



THE EFFECTS OF THINK-ALLOUD STRATEGY ON EFL YOUNG LEARNERS' READING SKILL PRACTICE

Lam Ngoc Anh Thu¹ⁱ,

Truong Vien²

¹Can Tho University,

Vietnam

²Assoc. Prof. Dr.,

Hue University of Foreign Languages,

Vietnam

Abstract:

Think-aloud is described as a strategy in which students verbalize their thoughts while they read. This strategy is used to help students monitor their own thinking and comprehend the text. This current study aimed to examine the effects of the think-aloud strategy on EFL young learners' reading skill practice and identify their attitudes towards the think-aloud strategy used by the teacher in teaching at a foreign language center in Can Tho city (Southern Vietnam's Mekong Delta region). This study was experimental research using both quantitative and qualitative approaches. The quantitative approach was used to investigate the effects of the think-aloud strategy on young learners' reading skill practice while the qualitative data was collected to understand the young learners' attitudes towards the use of the think-aloud strategy in teaching and learning reading skills. Pre-test, post-test, and semi-structured interviews were used to collect the data. The study was conducted with one group of participants. The participants included 25 students who were at the age of 10-12 years old. The results from the pre-test and post-test showed that there was a significant difference in the students' reading comprehension performance after the intervention. Thus, the think-aloud strategy has a great impact on the improvement of students' reading comprehension. Besides, there was no difference in reading comprehension achievement between males and females before and after the treatment. Especially, the results from the semi-structured interview revealed that all students had positive attitudes towards the think-aloud strategy.

Keywords: think-aloud, reading comprehension, reading strategies, young learners

ⁱ Correspondence: email lamngocanhthu85@gmail.com

1. Introduction

Reading is considered one of the required skills for foreign English acquisition (Aebersold et al. 1997) because it plays an important role as an input for other skills (listening, speaking, writing) which help students in language proficiency. For all students, reading comprehension is one of the most crucial elements since it serves as the foundation for a significant amount of educational learning (Alvermann et al. 2003). The role of reading comprehension not only influences adult students but also young learners. In fact, there have been several studies focusing on the essential role of reading in both the development and foreign language learning of children. Although reading comprehension plays an important role in studying a language and reading comprehension is a useful tool to access information and knowledge in school, most of students do not have an appropriate way to read a passage effectively. In class, students especially young learners often neglect their reading skills and they tend to be afraid of reading. One of the reasons is they do not know how to start and how to handle reading texts. Although finding a suitable method to help young learners develop reading comprehension at an early age is very crucial, it is also challenging for teachers.

In the foreign teaching and learning context of Vietnam, teachers are not trained to teach young learners because they just focus on adults or high school students when they studied at university (Tran & Nguyen, 2017). To support this point of view, the government's policy on the revolution in foreign languages pointed out that the national foreign language 2020 project posed a challenge to teachers in terms of young learners' teaching. Although reading strategy is very essential for young learners' reading comprehension, there is insufficient instruction about reading strategy. Young learners do not have many opportunities to learn the strategy for monitoring and regulating comprehension. Therefore, it is necessary to build students' conceptions of using strategy to handle the problems in their academic tasks. Among the instructional methods, think-aloud is different from prompting, modeling, or giving directions because this method enables students to know how to select the appropriate comprehension process in a particular text thanks to the teacher's demonstration (Block et al., 2004). Think-aloud encourages students to verbalize their thoughts which can help them improve their vocabulary and reading comprehension (Wen-qi Xiao, 2016). Through the think-aloud strategy, the teacher illustrates how to use comprehension strategies to understand and solve problems and students are given opportunities to practice by talking out loud their thoughts when reading. When students approach this method, the teacher can understand the cognitive process in their minds, so the teacher can know exactly the problems leading to comprehension failure. Therefore, the think-aloud approach is used to help students' reading comprehension by gaining a deeper understanding of their cognitive and metacognitive processes when they engage in academic tasks. This strategy is expected to become a crucial part of contributing to the success of learning English. However, there are few studies in the field of using a think-aloud strategy for enhancing young learners' reading comprehension. Consequently, to fill the gap, this study is aimed to investigate the effects of think-aloud on EFL young learners' reading skill practice.

2. Literature Review

2.1 Reading Comprehension

There are a lot of reading comprehension definitions in the literature. Reading comprehension is widely defined as a process in which individuals make sense of a text in order to achieve knowledge about a particular field. According to Nunan (2003), reading is a process in which the readers integrate what they read from the text and prior knowledge to construct the meaning. In line with L2 reading comprehension, Nuttall (2005) defines reading as an interaction between the reader and the text in order to provide meaning. To a similar extent, Grabe (2009) believes that reading comprehension is a complicated process which requires the readers to read the text, understand its meaning, and combine the background knowledge of the readers to grasp the meaning of the text.

The reading comprehension of material was affected by many factors including knowledge, cultures, purposes for reading, and motivation (Pardo, 2004). To understand the reading text, readers have to make a connection, draw inferences basing the steps of gathering information from the texts, and then make a conclusion about the reading text (Wan chin, 2021).

Furthermore, according to Guthrie and Scaffiddi (2009), the processes of building conceptual knowledge from a text through cognitive interaction and motivational involvement with the text constitute reading comprehension. They assert that in addition to cognitive strategies such as activating prior knowledge, summarizing, and asking questions, readers must also infer the meaning of the text. Students need to be motivated because those who are motivated to read employ cognitive strategies more successfully than the less motivated ones.

Students often meet challenges with new and complicated reading texts because they often make meaning of the text and they usually have to deal with difficult vocabulary which leads to unsuccessfully understanding the content. Regarding this trouble, Chamot et al. (1999) state that less effective learners concentrate excessively on the specifics, whereas more effective learners concentrate on the work as a whole.

Therefore, students must use a variety of teacher-provided strategies to become engaged and perform successfully in the reading process in order to address this issue. Mayer (2005) indicates that reading comprehension is related to the process of deriving helpful information from text, which is the goal of reading. To correctly understand what is being read, the readers must be able to know and apply strategies before, during, and after reading.

2.2 Think-aloud

2.2.1 Definition of Think-aloud

According to Afflerbach and Johnston (1984), cited by McKeown and Gentilucci (2007), who established the foundation for the think-aloud strategy's development, think-aloud is a method used to measure the cognitive reading process and it is also applied in the metacognitive areas when the readers use the tool to monitor comprehension.

Another definition of this strategy is provided by Pressley et al. In McKeown and Gentilucci's (2007) work, Pressley et al. (1992) cited think-aloud as considered a "*transactional strategy*". In other words, it is a collaborative process where teachers and students work together to develop comprehension of the text as they interact with it. While readers independently interpret texts based on their prior knowledge, interests, motivations, and reading goals, think-aloud conducted by group reading enables a small interpretive community to examine more viewpoints and negotiate understandings.

Think-aloud is described by Van Someren and colleagues (1994) in their books on the cognitive processes of thinking aloud as a problem-solving process in which the subject keeps on talking, verbalizes out loud whatever thoughts appear in their minds while performing the task at hand. Think-aloud is an instructional strategy that has been shown to enhance understanding, according to Duke and Pearson. This view is developed by Kucan and Beck who point out that think-aloud is as a technique for research, a way to teach, and a way to promote social connection.

Oster (2001) describes think-aloud as a strategy in which students express their thoughts while they read, so the readers can get the strategies to comprehend a text. However, students are not required to examine their conduct as in introspection. The ability to reflect on one's thinking, or metacognitive awareness, is an essential element of learning because it helps students to identify their current level of comprehension and make necessary modifications (Seyedi et al., 2012)

In brief, even though think-aloud has several meanings, this study describes it as a tool that requires the student to verbalize their ideas clearly as possible. This strategy is expected to assist students to improve their reading comprehension by practicing reading text.

