



EFFECTS OF EFL STUDENTS' USE OF METACOGNITIVE STRATEGIES IN EXTENSIVE READING TASKS ON THEIR READING PERFORMANCE AND ATTITUDES

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Abstract:

Reading plays important role in teaching and learning a second language as in reading, information is acquired and processed before learners can reach the final goal of English learning – communication. Extensive reading is a helpful way to develop students' reading habits. A quasi-experimental study with one group pretest-posttest design was conducted in the Vietnamese educational context to investigate the effects of students' use of metacognitive strategies on intermediate learners' reading performance and attitudes. The results indicated positive changes in learners' performance and attitudes, especially in higher-order thinking ability. Thirty-two participants from the convenient sampling method attended a 10-week reading course with metacognitive strategies embedded in extensive reading tasks. The scores from tests showed an improvement in reading comprehension ability and higher-order thinking application. The data from the questionnaire and semi-structured interview contributes to the positive attitudes toward students towards reading activities. This study has discovered the significant effects on the awareness of learners and afterwards cognition thinking. Learners have achieved a higher level of cognitive reading, critical reading and positive attitudes towards reading activity.

Keywords: reading comprehension, metacognitive strategies, extensive reading

1. Introduction

In Asia, EFL teachers recognized the importance of exposure to reading as comprehensive input, they believe the effects of reading practice in developing learners' ability, however, when becomes implemented, not many teachers do as they thought (Chang & Renandya, 2017).

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There are some difficulties in which students struggle with obstacles in reading related to the vocabulary shortage (Lesaux et al., 2010). Students do not prepare the habit of reading for themselves besides the compulsory textbooks in the course. Another difficulty preventing students from exploring reading much is that usually, insufficient teaching for all three stages of reading skills, namely pre-reading, while -reading and post-reading (Alebel, 2020) are still unsolved in all classroom contexts, which causes the weirdo action if students are required to read something else after having reading classes. Thus, it is necessary to create an environment in which teenage learners are encouraged to read more and enjoy the helpfulness that reading activity brings them.

This study was conducted for the following reasons of:

- 1) implementing extensive reading tasks with the student-centred approach in the classroom context to let students establish their own reading culture,
- 2) offering learners a new technique to access extensive reading,
- 3) investigating the effects of extensive reading tasks on students' performance and attitudes when students are offered metacognitive strategies to control their reading,
- 4) solving some of the learners' reading problems in terms of vocabulary and reading strategies, and
- 5) fostering learning autonomy to instruct learners to become independent learners for their lifelong learning.

The research comes up with two research questions regarding the effects of EFL learners' use of metacognitive strategies in extensive reading tasks on learners' reading performance and the effects of EFL learners' use of metacognitive strategies in extensive reading tasks on learners' reading attitudes.

2. Literature review

2.1 Reading performance

Reading is defined as a receptive skill for L2 learners that can facilitate and enhance knowledge and capability for learners (Floris & Divina, 2015). Reading comprehension is not a simple process, it is a complicated interaction combined by a group of factors, namely, teachers' instructional strategy, learning environment, readers' prior knowledge, personal readers, specific tasks and the text itself (Yang, 2016). Reading performance is referred to the ability to comprehend the text while reading activity. With this understanding of the meaning of reading tasks, teachers can combine asking students to do something along with students' reading comprehension of texts. It is emphasized that the role of reading is meditation and the purpose of reading is to develop active learners and independent readers with their achievements (Douglas, 2010).

A reading model of the reading process shaped by Weir and Khalifa (2009) has pointed out the combination of higher-order thinking skills in cognitive reading comprehension. Setting reading goals can lead readers to constantly do goal checking

and monitor their reading activity with remediation if an unexpected situation happens to them.

