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# The Impact of Mobile-Assisted Language Learning on Reading Comprehension in Senior High School Level: A Systematic Literature Review

Yulnada Sari\*, and Made Hery Santosa

English Education Department, Faculty of Post Graduate, Universitas Pendidikan Ganesha, Indonesia \*Correspondence: E-mail: yulnadda@gmail.com

# **ABSTRACT**

The implementation of MALL in the EFL classroom requires careful consideration, especially within Indonesian high school context. However, the impact of MALL on student's reading comprehension remains uncertain. This systematic review study focuses on reviewing the previous studies that used MALL on student's reading comprehension in Indonesia especially, at senior high school level. Then, this study investigates the impact of using MALL on students' reading comprehension and finds out the types of MALL used in teaching reading comprehension in the High School level. This study uses PRISMA guidelines for searching the results. The total number of articles is eight articles from the year of 2019-2023. Then, it found that the use of MALL in the EFL classroom gives a significant effect on the student's reading comprehension performances and the type of platforms integrated with MALL namely, Padlet and Google Classroom are for online discussion. Quizizz is for assessment and, Nearpod is for making content of learning. The English teachers can use this study as the reference in choosing types of MALL used in the classroom. Further research is needed to improve the applicability and validity of the study, including the consideration of different educational levels and contextual issues.

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#### 1. INTRODUCTION

One of the responsibilities of student is being a good learner. the criteria for being a good learner are that student must be an independent learner or the student must have autonomous learning skills (Xie & Yang, 2020). According to Xie and Yang (2020), being an independent learner is the ability of students to take responsibility for their learning. Also, by becoming an independent learner, the students are active in acquiring knowledge, skills, and finding the solutions by themselves. Additionally, in learning English, an independent learner has a strong relation to successful English language acquisition since it is the ability to self-motivate, take initiative, solve problems independently, and be more comprehensive and efficient in mastering English language (Boonma & Swatevacharkul, 2020). Regarding learning English, it cannot be separated from the four skills in English as speaking, listening, writing, and reading skills. Then, by being an independent learner in learning English, the students can develop and succeed in the learning process, especially to gain and obtain the knowledge of English.

In addition, one of the basic skills in English that is required by students is reading skill (Pilu & Nur, 2023). However, not all the students can acquire reading skills easily since it is not easy for them. Nugrahini (2019) argues that the students may face the problems in reading process as difficulties in getting the meaning and the main idea of the text. She adds that some aspects make the students have poor reading skills. Firstly, the students do not have the motivation to read. Secondly, the students lack learning media that can be used to help support their learning activities. Thirdly, they do not have the techniques or strategies for reading.

In Indonesia, one of the requirements to graduate from senior high school is the students need to pass the school examination and national examination in which English is one of the subjects that is also tested in the examination (Sari, Eriani & Pratolo 2020). They further state the question model that is always tested in English examination is multiple choice questions consisting of short reading comprehension test to comprehend the text or the dialogue. In reading comprehension, the students need the skill of understanding the meaning because it is the ability to read the text, process it and understanding the meaning (Banditvilai, 2020). Nurdianingsih (2021) adds that in reading comprehension process, the readers need to look for the meanings of each word, integrate the meaning of the sentences and paragraphs, and identify the key ideas or the themes of the text. Therefore, it is very necessary for the Senior High School students in Indonesia to master reading comprehension and one of the technologies that can be used to teach reading comprehension is by integrating Mobile-Assisted Language Learning. Then, by this research, it is necessary to review the use of MALL on student's reading comprehension.

In addition, there were some systematic review studies focused on the use of Mobile-Assisted Language Learning (MALL). One of them was from Dewi and Santosa (2022). This study was analysed using MALL on students' reading skill at secondary students. This study reviewed thirteen articles within ten years from the year of 2012 to 2022. This study showed that the use of MALL can improve student's reading skill, motivation, participation and interaction. The types of MALL used namely, Quizizz, Google Classroom, Edmodo, Line Webtoon, and WhatsApp. The second study was about developing reading comprehension through MALL (Klimova & Zamborova, 2020). There were ten articles from the year of 2018 and 2020. The result showed that using MALL on student's L2 reading comprehension can give significant impact and it can motivate student. Besides, the types of MALL used were Quizlet and WhatsApp. However, this study did not mention the student's level and the articles reviewed was in short period as within two years. The third study was conducted by

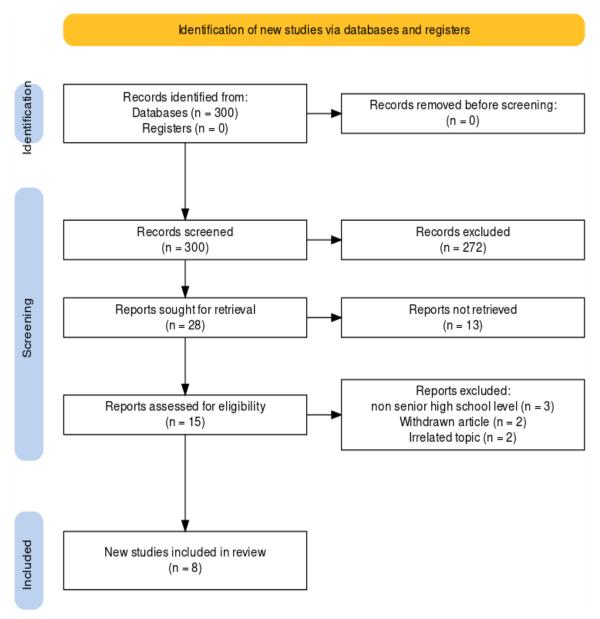
Zain and Bowles (2021). This study did not focus on using MALL to enhance English skills but it was focused on reporting the pedagogical benefits and issues on MALL within ESL/EFL context, especially in higher education. There were twenty-five articles that reviewed by the research from the past five year as 2016 to 2020. Even though, this study discussed about MALL but it was not mentioning specifically the types of MALL used for higher education students since the result revealed that MALL was carried based on the framework of Zone of Proximal Development (ZPD), Technology Acceptance Model (TAM), Community of Inquiry (CoI), Cognitive load theory, TPACK, and SMAR. The last study was about using MALL to enhance speaking skill among ESL and EFL students (Rajendran & Md Yunus, 2021). This study reviewed fifteen articles from the past five years as 2016 to 2020. The findings suggested to use MALL to teach speaking skill because it can give positive impact especially for ESL and EFL learners in the primary to secondary schools.