2.2.2 Effectiveness of Think-aloud Strategy

Thinking is a complicated process that appeared inside students (Thomas et al., 2019). It's hard for educators to recognize this procedure when students complete their tasks. One of the strategies that help teachers understand students' minds is think-aloud. According to Oster (2001), the think-aloud strategy refers to a thinking process that involves activities that assist students in verbalizing their thoughts as they read. Ebner (2013) indicated that a structured think-aloud procedure helps to scaffold students to improve vocabulary learning on the internet. By observing the ways in which the teacher verbalizes his thoughts when he reads, or analyses the information to complete the learning task, students can learn how the teacher constructs meaning for unfamiliar words, and learn the ways to select the strategy for addressing the problems. Kucan and Beck (1997) point out that three main goals that think-aloud achieve include providing a method of inquiry for understanding the cognitive process, serving as a method of instruction, and playing a role as an aspect of social interaction.

According to Meyers (1989), the think-loud technique is crucial for students to learn and develop their learning, especially for those who may have just started school and are unfamiliar with the overall educational system. Students who use the think-aloud strategy cannot conceal their weak points in learning. In this strategy, teachers can

recognize students' weaknesses if students can share their thoughts with them and with student's peers. Some children may rapidly grasp concepts that are taught in school, but others require further assistance and comprehension techniques (Lau, 2006). In this case, a think-aloud strategy can be useful.

Moreover, the think-aloud technique is currently acknowledged as a useful strategy by the psychological research community, and it also plays an important role in education. Oster (2001) noted that several studies have revealed that students who express their thoughts when they read get significantly higher scores in their exams. For instance, research by Henry (2008) has revealed that the think-aloud technique enhances reading comprehension on exams. The think-aloud technique needs to be shown by teachers to students in class, as well as introducing the elements of think-aloud and types of text interactions.

To sum up, students acquire learning skills as they speak out loud. They grow into reflective, metacognitive, independent learners, which is a crucial step in assisting students in realizing that learning requires effort and is frequently challenging. It makes students aware that they are not the only ones who have to think about their ways to solve problems (Seyedi et al., 2012).

2.3 Metacognition

Flavell (1979) stated that metacognition referred to the knowledge about cognition and the control of one's mental activities in learning processes. Metacognition also is related to individuals considering their own thinking process in terms of study skills, memory capabilities, or the capability to monitor their learning.

Content knowledge, task knowledge, and strategic knowledge are examples of metacognitive knowledge. There are generally two components of metacognition consisting of both metacognitive knowledge and metacognitive regulation (Flavell, 1987, cited in Raihan, A. M., 2011). Metacognitive knowledge represents the knowledge gained about cognitive processes that can be used to control cognitive processes. While metacognitive regulation refers to the application of metacognitive methods or the regulation of metacognitive processes.

Flavell (1979) defined metacognitive knowledge as the knowledge that students acquire and it can be applied to regulate cognitive processes. The procedure of cognition consists of three categories: knowledge of variables, knowledge of task variables, and knowledge of strategy variables.

Metacognition is described as a process in which people think about their own thinking. By studying how children develop their capacity to be conscious of and in charge of their own cognitive process, Flavell (1976) and Brown (1978) established research on the general notion of metacognition in the middle of the 1970s (Baker, 2002). Durkin's (1978–1979) who is interested in fostering students' metacognitive skills about the reading process argued that using most frequently the directed reading lesson as the technique to develop reading comprehension by teachers was ineffective in promoting students' capacity to independently comprehend texts.

Both Vygotsky (1962) and Piaget (1964) noted that children begin to become aware of their own minds at a very young age. This consciousness turns directs their thinking. When children are older, they show a greater awareness of their thought process and the ability to use the metacognitive ability to direct their thoughts. It was discovered that children are more developed argumentation skills related to metacognitive activities that encourage reflection on what, why, how, and when they learned about an issue (Mason and Santi, 1994).

Flavell (1979) in his study about whether or not children have consciousness of understanding some factors that control their memories and cognitions. This study revealed the proof that children are capable of reflecting on their own cognitive processes. After this study, metacognition was defined as knowledge and understanding of the cognitive phenomenon and forms a concept of it as the learner's knowledge of their own cognition.

According to Durkin (1978-1979, cited in Pearson, 2009) with the efforts of providing students more opportunities to develop their independent reading comprehension skills, educational research started looking for finding directed reading lesson replacements (Duffy, 2002). The purposes of this study were that by studying about metacognition, the researcher found a way to comprehend the reading comprehension procedure and get the strategies for teaching reading comprehension (Duffy, 2002).

Metacognitive education aims to make readers more conscious of their own thought processes as they read. Teachers explicitly teach students how to employ metacognitive strategies when they read a text (Pearson, 2009). In addition, to apply the metacognitive strategy, the metacognitive training must be gradually transferred or "released" from the teacher to students so that the students can apply the metacognitive strategy (Baker, 2002, cited in Pearson., 2009). The teacher first explicitly explains the metacognitive strategy before demonstrating when, how, and why it can be employed. This is known as a gradual transfer of responsibility. The teacher frequently uses think-aloud techniques for modeling. After the illustrating phase, there comes a guided-use phase where the teacher guides the students on how to use the strategy. Students increasingly gain the ability to initiate and use the target strategy on their own over time.

2.4 Think-aloud and Metacognitive Awareness

Metacognitive awareness occurs when the readers recognize their comprehension and there are various skills applied to aid comprehension (Thomat et al., 2019). By using a think-aloud strategy to analyze the cognitive process in a reading text, the teacher can model this awareness. In fact, when the teacher adopts think-aloud as a technique to support the reading of a text, it means the teacher provides students with the strategy to check the comprehension process by verbalizing. The think-aloud strategy is used as a comprehension-monitoring tool which integrates various skills (Xiao, 2016). When think-aloud is applied in reading, this strategy allows students to realize when and how to use the reading strategy (knowledge of cognition) and they also know the way to regulate and adjust the thinking process (knowledge of regulation). Both knowledge of cognition

and knowledge of regulation are important elements of metacognition. Therefore, it can be said that think-aloud and metacognition have a close relationship. This was also pointed out in the extensive reading research of Fitzgerald (1995) when she addressed the influence of thinking aloud as a metacognitive strategy on English language learners. The research studied the ways the reader approached the text and how they attempted to correct a miscomprehension. Based on the analysis above, think aloud strategy can be used as an instructional technique to help students develop reading comprehension.

According to Afflerbach et al., a think-aloud protocol is an efficient tool which is frequently used to obtain data on readers' use of cognitive and metacognitive strategies (Afflerbach, 2000; Garner, 1987; Pressley & Afflerbach, 1995, cited by Yaily, 2010). When a reader speaks out loud his or her thought as they do an assignment, there is a production of a verbal report or think-aloud protocol (Anderson, 1991, p. 460).

Teachers play role models by verbalizing their thinking. Teacher talks with students about the difficulties that students encounter and the solutions they come up with when they reflect on their own learning processes. There are some strategies of think-aloud used to model the comprehension process including predictions, creating images, linking information in text with prior knowledge, monitoring comprehension, and overcoming problems with word recognition or comprehension. The teacher can evaluate students' strengths and weaknesses by listening to what students say out loud.

2.5 Young Language Learners' Characteristics

There are some definitions regarding a wide range of young language learners (YLLs). While Philips (1993) and Kalendova (2008) note that young learners are children aged five or six to eleven or twelve years old. Another definition of the young learner is children between the ages of five to ten or eleven are considered young learners (Scott and Ytreberg, 1990, cited in Tran and Nguyen, 2017). This is similar to the report of McKay (2006) and Shin and Crandall (2014) when they noted that YLLs who study a foreign language and second language when are at the ages between five to twelve years old. In this study, young learners are children with their ages between 10 to 12 years old.

