significantly less verbose. Instead of words, she was using the tip of the pencil to indicate the part of the text she was working on. Another marked difference was the frequency of use of the dictionary. Whereas Anita used the dictionary just a few times to look up some truly advanced vocabulary, Vanessa often consulted it. Despite that, Vanessa tackled the reading task similarly to Anita. Vanessa, too, was reading at various speeds depending on the text's difficulty and degree of understanding, paid close attention to the content, linked ideas across the article, and re-read if necessary. She would annotate some information she found important, ambiguous, or unknown. She actively tried to make the meaning out of the context in which unknown or ambiguous words appeared. When that failed, she supported herself with her electronic dictionary and would jot down the Mandarin correspondents next to the English word. From time to time, Vanessa would nod slightly for a few seconds and nearly unnoticeably move her lips. On another occasion, she took her eyes off the text,

raised them over it, and froze her posture. When prompted, she just silently returned to the text.

Vanessa approached the comprehension questions in the same manner as she did the rest of the reading task: in silence, with the pencil and dictionary. She would go back to the text to confirm her answers, which, in the end, were all correct.

Sam was reading and re-reading all sentences aloud. His pronunciation left much to be desired. After successfully decoding the meaning of particular words in a sentence, he would go back to the beginning of the sentence and read it several times until a satisfactory level of comprehension was reached. Sam would read faster and without repetition the sentences where most of the vocabulary did not pose comprehension difficulties. Initially, he kept looking up every unknown vocabulary item and listening to the pronunciation. He began giving this approach up in the course of the second article due to his fatigue and an overwhelming number of unknown words. I did not observe any strategies aiming to find linkages between parts or even sentences of the articles, which contrasts with his self-report; the same can be said about paraphrasing and critical evaluation, which also was rated 5. He could barely construct a cohesive meaning of separate sentences, as he appeared to take them as nearly stand-alone, unconnected textual units. He seemed to struggle with word-to-word translation into Mandarin most of the time. Despite his best efforts to comprehend the content of the articles shown in attentive and careful work with the text, Sam failed to fully understand the main idea, especially of the more difficult article, which was reflected in incorrect answers to the comprehension questions.

Ken experienced overwhelming language difficulties that prevented him from accomplishing the reading task. He attempted to tackle the comprehension questions in the first article, but it appeared more like guesswork. He spent only a minute on the second article and gave up without trying to engage with the comprehension questions. When asked to read aloud the first article, he massively struggled with pronunciation and displayed a complete lack of fluency. He confirmed in L1 that he did not understand the meaning of the vocalised sentences.

The behaviour of the participants when on the TAP task was consistent with that of the participants in Jincheng & Rahmat (2022): while the successful readers utilised RS more globally to accomplish the task, the less successful readers struggled at the word-level. Overall, these findings align with Ghaith and El-Sanyoura (2019), who found that a high level of problem-solving RS positively correlated with the level of comprehension. However, Zuledwi and colleagues (2018) failed to reach a similar conclusion.

## Interview

Based on observing the reading process, I assumed Anita had undergone intensive training in RS. However, she firmly denied it and added that she had heard about 'reading strategies' from my RA for the first time. She said: 'I just feel I kinda can do it in this way, and I just do it. Nobody taught me, I don't know, it's just natural. Strategy? I think it's for soldiers.'

The interview with Vanessa allowed me to explore the striking difference between her performance and that of Anita. It should be stressed that learners adopt different learning strategies according to their psychological profile (Brown, 2014; Oxford & Nyikos, 1989), and they apply them 'in their unique way' (Horwitz, 1999, p. 558). We cannot, therefore, assume that Vanessa did not employ RS only because she

did not verbally comment on them. The way she was working with her pencil during the TAP points in a rather opposite direction. This was confirmed when I asked Vanessa about her silent 'inner talk'. Her response revealed that she was trying to analyse and evaluate the information read and relate it to other extra- or intertextual information known to her but opted not to manifest it overtly. When asked directly, she admitted that she was an introverted person. This perhaps accounts for the low rating (2) given to Item 5 on SORS 'When text becomes difficult, I read aloud to help me understand what I read'. She explained that she took 'read aloud' quite literally as audible vocalisation. It was, then, not some such a discrepancy between the self-report and performance, but more of the interpretive 'grey zone'.