2.2 Learners' attitudes in reading

According to model Mathewson (1994), attitudes contain 3 components. The first is cognitive attitude is about the belief of learners on Reading and its features or benefits. The second attitude is the affective attitude shown by how much the learners like or dislike the Reading activity in their feeling reflection. If learners spend some emotions such as "*happy, joyful, delighted*" (Park, Stoel & Lennon, 2008) when reading, it shows a positive attitude, and vice versa, if learners feel "*bad, unfavourable, unpleasant, disagreeable*", or even hate reading, it shows the negative attitude ((Park, Stoel & Lennon, 2008). Lastly, conative attitudes refer to the behaviour of learners in reading.

There was a result showing that reading motivation can be triggered by reading achievement (Toste, Didion, Peng, Filderman and Mc Clelland, 2020). At the primary level, reading interest is also correlated with reading outcomes (Kasper, Uibu & Mikk, 2018). This relationship has been found in the research of Guthrie et al. (2007), Martinez, Aricak, and Jewell (2008), the students were tested with Elementary Reading Attitude Survey and showed a relation between reading attitudes with reading achievement scores towards recreational, academic and total reading scores.

The two-way interaction of reading attitudes and reading behaviour has been discovered that engagement in reading, the interest to read and confidence feeling in reading can affect back to the development of learners' attitudes (Troyer et al., 2019). Internally, self-confidence in reading fluency also controls current reading fluency and raised the intention of reading for pleasure students (Reedy & De Carvalho, 2021). The attitudes of learners also show in the time proportion they spend reading (De Naeghel et al., 2012; Hebbecker et al., 2019).

2.3 Extensive reading

Extensive reading is considered a pedagogical approach requiring learners to read a large number of materials containing their linguistics suitable to students' comprehension ability (Grabe & Stoller, 2013). In the pedagogy aspect, extensive reading facilitates vocabulary and literacy purposes, it can construct and develop students' reading culture and offer them experience in society, culture and affection (Loh & Sun, 2019). With extensive reading instruction from teachers, students learn by themselves and learning makes sense. Extensive reading is an opportunity in learning English in which students are allowed to read an abundant amount of material at a fast speed (Nation & Waring, 2019). Overall, extensive reading further affects reading ability, vocabulary knowledge and English proficiency has been found by many researchers such as Mc Lean & Rounault (2017), Suk (2017), and Aka (2019).

In the virtual reading environment, the effect of online reading resources used in extensive reading is shown in the benefits in reading rate, reading motivation, attitudes increase, learning autonomy and accessibility as well (Dang, 2020). The academic

vocabulary word list can be enhanced through extensive reading (Mc Quillan, 2019) if teachers have a reasonable preparation for need-based reading sources, the number of words may be up to 37% as predicted in the study by Mc Quillan.

Eckerth and Tavakoli, in 2012, discovered the effect of reading as exposure to the target language in the EFL classroom. They have found positive changes in vocabulary retention through intervention made by tasks that enforce the time and frequency of written language exposure.

Little effect of extensive reading on incidental grammatical structure acquisition is found when students repeatedly access the extensive materials, parallelly with reading comprehension, students also pay their attention to grammar but at a very small scale. Another result from the extensive program has checked that the engagement of mother tongue in extensive reading can help students in adolescent age promote their grammatical awareness in second language learning and nourish the attitudes of learners towards reading instruction (Lee, Schallert & Kim, 2015).

The motivation for reading learning also is consolidated by extensive reading in studies by Tanaka (2017), and Lee, Schallert & Kim (2015). The key to higher self-esteem emotion is that it is the knowledge and experience condensed through extensive reading that creates a resilient foundation in readers' psychological state and vice versa, the self-confidence keeps the readers maintaining reading.

Was stated (Suk, 2017) that goal-setting and monitoring strategies used in his research about the extensive reading program can lead learners to more satisfying outcomes and become self-directed learners. Among several psycho-social factors, self-directed learning strategies formed from extensive reading activities can reinforce reading and reading achievement. It is true to believe that extensive reading can engagement develop an independent learner.

Zare (2018) has found a significant relationship between reading comprehension and critical thinking skills among ESP students, it can be inferred that teachers can help train critical thinking skills through reading activities.