Flavell (2000) noted that children start to develop a "theory of mind" before they are one year old. At this age, children have the ability to recognize, understand and estimate desires, and intentions which are mental phenomena. When children are around four years old, children start to comprehend knowledge as a component of a processing system that helps them to recognize the value of information and comprehend what is necessary for learning knowledge (Perner, 1991). Therefore, it is crucial for children to develop metacognitive skills during the early year because it helps to raise awareness of what they are learning. Providing pupils with the opportunity to develop these skills may help to minimize the learning gaps between younger and older students (White & Frederiksen, 1998).

Psychologist Jean Piaget's, who distinguished four stages of cognitive development, noted that the environment plays a significant role in children's cognitive development, and each stage of that development is based on and integrates with the previous stage (Piaget, 1928). Therefore, it is crucial for a language teacher to bear in mind

the main factors of the cognitive stage because the element of school is the important periods time for the occurrence of two of four shifts in the developmental stages.

3. Methodology

This study was experimental research with pre-test and post-test for one group of participants. In this research, the mixed methods approach was used to investigate the effects of the think-aloud strategy on EFL young learners' reading skill practice and the EFL young learners' attitudes towards the think-aloud strategy used by the teacher in teaching. For the purpose of the study, the quantitative approach was used to address a think-aloud strategy on young learners' reading skill practice while the qualitative data was collected to understand the young learners' attitudes towards the think-aloud strategy used by the teacher in teaching. Pre-test, post-test and semi-structured interviews were used to collect the data.

In this study, the treatment of the study lasted for 10 weeks with one group of an experiment. The experimental group included twenty-five students who received the experimental face-to-face instruction of English reading.

In the current study, the pre-test was used to collect data before the intervention with the purpose of investigating the participants' knowledge of English reading while the post-test was administered to measure students' reading comprehension performance after treatment. Moreover, to collect the qualitative data, a semi-structured interview was conducted with the participants after the intervention to clarify whether the implementation of this strategy was helpful for students' learning reading. There were nine students selected for an interview, based on the results of the post-test.

3.1 Participants

This study was conducted in a foreign language center in the Mekong Delta of Vietnam. There were 25 students who participated in this study. These students were EFL young learners whose ages were from ten to twelve years old and their grades were from grade 5 to grade 6. These students studied English at their primary school when they were in grade 1 and they have been taught English in the English language center for 4 years, so the English proficiency level of students was supposed to be A1 level (CEFR- The common Europe Framework of Reference for Languages) when they took part in the study. The participants in this study included 13 female students (52%) and 12 male students (48%). The students spent 90 minutes (one session) studying reading skills each week. After 10 weeks of the intervention, these students were invited to take the post-test and nine out of 25 students for interview were selected based on their post-test results.

3.2 Instruments

3.2.1 Reading Comprehension Tests

In this study, the reading test was used to examine the effects of the think-aloud strategy on EFL young learners' reading skill practice. The pre-test and post-test were used to examine students' ability in reading comprehension before and after using the think-

aloud strategy. The pre-test helps the researcher to get information about students' reading comprehension ability at the beginning of the study while based on the results of the post-test, the researcher can check whether or not the students' reading comprehension performance improves after treatment. Twenty-five students who participated in the research did the pre-test and post-test. The reading test was selected and adapted from "*Cambridge young learner English test*" (*Cambridge Mover 1 and 4 designed by Cambridge University Press*) which was designed to test participants' reading comprehension performance. The post-test was similar to the pre-test in terms of contents, types of tasks, number of parts and items, degree of difficulty, and time allowance. The typical young learners' attention span is shorter than adults. They easily get distracted if the task lasts a quite long time (Wolf et al., 2017), so the time allowance for the reading test should be around 30 minutes. During the research, the teacher plays a role as an instructor and also as evaluator.

3.2.2 Semi-structured Interview

The interview is a useful research instrument. Through the interview, the researcher understands more about the experience of participants and the researcher set a larger context in which they have experienced. In this study, the semi-structured interview was conducted to investigate the experiences, feelings, and attitudes of learners towards the think-aloud strategy used by teachers in teaching after the post-test was carried out. Nine students out of twenty-five students were interviewed. The participants were selected based on the highest score, lowest score, and average score after taking the reading post-test. The interview was conducted in the Vietnamese language to ensure the candidate can understand clearly the questions. Each participant spent approximately 40 to 50 minutes on the interview. Each interview is recorded and transcribed for data analysis. Through the interview, students were expected to provide further information in terms of these aspects including students' attitudes regarding how the teacher used the think-aloud strategy to teach English reading comprehension, students' opinions on what they liked when they were instructed think-aloud strategy in learning reading, students' thoughts towards the advantages of think-aloud during the reading learning process, students' perceptions of any difficulties they might meet when using the think-aloud strategy, students' recommendation for using think-aloud strategy in learning reading.

3.3 Materials

In terms of materials for teaching, in this study, the short reading text from "K5 learning website" was used for reading. The website <https://www.k5learning.com> was a well-known website founded in 2011 in order to provide learning tools, worksheets, and workbooks for K-5 kids. K5 Learning is an educational platform that offers valuable learning materials for students in kindergarten to grade 6. In terms of reading, K5 provides a great deal of stories which are followed by a variety of exercises, quizzes, and flashcards to test the reading comprehension ability of kids on specific topics. The reading text was selected based on the comprehension level of students, the length of the words, and the allotted time. The genre of reading texts is fiction novels. When selecting stories

for reading, fiction novels were selected because they are suitable for students in terms of knowledge and difficulty level. In addition, the readers found it imaginative, entertaining, and enjoyable when they read fiction texts. This element can stimulate students' imagination and improve their motivation in reading. Diverse topics such as adventure, fantasy, historical fiction, and science fiction were found in fiction texts. Therefore, this is also a good resource to choose the topic based on the survey of students' reading hobbies. The reading text includes about 150-200 words which are suitable for the reading level of young learners.

4. Results and Discussion

4.1 The Effect of Think-aloud Strategy on EFL Young Learners' Reading Skill Practice

4.1.1 Participants' Reading Comprehension Performance with the Group of Participants Before and After Treatment

The students' reading comprehension before and after treatment was measured by using a descriptive test. The results indicated that the students' reading comprehension is at weak ($M_{pre} = 4.57$) in the pre-test and the students' reading comprehension is fairly good ($M_{post} = 7.34$) in the post-test. The students' English proficiency was evaluated according to the Vietnamese scoring system. Table 1 below describes the student's band scores.

Table 1: Vietnamese scoring system

Score range	Proficiency
8-10	Good or Excellent
6.5-7.9	Fairly Good
5.0-6.4	Average
3.5-4.9	Weak
<3.5	Very Weak

Based on the results from the descriptive test, it can be said that the student's reading comprehension in the post-test was significantly higher than the results of the pre-test. It can be concluded that the reading comprehension of students improved after 10 weeks of treatment. These results were described in Table 2 and Figure 1 below.

Table 2: Descriptive statistics of participants' reading comprehension of the experimental group before and after the treatment

Conditions	Tests	N	Mean	SD
Experimental	Pre-test	25	4.57	1.67
Experimental	Post-test	25	7.35	1.90

To check whether the mean scores on participants' reading comprehension before and after the study were different, General Linear Model Repeated Measures (GLM) were performed. The result indicated that the two means were different ($df=1, F=78.28, p= .000$). It can be concluded that the think-aloud strategy has a great effect on the development of students' reading comprehension after the treatment.