Sam marks a quality difference. While the previous two respondents communicated with me in well-formed and fully comprehensible English, Sam chose Mandarin. He seemed to understand most of my questions in English but relied on my RA's translation and replied only in Mandarin. He confirmed my initial hypothesis that the cause of comprehension problems, certified in the comprehension test, was the overall language difficulty. When asked to comment on the discrepancy between the self-reported and observed frequency use of the cohesion-related strategies, he admitted that he almost never had been confronted with such complex texts in English and that he was giving the answers to SORS mainly with Mandarin texts in mind.

The interview with Ken was by far the shortest one. It was conducted exclusively in Mandarin. The only issue discussed was the striking inconsistency between his declared use of RS and the demonstrated inability to employ them. He replied that his responses had been more of a 'wish list' for the ensuing reading task in L2. He admitted that he vastly underestimated the level of difficulty.

## CONCLUSION

The project reported in this paper testifies to the assumption that truly informative results can be arrived at when self-reported data are triangulated with observational data. The proficient/developing split proposed based on the analysis of the SORS and TAP results seems to coincide with the quality change observed at the interview stage. The proficient participants chose English, and the developing ones chose (or were limited to) Mandarin. This finding suggests a correlation between the English proficiency level and the observed frequency of RS use. It is additionally supported by the fact that while both proficient students utilised practically all RS included in SORS, Sam was observed applying a much narrower spectrum, and Ken displayed an attempt to use merely a few. At the same time, a reversely proportional correlation can be suggested between the level of proficiency and self-reported frequency, variety, and accuracy of RS use. Consistency between the self-reported data and the actual use of RS can be observed in the proficient group. The participants evaluated their RS use as high and were found to utilise a wide variety of appropriate RS frequently. The developing group appears to follow a reversed pattern. The discrepancy between the self-report results and the actual use of RS increased with the drop in the proficiency level. Not only did the participants apply fewer RS less frequently than they declared, but also, on many occasions, the application did not lead to the successful completion of the reading task. These results are in line with most studies on RS (e.g., Abraham & Vann, 1987; Chamot, 2004; Shang, 2011; Zhang & Wu, 2009).

It appears that there is a threshold of proficiency that must be reached in order to benefit from the application of RS. Simple awareness of RS and perception of their usefulness, when not backed up by a sufficient level of language competence, does not guarantee learning success, nor may it appear beneficial. The least proficient participant, whose English proficiency was vastly below the necessary level, failed entirely to complete the task despite having declared a high awareness of the usefulness of RS. It must be thus highlighted that RS are a supportive means, but they cannot substitute for the lack of operational language competence.

## RECOMMENDATION

What strikes perhaps most is the fact that even though the most proficient participant never underwent any formal instruction, her knowledge of RS was fully operational, which resulted in the very successful utilisation of the vast majority of RS included in SORS. This finding seems to be consistent with some RS researchers (e.g., Chamot, 2005; Oxford & Cohen, 1992) who hypothesise that successful readers, due to excessive and prolonged use of reading strategies, fully automatise the process of strategy deployment, which becomes practically unconscious. These findings, to some degree, go against Ko's (2002) claim that students need to undergo extended training in strategy use before reaching mastery. However, it would not be sensible to extrapolate from this example and suggest that explicit training is not necessary. Quite conversely, it rather indicates that highly motivated students are capable of finding their own way in the development of their proficiency, which may lead to a tacit conclusion that classroom teachers may try to allot more time and attention to give instructions in effective utilisation of reading strategies to students who are not as autonomous as the most successful learners are (see also: Poole, 2012; Pressley, 2002; Shen & Huang, 2007).

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## Conflict of Interests

The authors declare no conflict of interest.

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<sup>i</sup> Tracy (altered name), a graduate student from the same University, a native speaker of English and Mandarin.

<sup>ii</sup> Hers and all other participants' names have been altered to preserve anonymity.

<sup>iii</sup> For details regarding the instrument, see Mokhtari and Sheorey (2002).

<sup>iv</sup> Also translated into English by my RA whenever needed.

<sup>v</sup> When rounded up to one decimal, as proposed by Mokhtari and Reichard (2002), Ken's RS frequency use mean reaches the 'high' category.