2.4 Metacognitive strategies

According to Cunningham et al. (2018), metacognitive strategies consist of four elements: planning, monitoring, controlling and evaluating. The term "planning" refers to deciding the appropriate learning strategies and choosing the support materials or sensible resources to have an effective performance for the requirement in the task while "monitoring" and "controlling" refer to adjustment and "evaluating" shows learners' decision on analysing texts with flexible criteria depends on the goal requirement. Metacognition can help learners examine the problems in ineffective learning and adapt their strategies to be better in learning outcomes (Alexander, 2008).

Metacognition of reading concludes the strategies used while learners try to remember, and understand, and summarize the text (OECD, 2020). Metacognition is also sorted into higher-order thinking skills evoking students an active role in the cognition process and the learning progress (Barnes & Stephen, 2019). In the model of Bloom, the

domain having metacognition is evaluating and creating, which requires more complicated action inside one's mind, if students can complete the task of these levels, the meaningful function of reading can be reached.

The metacognitive strategies are correlated with the readability levels of texts, the higher level of difficulty of text, the more metacognitive strategies generated by EFL learners and the problem-solving strategy was employed (Ghaith & El-Sanyoura, 2019).

A strong connection between metacognition with intrinsic learning motivation and metacognitive awareness was found high (De Pasque & Tricomi, 2015). When a student has more observation and reflection on their process, they can develop learning autonomy.

Artelt & Schneider (2015) indicated that reading competence was likely higher when learners provided metacognitive knowledge. The effect of metacognition specifically in monitoring ability does not stop at reading comprehension. It constructs self-regulated and successful learners when learners perform more frequent and are skilful in monitoring. Is it advisable for both teachers and students to develop comprehension and metacognition awareness comprehension at the same time (Gutierrez & Schraw, 2015).

3. Methodology

The research was conducted in 2 sections: quantitative and qualitative with one group of 32 participants aged 12 to 15 (8 female learners, 14 male learners). Participants did the pre-test and join a 10-week reading course with extensive reading tasks. The intervention ended up with a post-test and questionnaire answering to test the attitudes of learners. Six learners joined in the interview section after receiving consent letters from the researcher to ask for permission from their parents to record their voice answers and use their answers. SPSS was used to calculate the data from the quantitative study and the Raymond Padilla method was used to analyse the qualitative data.

3.1 Findings

a. Questionnaire

A descriptive statistics analysis was conducted to answer the second question in this study, the results showed that on the whole, learners have positive attitudes toward Reading, and the mean score was at agree level (mean = 3.93). Learners agreed with the statements in a questionnaire regarding positive attitudes toward extensive reading tasks, they also have an awareness of the beneficial role of the tasks on their language proficiency, thinking levels, cognition and metacognition knowledge.

Table 1: Descending ranking of the mean scores in 10 clusters (N = 32)

	Clusters	Mean
Effects on language acquisition	cluster4mean	4.40
Effects on higher-ordered thinking skill	cluster6mean	4.10
Cognitive attitudes	cluster1mean	4.09
Effects on lower-ordered thinking skill	cluster5mean	4.06
Effects on reading performance	cluster7mean	3.97
Effects on metacognition skill	cluster9mean	3.73
Affective attitudes	cluster3mean	3.72
Other effects (learning autonomy, self-esteem, self-directed learning)	cluster10mean	3.68
Effects on reading motivation	cluster8mean	3.53
Behavioural attitudes	cluster2mean	3.28

The mean score of cluster 4 is in the first place (mean = 4.40), which showed that learners have highly positive attitudes toward the effect of extensive reading tasks on language acquisition. Learners focus on familiar content that they have learnt explicitly or they have seen in their coursebook.

The eight continuous clusters' means follow the first one on the effects on higher-ordered thinking skills (mean = 4.10), cognitive attitudes (mean = 4.09) lower-ordered thinking skills (mean = 4.06), reading performance (mean = 3.97), metacognition skill (mean = 3.73). It is initiated to state that extensive reading positively influences learners' mental awareness in skill lessons, especially in the higher critical level of thinking.