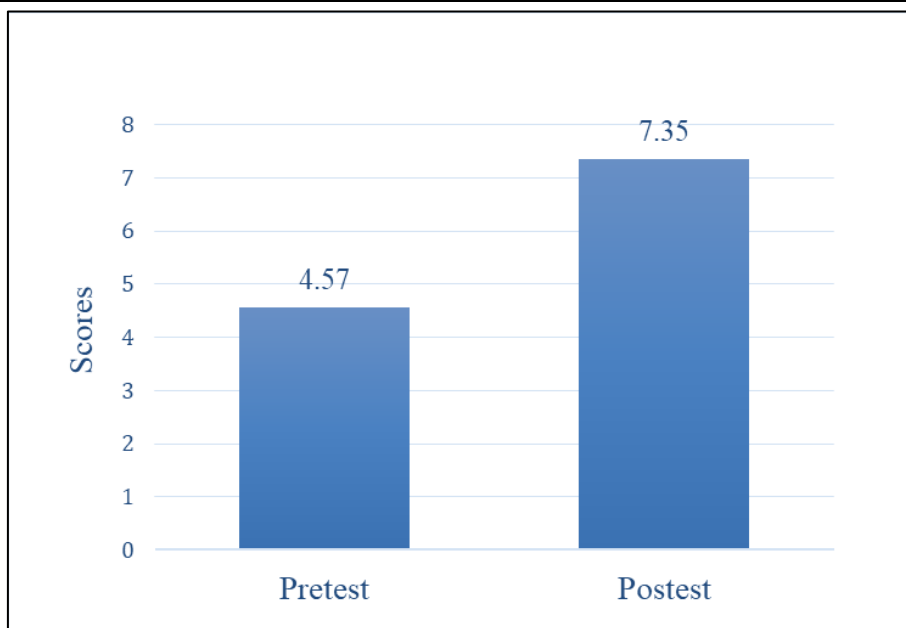


Figure 1: Summary of participants' reading comprehension performance before and after the intervention

4.1.2 Participants' Reading Comprehension Performance with Male and Female Students Before and After the Intervention

An independent sample T-test was calculated to compare the mean scores of male and female participants regarding their reading comprehension performance before and after treatment. In terms of the mean of the pre-test in the intervention group, the result indicated that no difference between the two means was observed ($t=-.13$; $df=23$; $p=.896$). Participants' reading comprehension performances were the same taking gender into consideration.

Similarly, in terms of the mean of the post-test in the intervention group, the result reported that there was no significant difference between the mean of the post-test in the group of participants, the two mean was observed ($t=0.067$; $df= 23$; $p= .947$). The results showed that the female students and male students were the same in reading comprehension. The results were reported in Table 3 and Figure 2 below:

Table 3: Descriptive statistics test on the reading comprehension performance of male and female students before and after treatment

Tests	Gender	N	Mean	Std. Deviation	Std. Error Mean
Pre-test	Male	12	4.53	1.42	.41
	Female	13	4.62	1.92	.53
Post-test	Male	12	7.38	2.16	.62
	Female	13	7.32	1.71	.47

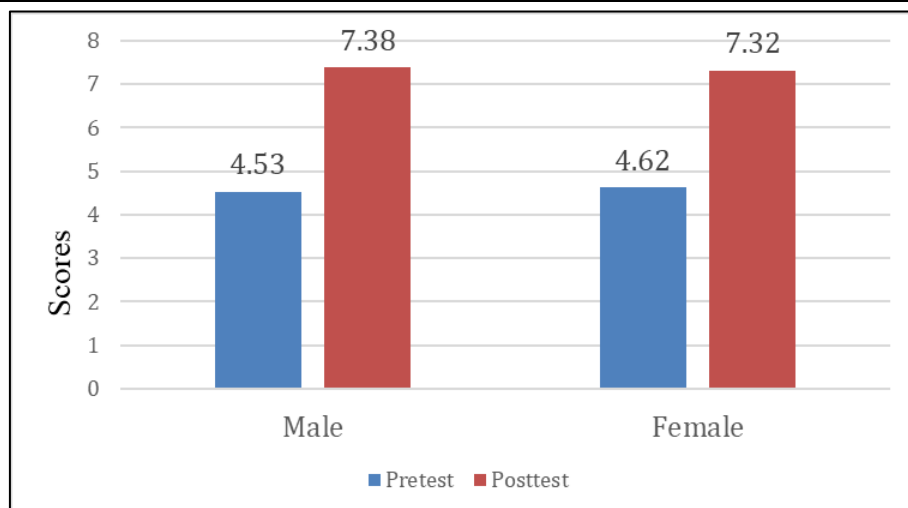


Figure 2. Summary of participants' reading comprehension performance of male and female students before and after treatment

4.2 Young Learners' Attitudes about Think-aloud Strategy Used by Teacher in Teaching

The semi-structured interview was conducted in order to collect information about students' attitudes towards the use of the think-aloud strategy in teaching and learning reading after gathering data from the post-test. The interview was conducted via Google Meet because of the time limitation in class. Students were asked some questions related to students' attitudes regarding how the teacher used the think-aloud strategy to teach English reading comprehension, students' opinions on what they liked when they were instructed think-aloud strategy in learning reading, students' perceptions of any difficulties they might meet when using the think-aloud strategy, students' thoughts towards the advantages of think-aloud during the reading learning process, students' recommendation for using think-aloud strategy in learning reading. Generally, based on the interview, most of the students have positive attitudes toward the use of the think-aloud strategy in teaching and learning reading and all students agree that they want the teacher to continue using this strategy in teaching reading. Students also give some suggestions about reading activities and reading content to help with the application of the think-aloud strategy in the future.

4.2.1. Students' Attitudes Regarding How the Teacher Used the Think-aloud Strategy to Teach English Reading Comprehension

A. A Novel, Accessible and Interesting Strategy for Teaching and Learning

The results from the interview showed that most of the students believed the think-aloud strategy was a new strategy for them. Although this strategy was new, it was not too difficult for students to understand and apply. Students believed that they completely had abilities to learn and use it as a strategy for learning reading. For example, four students said:

"I find it interesting, I haven't studied this strategy before, so when I am taught this strategy, I find it very new and interesting." (Interviewee 1)

"I think this strategy is quite accessible and quite easy to study. Although it is difficult for us to study this strategy initially, it gradually becomes easier." (Interviewee 7)

"Yes, it is not difficult." (Interviewee 3)

"I find it easy to approach, easy to get used to, easy to study." (Interviewee 4)

B. Promote Curiosity and Interest

The participants stated that the think-aloud strategy made them feel curious. Students were eager to find out the strategy and they were also curious about how they can apply the strategy in a reading text and how effective this strategy brought them. Furthermore, think-aloud helped to increase students' interest in learning the reading, Student 7 and Student 8 said:

"Yes, teacher, it makes me curious and I want to learn about it." (Interviewee 7)

"I find this strategy fun, I feel enjoyable." (Interviewee 8)

Some students had similar ideas regarding the roles of the think-aloud strategy in boosting their reading confidence, for example,

"Yes, I think this strategy helps me to better understand the reading text. I also find this strategy quite good and interesting." (Interviewee 9)

"I think this strategy is convenient for me because I don't think I'm good at English. However, when I study this strategy, I find it easier to read a reading text. This strategy helps to orient my thought while reading, so I feel I like it a little bit more." (Interviewee 7)

"Yes, it is easier to understand. After studying this strategy, I feel it is easier to understand when I read a text." (Interviewee 3)

"In my opinion, I find it very convenient. In the past, I used to have problems in gap-filling exercises in reading and writing tests. However, since I have studied think-aloud strategy, It is much easier for me to solve all the problems in the reading exercises." (Interviewee 6)

However, two out of nine students hold the same opinions about the difficulties of the think-aloud strategy when they approached the think-aloud strategy. As Student 2 and Student 5 said,

"I feel this strategy is difficult because I don't understand some parts." (Interviewee 2)

"This strategy is difficult. I am not familiar with this strategy." (Interview 5)