The effects on reading performance place the 5th position (mean = 3.97), followed by the metacognition development effect (mean = 3.73) and affective attitude (mean = 3.72). The effects on learners' autonomy, self-esteem, self-direction, and motivation afterwards with the mean score namely equal to 3.68, 3.53 showed the positive attitudes of learners on encouraging the role of the extensive reading tasks to build up the positive affective factors.

The mean score of the last cluster about effects on behavioural attitude is at last with mean = 3.28 takes conative attitudes influence is at a moderate level.

b. Test

The test was delivered on the first and the 10th week of intervention. Paired sample T-test was conducted to determine whether there is a difference between the results on the pre-test and the post-test. The results indicate that there is a significant difference between the pre-test and post-test ($t = -7.64$, $p = .00$). Learners, after practising extensive reading tasks, have resulted in better performance.

Table 2: Paired sample statistics for pre-test and post-test

		Mean	N	Std. Deviation
Pair 1	Pre-test	15.59	32	5.254
	Post-test	20.97	32	3.469

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-test – post-test	-5.375	3.982	.704	-6.811	-3.939	-7.636	31	.000

c. Note form

The note form was used on the 4th week of intervention because, in the first three weeks, learners were in the instruction stage, extensive reading at that time is at the high-controlled level and depends on the teacher. After three weeks under instruction, learners can do extensive reading on their own and the presentation task now is the outcome of their extensive reading activity. Note form recorded the questions generated by learners after their extensive reading process and presentation preparation. The researcher used 2 letters to indicate the domains according to Bloom Taxonomy and a number to mark the order of questions found about domains.

The results showed that all 32 participants in experimental groups can create the questions after their reading process. The Evaluation domain was dominant with 12 questions, taking 40,62% of the total questions. The second prevalent domain is Remembering with 7 questions, taking 21,88%. The portion of Analysing and Creating domain are equal with 6 questions and take 18,75 for each domain.

Table 3: The categorization of questions from learners in the extensive reading task

Domains	Codes	Questions	Objectives
Remembering	RE1	What is the definition of AI?	Define Describe
	RE2	Have you ever tried to solve a Rubik's cube and what impression did it give you?	
	RE3	What benefits can the game give you?	Recognise Point Recall
	RE4	What entertainment do you like most?	
	RE5	How much time in a day do you spend on your phone?	
	RE6	Do you have experience in delaying homework? Can you describe it briefly?	Recall & describe Describe
	RE7	Have you ever been sexually harassed; how did you deal with it?	
Understanding	UN8	What are the examples of AI?	Give example
Analysing	AN9	What does education mean to you?	Analyse
	AN10	How does entertainment affect your life?	Analyse
	AN11	In your opinion, what is the satisfaction of the bullier in cyber violence?	Analyse
	AN12	What are the reasons making us fall into social network addiction?	Analyse
	AN13	Why are some people drink alcohol in traffic?	Explain
	AN14	What are the pros and cons of competition in your life?	Analyse
Evaluating	EV15	Would you take a class taught by a robot? Why or why not?	Decide & explain

	EV16	If you have a chance, will you study abroad in Finland? Why?	Decide & explain
	EV17	Should people depend on technology for everything? Why?	Judge & explain
	EV18	Do you think AI technology can dominate the world?	Critique
	EV19	What do you think about AI?	Critique
	EV20	Between vaccine and medicine, which one is better? and why?	Compare & explain
	EV21	What innovation impressed you most? And why?	Compare & explain
	EV22	What do you think about this invention (AI technology)?	Judge
	EV23	We are controlled by electric devices, aren't we?	Self-evaluation
	EV24	Do you think your time spent on the phone is appropriate?	Critique
	EV25	How can we use technology but still be independent of it?	Solve
	EV26	Can we reduce climate change? In what ways?	Solve
Creating	CR27	What would happen to professions if we did not have technology?	Hypothesize
	CR28	What would happen if people apply AI to create innovation?	Hypothesize
	CR29	What if robots all replace human jobs, people will be relaxed and comfortable or people will lose value?	Hypothesize & critique
	CR30	If you were the Government, what would you do to convince your civil to save the environment?	Hypothesize & solve
	CR31	Would you want to live in the everlasting virtual world instead of real life? Why?	Hypothesize & explain
	CR32	What would you do if you were a school principal when school violence occurred in your school?	Hypothesize & solve

d. Semi-structured interview

The interview questions are based on 6 major contents regarding learners' changes in attitudes during their extensive reading tasks and reading performance in tests. After their parents agreed and signed, the private online meeting is delivered through the Zoom platform to keep the convenient and comfortable mental and physical status for participants.

A. Learners' cognitive, behavioural and affective attitudes toward reading

Learners have recognized the beneficial role of reading during the process of practising extensive reading tasks, in their perspective, reading is important and can broaden their general knowledge, vocabulary knowledge, pronunciation, grammar knowledge, critical thinking, and information.

The reading habit of learners has been consolidated in free time reading with wide access to materials, genres, and technology and also expand to reading techniques aloud

rather than reading in silence because the participants found many new words during reading, and in his perspective, that is a chance to learn new words with their domains such as meaning, form and pronunciation. Those who have not read much before, now with the extensive reading program, have the opportunity to establish a new routine.

The participants then also had positive affection for reading activities especially when a speaking task was attached to learners' home reading activity. Learners pay more attention to reading presentation tasks to classmates. In addition, learners like this reading for presentation tasks, with their practice on reading, and they found it unpressured. when reading even if they do not have a rich vocabulary.

B. Learners' reading performance at lower to higher-ordered thinking levels

During the process of online extensive reading in the planning phase of the task, learners are found using four domains of thinking levels: understanding, analysing, evaluating and creating. Learners read by tracking to main ideas. Analysing strategy is conducted in test completion when learners need to recognise the trap option in multiple-choice test items, which supports learners in getting the correct meaning of texts and answers in the test. The participants were found to conduct evaluations in choosing the reliable articles to use in the presentation task. The content of the presentation was considerably selected by participants based on their personal opinions about the text. Moreover, students use a self-questioning generating technique to direct the reading process, like in a problem-solving phenomenon.

C. Learners' strategies used in comprehension

Comprehension strategies are used in and found in three activities: extensive reading tasks, reading tests and learners' home reading styles. Learners tend to use five strategies related to keywords or main ideas scanning, content comparing, note taking, information confirming by re-reading, summarising, predicting and asking for supportive help from people or the internet.

Firstly, keyword scanning is frequently used in the test's completion. To understand the meaning of the text and figure out the correct answers, learners need to grab the key points and compare them to necessary demands like in comprehension questions.

Participants also use the connection of meaning from larger units such as sentences by considering at similar or identical ideas appearing in the text. Learners also seek connections among paragraphs to have a more overview understanding.

Note-taking was used dominantly in the extensive reading tasks, participants take notes to arrange the ideas in the planning phase of task solving to prepare the content for the follow-up presentation after home reading was done.

Re-reading is also used not only to slow down the reading rate but to investigate complicated ideas or incidental problems in reading such as hard words or strange structures. Furthermore, the reading again technique can help with confirming the accuracy in information interpretation among students.

Another technique used is summarising with less frequency than the other techniques, participants employed the summarising technique in planning presentations. It is preferred that summarising may go parallel with another goal of reading besides literal comprehension.

The prediction was also employed when participants were faced with difficult and new words, hints from the context of reading also play the guidance role for learners. To keep fluency in reading, learners decided to skip some minor unknown words or phrases and maintain reading at the general content understanding

The last strategy is about supportive strategy, learners use the Internet to check their incomprehension ideas or directly ask their friends, who are better than them at reading to have assistance. In getting comprehension in the planning phase for the present task, learners looked up e-dictionary to have the exact meaning of words in their mother tongue and vice versa.