4.2.2 Students' Opinions on What They Liked when They Were Instructed Think-aloud Strategy in Learning Reading

A. Freedom to Express Opinion and Debates

Some students stated that they liked the ways of think-aloud strategy. Students believed that when they used this strategy, they had lots of opportunities to express their own ideas and they also can listen to their friends' thoughts. Thus, using the think-aloud strategy made students confident and they can improve their argumentative skills. They said,

"I enjoy practicing the think-aloud strategy with my classmates. Besides, I also enjoy speaking out loud my thoughts and listening to my friends' thoughts. We can debate and discuss with each other to find the best answers. These activities were really interesting and I also feel more confident." (Interviewee 3)

"I'm impressed with this strategy because I find it easy for me. When I practice this strategy, I think it was convenient and I feel comfortable. In my opinion, I love to share what I thought in daily life. I am uncomfortable when I cannot express my ideas." (Interviewee 6)

"I like this strategy. What I like are the activities in class, the lesson, the interesting reading topics. Working in a pair before teacher gave comments was effective. This activity makes me better understand the lesson. I also can learn more vocabularies, and learn the way to read a text." (Interviewee 8)

One student believed that think-aloud strategy is more effective than the method she has ever studied, she said:

"I think I can apply think-aloud strategy in reading, but there are a few reading strategies I'm not very familiar with. I feel that after I use the think-aloud strategy, it is more effective than the method I learned in my school." (Interviewee 1)

B. Supporting Problem-solving

Some students expressed that they had a strong impression of the think-aloud strategy and they were interested in how this strategy guided them to access a reading text. Unlike the words-by-words translation technique that they often use, the think-aloud strategy helps them to think and use the reading strategy to solve problems. For example, they said,

"I like think-aloud strategy because this strategy helps me better understand the reading text more than the other methods. When I studied this strategy the first time, I find it new, but I can also do it. It is not too difficult for me. In this strategy, I don't need to translate word by word, but I can still understand the reading text." (Interviewee 1)

"I like the way students learn how to make a question and verbalize their thoughts. Students can find clues to get the answers by themselves or ask for suggestions from teachers. Thinking and problem-solving will help me better understand the reading text." (Interviewee 9)

4.2.3 Students' Thoughts Towards the Advantages of Think-aloud During the Reading Learning Process

A. Improving Reading Comprehension Skills

The results from the interview indicated that most of students believed that think-aloud is a useful and effective strategy. By using think-aloud strategy, students know the ways to deal with a reading text. Most of participants believed their reading comprehension skills were developed thanks to the use of think-aloud strategy in reading class. For example,

"Yes, I believe that my reading comprehension skills improve after I study and apply this strategy in reading practice. Normally, I cannot understand the reading text well. I tend to wait until the teacher translates the meaning of the words or paragraphs, then I can understand them. However, now I just skim the reading text, I still generally understand it. It means that when I read a text, I do not know what I should read first, or what come after, and when I encounter difficult words, I do not know how to handle. Now, I know what I need to do, how to apply the strategies in a reading text. Therefore, I find it easier to understand than before." (Interviewee 3)

"I think this strategy is very effective. I understand the reading quite well after I use this strategy in reading text." (Interviewee 4)

B. Monitoring Comprehension and Overcoming the Difficulties of Reading Texts

When students were asked to share their opinions about the benefits of the think-aloud strategy, three out of nine students stated that they made a lot of progress in monitoring comprehension. By using think-aloud in practicing reading skills, participants knew the ways to solve problems and knew how to deal with problems in a reading text. For example, they said:

"Previously, when I encountered difficult vocabularies or contents in the reading text, I often ask my friend, my teacher or search the meaning of the words by using a dictionary, but now I know how to make a prediction, make inferences to find the answers." (Interviewee 3)

"I think I make lots of progress, I know how to do the reading test, know how to solve problems in a reading text." (Interviewee 6)

"I think my reading comprehension skills are improved so much. For example, after I study think-aloud strategy, I can make questions and solve problems by myself. I also know how to use general reading comprehension strategies, and I know how to deal with a reading text. I think, this strategy helps me train my mind to think critically, make questions, find clues to get the answers, and make more inferences." (Interviewee 9)

Besides that, some students reported that they realized practicing the think-aloud strategy may help them to become independent readers without the help of a teacher or dictionary in the future. They said,

"Yes. It helps me understand the reading texts without asking the teacher's support, so I think it is very convenient. I think this method is better than the methods I learned in school. In a sentence, there are words I understand and some words I don't understand, so this strategy helps me guess the meaning of words." (Interviewee 1)

"Well, as compared to previously, when I asked teachers some questions, if teacher answered them right away, I will not understand why it means so, now teacher lets us predict and find the clues by ourselves. Therefore, with this strategy we can learn the ways to solve the problems without asking teacher's helps." (Interview 6)

C. Expanding Vocabulary Knowledge

The results from the interview indicated that some students reported that their vocabulary increased during the learning process by using the think-aloud strategy. Besides that, students also learn more about the structure patterns, learn how to arrange the sentences as well. For instances,

"I believe I make a lot of progress. For example, I know more vocabularies, then this strategy also helps me to know how to process a reading text, I also know how to predict difficult vocabularies or predict in advance the situations that may occur in the next reading passage." (Interview 5)

"I realize I get more vocabularies, sentence patterns, and knowledge of sentence arrangement. Besides, this strategy also helps me to know how to solve problems." (Interviewee 8)

Besides lots of benefits that participants gain from the think-aloud strategy, students also meet lots of obstacles since most of the students approach this method for the first time. Some of students' obstacles were revealed in the next part.

4.2.4. Students' Perceptions of Any Difficulties They Might Meet When Using the Think-aloud Strategy

A. Unfamiliar Strategy

Some students agreed that think-aloud was a very new strategy for them, so they feel difficult to build a new habit which is “verbalizing out loud” their thoughts.

“There are many difficult words that I do not understand. Another difficulty is that although I can say out loud my thoughts, I also find it challenging because I am not accustomed to doing so and I am also afraid of making mistakes.” (Interviewee 1)

“I find it a bit difficult because I haven't done this before, so I'm not used to it, and I don't know how to say it, and I also feel shy.” (Interviewee 9)

“The reason why I do not use some general reading comprehension skills is that they are difficult for me. I do not have the habit to use them. Although I can understand how to apply these strategies when I read the reading text, I cannot automatically apply them because I am not used to it, I have not practiced these strategies too much.” (Interviewee 4)

Some students thought that they need time to practice so that they become familiar to the strategy.

“I can understand the contents of teacher's instruction. However, when I applied it, I did not use it well in the reading text and I also find that I need more time to practice.” (Interviewee 5)

B. Lack of Vocabularies

Think-aloud is a strategy in which the readers must read, think, and solve problems by using some reading strategy while they are reading and saying out loud what they thought. Although the think-aloud strategy was not much related to translating the meaning of words, most students believe that lacking basic vocabulary hinders students' understanding of reading text and using reading strategy to understand the reading text. They said,

“In the reading text, there are a lot of new vocabularies for me and it is also my difficult part.... I, always meet new vocabularies which I do not understand...” (Interviewee 2)

“I realize my vocabulary is limited, so it is my difficult when I read a reading text. I find that when I have a low vocabulary, so whenever I make questions, I cannot rely on the basic words I know to infer the meaning of new vocabularies.” (Interviewee 3)

C. Emotional Barriers

Three out of nine students reported that they are difficult to verbalize their thoughts because they feel shy to say them out loud and they are afraid that they make mistakes when they express their ideas. For example:

"Another my difficulty is that although I can say out loud my thoughts, I also find it challenging because I am not accustomed to doing so and I am also afraid of making mistakes. (Interviewee 1)

"...Because I am afraid, I am afraid I will be wrong if I say it." (Interview 4)