D. The application of metacognition strategies in extensive reading tasks

The results show that metacognitive strategies in all 3 phases: the planning, monitoring and evaluating phases were utilised. In the planning stage, learners spend time choosing a topic and they use Internet resources to find relevant information for their topics. To prepare for the presentation, learners also outline some main ideas they have from reading. When learners have enough main ideas to put in the presentation, they planned to have a script and do a trial speaking at home. Rehearsing at home can help learners find weaknesses in their use of language and adapt it into intelligible speech with reasonable readers' level of difficulty and relevance to have better performance for social speaking with their classmates.

In their reading phase, they also conducted a monitoring strategy to ensure the information they have read can be absorbed correctly before they talk about it in front of the class. Participants mentioned that they still employed some strategies like rereading or confirming ideas, similar to comprehension strategies that they used in reading tests and reading entries.

Learners' use of metacognition was also found in presentation preparation, learners reported that they evaluate the content by observing their audience's facial reaction. Mover, the whole process from outlining, writing a draft to speaking rehearsal. Is under the control of learners' evaluation.

It could be said that the goal learners aim to is to make their audiences, in fact, their classmates, understand the content. Therefore, which can be obstacles in their friends' comprehension of presenters' performances are easily to be estimated by presenters themselves. Learners were evaluated on the words used in the presentation.

Learners also evaluate the reading text quality before taking them to be resources for presentation. The balanced level between the reading text and the ability to understand the content in written language resources of learners is also a choice to guide them in choosing which resources and content were made.

E. The effects on language proficiency

The first and foremost effect recorded from participants is that Reading helps itself in terms of vocabulary, grammar and reading speed. Thanks to the task that requires learners and understand the content before having a presentation, learners have time to be exposed to English in the extra time at home. It is like an opportunity to build up words during appropriate times and resources.

The effect on grammar retention was also found yet at a low level. During the extensive reading, the focus is on content comprehension, therefore, learners spend little attention on how structures are formed and expressed in the text. Even if they acquire grammar, it is only at the level of recognition.

Extensive reading enhanced reading speed, learners can read faster than they did at the beginning of the course. Moreover, learners found effects for four skills of Reading because the vocabulary and grammar acquired from extensive reading tasks were useful in other language skills namely listening, writing and speaking due to all four skills always needing vocabulary and grammar, which are very nourishing in reading. Those linguistic patterns can strengthen and lengthen linguistic academic achievement, for example, public speaking chance.

F. The effects on motivation

The effects of extensive reading have played an encouraging role in learners' autonomy, self-esteem and learning motivation. Learners have become more independent in reading activities. Learners' have acknowledged the profitable role of reading and established reading habit. Time management in the student reading environment is an obvious benefit. With the effort spent on reading, learners were confident more with their performance when they access a variety of reading entries in an extensive reading task. Learners expressed the goal of reading for academic purposes so far, for example, they wanted to read and listen to the script of some reading articles.

G. New additional findings about difficulties in reading

The learners were found getting struggling with reading resources, vocabulary and meaning of the texts during their reading process to fulfil extensive reading tasks and reading comprehension tests.

Firstly, when learners researched extensive reading topics, they found some of the topics are uncommon and it causes a lack of materials to read, it affects physical and mental health because they feel confused in choosing the resources both in target and first languages.

Although spending time more on reading habits but the limitation in the number of vocabularies still challenges participants in reading performance. The extraordinary meaning of vocabulary when participants first time has seen also causes a problem in comprehension in students.

The variety of word choices also put learners in a state of astonishment because they are not sure which ones the test takers want them to give, for example, a student

showed her knowledge in using three different words for the blank-filling reading exercise and she wonders whether the author uses the same words to her or not. Learners sometimes feel hard to think about any suitable words for the contextual items in the reading test.

Last but not least, the learners also preview some difficulties in reading challenges at home and in the classroom. The common challenges for them are usually in the level of relevance to link content entries together while their mind is not ready for that.

These difficulties caused by inappropriate reading resources, shortage of vocabulary among learners and meaning interpretation ability found in the interviews can be considered included in further research to apply new solutions for learners.

6. Discussion

6.1 Summary of key findings

The findings from quantitative and qualitative data were found that they have influenced the positive development of learners, there are nine effects on participants' reading performance and attitudes. The performance of learners was examined in four domains, read to understand, read to interact with the texts to achieve goals, read to develop language proficiency and be ready to contribute to society (PISA, 2018). The attitudes were examined in 4 domains: time spend on reading, cognitive attitude, affective attitude and conative attitude (Mathewson, 1994). Two more effects on confidence and intrinsic motivation also were recorded.

Firstly, at the level of reading to understanding, learners are tested and found to improve significantly. Thirdly, the extensive reading task has increased the vocabulary in learners' language capability. Fourthly, learners have spent more time reading or in case the time was kept the same to their schedule, the reading rate was faster and the quality of texts reading increased. Fifthly, learners' beliefs on reading benefits are concreted and learners are aware of reading's initial role. Sixthly, learners like reading and there was no dislike opinion found in the questionnaire or interview. Seventhly, the intention of reading in further time was recognised can be a prediction for longitudinal effect on reading habit.

6.2 Discussion

The effects of extensive reading on learners' performance and attitudes shown in the research are in line with findings from many other scholars in EFL learning. Regarding learner's performance, this study is partly similar to the study by Evans, Kelly, and Sikora (2014), the effect of home reading somehow influences on academic performance of adolescent learners, especially in Reading, and has caused an enhancement. The age of participants in this study also is teenage, they performed better in the post-test in comparison with the pre-test. Learners moving up from 1 to 2 levels is good news because it shows a significant improvement in Reading. Although there are still some learners

who keep staying at the same level the rate of correct answers in the test had changed showing that improvement occurs.

The other effects on language proficiency in terms of vocabulary also have been found. The study's result in improvement of vocabulary was found in line with other scholars investigating the effect on vocabulary size development such as Eckreth & Tavakoli (2012), and Mc Quillan (2019). The participants in Eckerth and Takavoli's study were students with an advanced level of proficiency, the participants in the 3 studies and this study were of adolescent age. The teenage participants in this present study acquired more vocabulary from diverse topics in reading. It is considered for further research to test the vocabulary effect in reading extensive tasks.

The grammar development was ambiguous in this study. Normally, in extensive reading, the focus is on meaning and comprehension, therefore, it is explained that readers pay more attention to scanning the ideas rather than looking for explicit grammar. However, there are findings in interview data that showed learners found grammar points in an extensive reading task. While to-in infinitive was explored in the reading program in the study of Aka (2020), mixed-conditional was found in this study. It is considered that the resources of texts also decide which grammar can be explored by readers. Also, the attention of readers when reading may lead to structure retention and the background knowledge about the grammar of learners may affect whether learners recognise the grammar structures in written form or not.

The obvious results were on the critical thinking of participants, the questions and metacognition development from doing tasks has caused a higher most of learners can perform the ability to interact with the text at the level of evaluation.

The second research question study is about what effects are on attitudes, learners gain positive attitudes after they practice extensive reading tasks in presentation assignments. The social factor embedded in the presentation played the role of an environment for learners to practice public speaking, thus, it is advisable to integrate reading-to-speaking tasks to which improve learners' motivation as in the study by Tanaka (2017). However, both this current study and Tanaka's study still have not investigated how much the motivation developed despite Tanaka using a longer time than this current study to train extensive reading for learners. Tanaka has trained learners in university for one year but the researcher in this study spent 10 weeks of intervention training.

Teachers should embed extensive reading as a part of the reading course syllabus and allow learners to use the Internet to practice extensive reading more as it brings positive affection to learners. With the extensive reading activities with online resources, intrinsic motivation of learning reading is strengthened. In this current study, learners were encouraged to search the Internet to have extensive reading texts during 10 weeks of intervention, which is the same method used in Bui & Macalister (2021). Unlike Bui and Macalister, the participants of this study were learners at adolescent age, different from freshmen students. Therefore, it may be considered to compare the influence of

intrinsic motivation between student participants and adolescent participants to see how strong the influence can affect.