One student revealed they she only felt comfortable when she talked out loud to some friends she trusted, she said:

"I tend to communicate a lot when I sit next to friends I know clearly; Otherwise, I just talk to the teacher. Because those friends make me uncomfortable if I'm not familiar with them, so I do not want to verbalize my thoughts." (Interview 6)

To agree with that point of view, one student stated that he thought it was better if the think-aloud strategy should not be learned in a place where there were not too many students. In other words, he believed that the think-aloud strategy should be practiced in a small group so that not many students could hear him while he verbalized his thoughts, he said,

"I prefer to work individually rather than in a pair or a group because sometimes my partner does not cooperate and discuss with me, In my opinion, to practice think aloud strategy, I think there should not be too many students in class because I am afraid... (Interviewee 8)

Although most of the students agreed that think-aloud helps them to improve their critical thinking and help them to better solve problems, one student revealed that he met a bit of difficulty with this strategy because he tends to think things simply instead of using many strategies to deal with any problems. For example:

"I am the kind of person who likes to think simply. I do not want to think complicated. If I use too many strategies to solve problems, it will make me confused." (Interviewee 4)

One interesting thing is that one student stated when she used the think-aloud strategy, sometimes she got confused because there were many thoughts running through her head, sometimes these thoughts conflicted with each other and she cannot decide which ones were right. She also believed that verbalizing her thinking may interrupt her thinking process, thus she forgot what she was thinking.

"Besides, I find that when I apply the think-aloud strategy, sometimes I easily get confused. For example, while I am thinking and I verbalize my thoughts simultaneously. At that time, I feel confused, I feel like something interrupts my thoughts and I will forget what I have been thinking ..." (Interview 6)

4.2.5 Students' Recommendation for Using Think-aloud Strategy in Learning Reading

Some questions related to students' recommendations were asked with the purpose of improving the use of the think-aloud strategy in teaching and learning reading. All of students were excited to contribute their ideas. For example, five students shared the same idea that because think-aloud was the new strategy for them, they need more time to practice using it well. They also suggested that they would like to practice carefully each reading comprehension strategy (predicting, questioning...) before moving to another strategy. Examples of students' recommendations are as follows:

"I want to practice carefully one by one the reading comprehension strategy." (Interviewee 5)

"I think it is necessary to repeat the important points of the reading comprehension strategy." (Interviewee 2)

"Yes, I think it is fine now. If possible, the reading topics should be more diverse and each reading comprehension skill should be instructed detailedly before moving to another one." (Interviewee 6)

"I think I need to practice skillfully each reading comprehension strategy separately before moving to the next strategy." (Interviewee 8)

"I think it takes more time for me to practice these reading comprehension strategies and I need time to better understand these strategies. I think I can understand each reading strategy separately but I cannot use it properly yet." (Interviewee 9)

One student recommended that the teacher should provide more basic vocabularies in the reading text so that he can better understand the reading. He said:

"The difficult levels of reading material should vary, and additional instruction in the fundamental vocabulary should be given..." (Interviewee 8)

In terms of the activities in class, one student shared her ideas that the teacher should organize some games that can apply the think-aloud strategy so that students may be more excited about learning reading. She said:

"I think the teacher should provide games that can apply the think-aloud strategy. I believe it will be more enjoyable for students who enjoy playing games." (Interviewee 7)

In addition, to make sure students can use the reading comprehension strategy better, two students recommended that the reading texts should be added more pictures so that they are easier to visualize, predict or use other reading comprehension strategies. Examples of these students' suggestions are as follows:

"I think the reading topics are interesting but I wish there were more pictures in the reading text." (Interviewee 1)

"I think the reading text should be added more illustrative images so that it makes it easier for students to visualize and predict." (Interviewee 9)

In summary, through the interview, all of the participants revealed that they were interested in using the think-aloud strategy in studying reading comprehension skills and those participants agreed that they would like the teacher to continue to use the think-aloud strategy in teaching reading. In the final chapter, the discussion and conclusion of the study will be presented.

4.3 Discussion of the Findings

4.3.1 The Effect of Think-aloud Strategy on EFL Young Learners' Reading Skill Practice

The first answer of this study was answered based on the data collected from the pre-test and post-test (Table 2). The results of GLM for Repeated Measures showed a substantial improvement between the pre-test and post-test in terms of students' reading comprehension ($M_{pre} = 4.57$; $SD = 1.67$, $M_{post} = 7.35$; $SD = 1.90$) ($df=1$, $F = 78.28$, $p = .000$). In other words, after 10 weeks applying think-aloud strategy on teaching and learning reading skills, the students' reading comprehension achievement was improved quite well. Although the length of treatment was not so long and some students believed that they may need more time for practicing the think-aloud strategy in order to become more proficient, the results show great potential from the strategy which helps students make more progress and achieve more success in the future.

The results of the study are in line with the findings of several studies mentioned in the literature review such as Alzu'bi (2019), Sonmez & Sulak (2018), Syamsul (2019). The results from the current studies shared common things with Xiao, Q. (2016) and Nguyen (2020) who asserted think-aloud strategy can be used as a tool to help students develop their reading comprehension skills.

To explain these results, the development of students' reading comprehension performance is the result of the characteristics of the think-aloud strategy in which during the teaching and learning process, the teacher modeled the think-aloud strategy by speaking out loud about how the teacher used some reading strategies such as predicting, questioning, connecting, clarifying, etc. to find out the clues to solve the problems. Therefore, students learn how to use these techniques. During the learning process, students learn the way to verbalize and explore their thoughts, students share their thoughts with teachers and receive feedback from teachers. This process enables students to comprehend the reading text while reading, verbalizing, and exploring the reading

text. This finding is supported by a claim stated by McKnown and Gentilucci's (2007) who said that think-aloud is one of the transactional strategies which allows students to construct and comprehend their understanding of the reading text thanks to the collaboration between teacher and students. Besides, students can practice many strategies that assist them in thinking and increasing comprehension while they read a reading text.

Moreover, after treatment, some aspects of reading such as vocabulary, inferencing, reading for details information, and main idea were improved although identifying the main idea skill was not developed so much when compared to the skill of identifying the detailed information. These results were similar to the results of the study conducted by Bahri et al. (2018) and Jahandar et al. (2012).

In terms of the students' band scores, based on the results from the pre-test and post-test, the majority of students scored at the level of very weak (24%), weak (32%) and average (32%) in the pre-test and most of the students' category was fairly good (32%) and excellent (48%) in the post-test. Besides, 4 % of students were categorized as average and 8%, and 8% of students were classified as weak and very weak respectively in the post-test. The findings indicated there was a shift in the ratio of very weak, weak, and average students to fairly good and excellent students in which the number of fairly good and excellent students increased after the use of the think-aloud strategy in learning reading comprehension. These results prove that the think-aloud strategy give a significant contribution to improving students' reading comprehension performance. These findings are compatible with the findings of the study conducted by Sudiati et al. (2018), who revealed that the findings indicated that low-achieving students changed after treatment, while high-achieving students outperformed low-achieving students in the post-test.

In the current study, the results of the differences two genders indicated that there were no significant differences between males and females during the learning process. These results indicated that the male and female students have the same capability in using the think-aloud strategy in learning reading comprehension skills. This finding is different from the findings of the study carried out by Karizak and Khojasteh (2016) who found that male students are better than female students in both employing reading strategies and performing reading comprehension.

4.3.2 Young Learners' Attitudes towards Think-aloud Strategy Used by Teacher in Teaching Reading

In this study, to find out the attitudes of students towards the use of the think-aloud strategy in teaching and learning reading comprehension, the interview was conducted.

First, in terms of students' attitudes regarding the teacher using the think-aloud strategy to teach English reading, the participants believed that the think-aloud strategy promote their interests and curiosities because they believed that think-aloud was a new strategy that they have not ever heard of before, so they felt curious and wanted to explore how to use this strategy in a reading text. Students also felt fun and enjoyable when they used this strategy.

Students also showed that they felt more confident and independent in learning reading after using the think-aloud strategy. This matches the finding of Alzu'bi's study in which he stated that think-loud enables learners to think cooperatively and independently without the assistance of a teacher.

Using a think-aloud strategy also improves students' motivation. This finding of the study was consistent with the findings of the research conducted by Alzu'bi (2019) who indicates that a think-aloud strategy motivates learners who like the learning process. Additionally, a think-aloud strategy engages children in reading so they gain more knowledge and can actively understand texts both in the classroom and at home. Similarly, these findings match the finding of Bahri et al. (2018) when they indicated that the think-aloud strategy helped students' reading comprehension since they can combine what they experienced throughout sessions. This strategy motivated the students because it encouraged students to learn more thoroughly and increased their understanding of the texts.

Secondly, regarding students' opinions on what students were interested in when they were instructed think-aloud strategy in learning reading, the results from the interview revealed that most of the students like working in a pair or a group so that they can freely say out loud their thoughts and receive the interesting ideas from their partners. Students can discuss with each other and defend themselves to clarify the problems. These results are similar to the findings of the study carried out by Kucan & Beck (1997) and Baumann et al. (1993) who mentioned think-aloud strategy increases social interaction among students and it stimulates students' self-regulation strategies when they meet comprehensive challenges.

Thirdly, concerning students' thoughts towards the advantages of think-aloud during the reading learning process, most of the students stated that the employment of the think-aloud technique significantly improved reading comprehension abilities, monitoring comprehension abilities, and overcoming reading challenges abilities. Additionally, some students claimed that by employing the think-aloud strategy while reading, they were able to increase their vocabularies.

These results of the study go in line with the study conducted by Wan Chi & Ghani (2021), Jafarigohar & Soleimani (2013), and Jafarigohar et al., (2013) when they believe that the majority of students claimed that think-aloud had improved their comprehension of the reading materials and made them more conscious of how they read (Wan Chin & Ghani, 2021). In addition, this finding is consonant with the findings of previous studies conducted by Jafarigohar, Soleimani (2013). Particularly, in their studies, they found out that think-aloud effectively improved students' understanding of English reading comprehension. Think-aloud strategy enhance students' capacity in their process of thinking because this strategy allows students to connect the prior knowledge and what they read to understand the reading text, subsequently developing their comprehension of the material (Jafarigohar et al., 2013).

Fourthly, in terms of the students' perceptions of any difficulties they might meet when using the think-aloud strategy, the results from the present study revealed that some students claimed that they felt challenging to adapt to the think-aloud strategy

because this was very new for them. Furthermore, their difficulties to employ think-aloud to fully comprehend the materials are the result of lacking fundamental vocabularies. These challenges were also consistent with the study carried out by Wan Chin & Ghani (2021) who indicated that students found the think-aloud strategy challenging at the beginning of the training session. They tend to be less responsive and have low engagement. Participants then become more engaged in the learning process in the following session. These troubles could be explained that because think-aloud is a strategy require students to verbalize their thought when reading. Talking out loud is not a habit of students, these participants do not have opportunities to express their ideas in academic settings. Other reasons are students do not know what to say and how to say it out loud, or even though students do not have difficulties with these troubles, some feel hard to say it out loud because they are afraid of making mistakes, shy, etc. Therefore, the teacher's modeling think-aloud is a crucial step. Besides, students should be provided with think-aloud prompts to help them how to say and the atmosphere for practicing think-aloud also should be considered carefully.

According to the interview's results, unfamiliar vocabularies make students not understand the reading materials. Other studies conducted by Mohammed and Rashid (2019), Shehu (2015), and Chen et al. (2016) share the same results which noted that one of the issues impacting students' reading comprehension was a lack of vocabulary knowledge.

Another issue that makes participants concerned is implementing group work during the reading practice. While most students prefer to work in pairs or in a group to practice reading, some believe practicing a think-aloud strategy would be more effective when student work individually or in a small size of the class. When asked, these participants also responded that while they like to think-aloud individually, they do not deny the benefits of practicing reading using think aloud-strategy in pairs or a group. The students' advocate for individual work revealed that they felt shy and uncomfortable sharing their thoughts with friends who were not close to them. This trouble sometimes comes from the lack of enthusiasm for sharing ideas with their partners. Such results supported by Wan chin & Ghani (2021)'s study indicating that some students prefer think-aloud individually as they were more comfortable.

Finally, in relation to the findings of students' recommendation for using the think-aloud strategy in learning reading. Students mentioned that before moving to another strategy, students would like to thoroughly practice each reading comprehension strategy (predicting, questioning, etc.) with reading text. In addition, one student suggested that the teacher should provide more fundamental vocabularies before reading so that he may better understand it. Students also suggest that the teacher should organize some games that used the think-aloud strategy so participants would be more excited about learning reading skills. Finally, to make reading material easier to imagine, predict, or apply other reading comprehension techniques, there should be more illustrative pictures in the reading text.

In summary, the data from the pre-test, post-test, and semi-structured interviews indicated that the students' reading comprehension performance improved significantly

after the use of the think-aloud strategy in teaching and learning reading comprehension. Besides, the results from the interview also revealed that students are keen and eager to join the learning process. Students showed their positive attitudes toward the use of the think-aloud strategy in teaching and learning reading. The findings were consistent with the previous studies. The next part is the conclusion extracted from the study, the suggestion for further studies, and the limitation of the study.

5. Conclusion

Based on the finding and discussion in the previous chapter, some key points of the research are drawn. Firstly, the use of a think-aloud strategy could improve the EFL young learners' reading comprehension performance. This is demonstrated by the mean scores from the post-test being higher than those from the pre-test. Besides, the results from the General Linear Model Repeated Measures lead to conclude that the think-aloud strategy has a significant impact on the development of students' reading comprehension after the intervention. The findings of the Independent Sample T-test revealed that the female students and male students were the same in reading comprehension achievement. The results from the semi-structured interview indicated that all students had positive attitudes towards the use of the think-aloud strategy in teaching and learning reading comprehension. To sum up, the think-aloud strategy had a quite high effect in teaching and learning reading comprehension to EFL young learners. Therefore, along with teaching in traditional classrooms, the think-aloud strategy should be considered a potentially valuable strategy for teaching reading comprehension.

Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Author(s)

Lam Ngoc Anh Thu is an English teacher at a foreign language center in Can Tho City, Vietnam. She is currently completing her Master's Degree in Principles and Methods in English Language Education at Can Tho University, Vietnam. Her research interests include reading skills, teaching methods, and young learners' cognition.

Truong Vien is an Associate Professor, Hue University of Foreign Languages, Vietnam. His research interests include second language acquisition, professional development, service learning, and pragmatics.