Learners' readiness in reading also improved positive attitudes in the reading activity. As in Sun's (2021) research, having diverse choice resources in terms of topics and reading levels, readers feel free to read and read at their fluency more frequent. However, printed novel books and magazines tagged for three levels of reading (easy, average difficult and most difficult) were offered in Sun's study, but the materials in this current study were available online and unlimited. The control of teachers in materials was reduced in this study, in contrast, teachers in Sun's study control the input in extensive at topics and genres.

In comparison with the previous study on metacognition conducted on secondary school students, this study explored the ability to be confident, and critical and monitoring the ability of adolescent learners. This is the same as the results found in the mediation effect of metacognition by Barenberg and Dutke (2019). Results in two studies showed that through learning using metacognitive strategy, learners understood the metacognition strategies and developed their confidence.

This study avoids the limitation of studies by Milliner (2017). Learners in Milliner's studies had to read assigned- structured audio ebooks duties and the choice to choose the document was narrowed and controlled and the results were not as expected. It may be caused by the countereffect of a reading assignment, participants with a long time and high pressure in reading cannot enjoy the pure pleasure of extensive reading. This study controlled the outcomes of reading not the progress of reading and learners have more freedom in choosing what and how they read as long as a meaningful outcome can appear.

7. Conclusion

From the pedagogical perspective, this study offered a useful activity to imply in reading class for intermediate learners. Both learners' reading performance and attitudes have increased in a positive direction, which shows that an extensive reading program integrated with sharing information tasks can enhance learners' progress.

The general increase in the whole-group scale and numbers of cases which rose in 1 or 2 levels of reading proficiency test has solved research question number 1. The answer to this question is metacognitive strategies in extensive reading tasks have enhanced the reading ability of learners and provoked higher-order thinking ability of learners. According to PISA (2018) standards in reading performance, the use of extensive reading tasks with metacognitive awareness can fulfil three of four criteria in the assessment.

First and foremost, the learners can read and understand the written text literally. Secondly, learners can reflect and achieve the speaking task embedded in extensive reading outcomes and the level of thinking of learners can reach the remembering, understanding, analysing, evaluating and creating level (Anderson, 2001). Thirdly,

develop knowledge and potential. The learners in this study have expanded their knowledge on various topics from their classmate's presentations and directly on their reading activity.

Positive attitudes of learners were found in awareness about reading, the implementation of reading in and outside the classroom and the motivation factors. They formed an interest in extensive reading and tend to spend more time reading with their monitoring. The critical thinking benefits although not recognized by learners but consciously works and can maintain motivation in learning for learners.

The study has found the answers to the research questions and besides that, from a minor view of learners' difficulties in reading, the extensive reading activity has partly solved the obstacles in vocabulary and comprehension.

7.1 Limitations and recommendations for further study

The study occurred in a short time of intervention – 10 weeks and the learners spent three first weeks getting acquainted with summarizing and self-noticing skills, therefore, actually they had 7 weeks of practising extensive reading. In further time, other researchers can expand the number of participants to collect diverse data to explore the deeper effects and have more inclusive data.

The effect of extensive reading is found in all ages from young learners to adult learners, further researchers should explore the effects of extensive reading in other contexts with different ages.

The key to pleasure reading success derives from the confidence and desire to read to children, moreover, the preparation encouragement and opportunities for children to read at school also plays important role in making learners have positive attitudes toward reading (Reedy and De Carvalho, 2021). This study implemented the home-reading approach to utilise comfortable emotional effect for participants but this study also combined home reading with school performances. Naturally, extensive reading is a pleasure activity and learners like reading at home because of the free-pressure atmosphere but when it is combined with classroom tasks it can become intensive reading if the teacher controls too much on it.

Conflict of interest statement

The authors declare no conflicts of interest.

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