References

- Aebersold, J. A., & Field, M. L. (1997). *From Reader to Reading Teacher*. Cambridge: Cambridge University Press. Comprehension. Folio. 69-75.
- Alzu'bi, M. (2019). The impact of think-aloud on EFL students' reading comprehension. Retrieved from

<https://www.researchgate.net/publication/337890517> The Impact of ThinkAloud on EFL Students' Reading Comprehension

- Alvermann, D., & Earle, J. (2003). Comprehension instruction. In A. P. Sweet & C. Snow (Eds.), *Rethinking reading comprehension* (pp. 12-30). New York: Guilford Press.
- Anderson, N. (1991). Individual differences in strategy use in second language and testing. *The Modern Language Journal*, 75(4), 460-472.
- Bahri Ys, S., Nasir, C., & Rohiman, C. L. N. (2018). Using the think-aloud method in teaching reading comprehension. *Studies in English Language and Education*, 5(1), 148-158.
- Baumann, J. F., Jones, L. A., & Kessel, N. S. (1993). Using think-aloud to enhance children's comprehension monitoring abilities. *The reading teacher*, 47(3), 184-193.
- Block, C. C., & Israel, S. E. (2004). The ABCs of performing highly effective think-alouds. *International Reading Association*, 58(2), 154-167.
- Chamot, A.U., & El-Dinary, P. B. (1999). Children's learning strategies in language immersion classrooms. *The Modern Language Journal*, 83, 319-338
- Chen, L. L., Maarof, N., & Yunus, M. M. (2016). Factors Affecting ESL Reading Comprehension of Malaysian Secondary School Students. *International Conference on Education*, 542-547.
- Durkin, D. (1978). What classroom observations reveal about reading comprehension instruction. *Reading Research Quarterly*, 14 (4): 481-533.
- Ebner, R., & Ehri, L. (2013). Vocabulary learning on the internet: Using a structured Think-Aloud procedure. *Journal of Adolescent & Adult Literacy*, 56(6), 480-489.
- Fitzgerald, J. (1995). English-as-a second-language learners' cognitive reading processes: A review of research in the United States. *Review of Educational Research*, 65(2), 145-190.
- Flavell, J. H. (1979). Metacognition and cognitive monitoring. A new area of cognitive-developmental inquiry. *American Psychologist*, 34(10), 906-911.
- Flavell, J. H. (2000). Development of children's knowledge about the mental world. *International Journal of Behavioral Development*, 24(1), 15-23.
- Grabe, W. (2009). *Reading in a second language. Moving from theory to practice*. New York: Cambridge University Press.
- Guthrie, J. T., & Scaffidi, N. T. (2009). Reading comprehension for information text: Theoretical meanings, development patterns, and benchmarks for instruction. NJ: Lawrence Erlbaum Associates.
- Henry, L. A. (2008). Building reading comprehension through think-alouds. Retrieved October from <http://www.readwritethink.org/classroomresources/lesson-plans>
- Jafarigohar, M., Soleimani, H., & Soleimani, Z. (2013). The effects of reciprocal teaching vs think-aloud on reading comprehension of pre-intermediate students in Iran. *International Journal of English and Education*, 2(1), 191-202.
- Jahandar, S., Khodabandehlou, M., Seyedi, G., Mousavi, R., & Abadi, D. (2012). The think-aloud method in EFL reading comprehension. *International Journal of Scientific & Engineering Research*, 3(9), 1-9.

- Kalendova, E. (2008). The use of game-like activities in teaching English to young children. Masaryk University.
- Karizak, A. F., & Khojasteh, L. (2016). The effect of three kinds of reading strategies on EFL learners' reading comprehension and gender difference using think-aloud protocol. *International Journal of Applied Linguistics and English Literature*, 5(5).
- Kucan, L., & Beck, L. I. (1997). Think aloud and reading comprehension research: Inquiry, instruction, and social interaction. *Review of educational research*, 67(3), 271-299.
- Lau, K. (2006). Reading strategy use between Chinese good and poor reader: A think-aloud study. *Journal of Research in Reading*, 29(4), 383-399.
- Mason, L., & Santi, M. (1994). Argumentation structure and metacognition in constructing shared knowledge at school, AERA annual meeting, New Orleans, USA.
- Mayer, Richard (2003). *Learning and instruction*. Upper Saddle River, New Jersey: Pearson Education, Inc.
- McKay, P. (2006). *Assessing young language learners*. Cambridge University Press.
- McKeown, R. G., & Gentilucci, J. L. (2007). Think-aloud strategy. Metacognitive development and monitoring comprehension in the Middle school second-language-language classroom. *International reading association*. 51(2), 136-147.
- Meyers, J. (1989). Think-Aloud protocol analysis of reading comprehension tactics used by students with reading problems. Special Education Programs (ED/OSERS), Washington, DC.
- Mohammed, Q., & Rashid, R.A. (2019). The Sources of Reading Comprehension Difficulties Among Saudi EFL Learners. *Trends in Social Sciences*, 1(1), 7-16.
- Nunan, D. (2003). *Language Teaching Methodology*. London: Prentice Hall International
- Nuttall, C. (2005). *Teaching reading skill in a foreign language* (2nd Ed.). Oxford: Macmillan Heinemann.
- Oster, L. (2001). Using the think-aloud for reading instruction. *The Reading Teacher*. 55(1) 64-69.
- Pardo, L. S. (2004). What every teacher needs to know about comprehension. *International Reading Association*, 272-280.
- Pearson, P. D. (2009). The roots of reading comprehension instruction. In S. E. Israel & G. G. Duffy, *Handbook of research on reading comprehension* (pp. 3-31). London: Routledge.
- Perner, J. (1991). *Understanding the representational mind*. Cambridge: MIT Press.
- Phillips, S., 1993. *Young learners*. Oxford University Press.
- Piaget, J. (1964). *Six psychological studies*. New York: Vintage.
- Piaget, J. (1928). *The Child's Conception of the World*. London: Routledge and Kegan Paul.
- Raihan, A. M. (2011). 'Think-aloud' techniques used in metacognition to enhance self-regulated learning. *Journal of Educational Research Educational Research Institute, Kongju National University*, 25(2), 125-160.
- Scott, W. A., & Ytreberg, L. H. (1990). *Teaching English to children*. London: Longman.
- Seyedi, G. (2012). The think-aloud method in EFL reading comprehension. *International Journal of Scientific and Engineering Research*, 3 (9), 1-9.

- Shehu, I. (2015). Reading Comprehension Problems Encountered by Foreign Language Students, Case Study: Albania, Croatia. *Academic Journal of Interdisciplinary Studies*, 4(1), 91-96.
- Shin, J. K., & Crandall, J. A. (2014). *Teaching young learner English: From theory to practice*. National Geography Learning.
- Sönmez, Y., & Sulak, S. E. (2018). The effect of the think-aloud strategy on the reading comprehension skills of 4th grade primary school student. *University Journal of Educational Research*. 6(1), 168-172.
- Sudiati, S., Hanapi, H., & Bugis, R. (2018). The effectiveness of think-aloud strategy in students' reading achievement. *Jurnal Retemena*, 5(1), 44-56.
- Thomas, W. D., & Lapp, D. (2019). Teaching developing vocabulary using think-aloud and read aloud strategies. Wiley Online Library, 1-9.
- Tran, B. B. T., & Nguyen, H. B., 2017. Reading strategy instruction to Vietnamese young language learners: Teachers' practices and perceptions. *Can Tho University Journal of Science*. 7: 138-147.
- Van Someren, M., Barnard, Y., Sandberg, J. (1994). The think-aloud method: a practical approach to modelling cognitive. *Academic Press, London*.
- Vygotsky, L. S. (1962). Thought and language. *Cambridge: The MIT Press*.
- Wan Chin, A. S., & Ghani, K. A. (2021). The use of think-aloud in assisting reading comprehension among primary school students. *Journal of Cognitive Sciences and Human Development*. 7 (1), 11-23.
- White, B. Y., & Frederiksen, J. R. (1998). Inquiry, modeling, and metacognition: Making science accessible to all students. *Cognition and Instruction*, 16(1), 3-118.
- Wolf, M. K., & Butler, Y. G. (Eds.). (2007). *English language proficiency assessment for young learners*. New York, NY: Routledge.
- Xiao, Q. (2016). Using thinking aloud to enhance poor readers' vocabulary knowledge and comprehension. *International Conference on Humanity, Education and Social Science (ICHESS 2016)*.
- Yayli, D. (2010). A think-aloud study: Cognitive and metacognitive reading strategies of ELT department students. *Eurasian Journal of Educational Research*, 38, 234-251.

Creative Commons licensing terms

Authors will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions, and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of English Language Teaching shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).