Therefore, after reviewing the Systematic Literature Review (SLR) studies above, it can be concluded that the systematic review studies published in the new period of 2019 to 2023 is still limited particularly on the use of MALL on reading comprehension for senior high school students in Indonesia. Thus, this systematic review study is as a new study to conduct and conclude the use of MALL on student's reading comprehension. As a result, this study summarizes the data from the previous studies on the impact of MALL on students' reading comprehension under the year of 2019 to 2023 in Indonesian context as well as to close the gap. This study also summarizes the findings of the previous studies to answer the research questions. Hence, the research questions in this systematic review study are as follow:

- 1. What is the impact of Mobile-Assisted Language Learning on student's reading comprehension especially, in senior high school level?
- 2. What are the roles of Mobile-Assisted Language Learning that has been used to improve student's reading comprehension especially, in senior high school level?

## 2. METHODS

In investigating the impact of Mobile-Assisted Language Learning (MALL) on student's reading comprehension in senior high school level especially, in Indonesia, the articles that reviewed were under 2019 to 2023 because the studies within five years are considered relevant. In addition, to display the appropriate information in some former studies about the use Mobile-Assisted Language Learning on student's reading comprehension in senior high school level, the systematic review method was employed and it involved the function of Mobile-Assisted Language Learning that has been used to improve student's reading comprehension in senior high school level. According to Martin, Sun, and Westine (2020), a systematic literature review study is used to identify and understand the existing of body of knowledge on a specific topic. Besides, this research is used Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) Guidelines (Page, McKenzie, Bossuyt, et., al 2021). The PRISMA guidelines is used to explain the schema and visualize the identification and selection of the result in the review of the articles (Utami & Santosa, 2023). Besides, the PRISMA model also helps the researcher to ensure the clarity, transparency, and completeness in the presenting of the review process (Page, McKenzie, Bossuyt, et., al 2021). Therefore, The PRISMA model was used in this research to make qualified criteria, data collection process, data details, study information resources, and the results of the final articles reviewed. Then, the following is the PRISMA flowchart.



**Figure 1.** Visual representation of the research and selection process based on Page et al., (2021)

#### Data collection technique

The articles in this systematic review are from Google Schoolar database through Publish or Perish (PoP) application since Google Schoolar provides a broad and comprehensive academic source including articles or books and it is also free access. The articles were obtained by inputting some keywords as "the impact of Mobile-Assisted Language Learning" and "the use of MALL on reading comprehension". Thus, the time setting was 2019 to 2023. The three processes of reviewing the previous studies from the database were applied. First is the researcher searched the database. The second is classifying the articles with inclusion and exclusion criteria. The last is selecting the articles. According to Pilu and Nur (2023), the inclusion and exclusion criteria is important to find the scope of the review and it is used to determine which studies will be included or excluded from the analysis. Then, the exclusion

and inclusion criteria were applied to find out the articles that relevant to this research. In addition, the inclusion criteria are using MALL to improve student's reading comprehension, must be empirical research or journal articles, must be about the implementation of MALL on student's reading comprehension, published in the year 2019 to 2023, must be for senior high school level, must be in EFL context, and using English language in writing the articles. Meanwhile, the inclusion criteria are not using MALL to improve student's reading comprehension, non-empirical research or non-journal articles, the implementation of MALL for other skills in English, not published in the year of 2019 to 2023, not for senior high school level, non-EFL context, and using other languages in writing the articles. The following is the inclusion and exclusion criteria.

Table 1. Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
Using MALL to improve student's reading comprehension	Not using MALL to improve student's reading comprehension
Must be empirical research or journal articles	Non-empirical research or non- journal articles
Must be about the implementation of MALL on student's reading comprehension	The implementation of MALL for other skills in English
Published in the year 2019 to 2023	Not published in the year of 2019 to 2023
Must be for senior high school level	Not for senior high school level
Must be in EFL context	Non-EFL context
Using English language in writing the articles	Using other languages in writing the articles

Therefore, from the processes of searching the database, it was obtained 300 articles with published 2019 to 2023. Also, the inclusion and exclusion criteria in the Table 1 was used as the guideline to determine the final articles that matched with the research topic in this study. As defined in Table 1 that there are seven inclusion and exclusion criteria. These criteria help the researcher to certify the focus and relevant of the review. As well, the inclusion criteria involve the characteristics of the articles that considered relevant to the objective of the review while the exclusion criteria are consist of the characteristics or the factors that make the articles irrelevant to be reviewed. Hence, it found that there are eight articles as the data of this research.

#### Data analysis

The inclusion criteria were used to determine the articles that suitable in the scope area of this research, while the exclusion criteria were used to select the articles that did not meet the scope area of this research. After selecting processes based on the inclusion and exclusion criteria, it found that only eight articles that matches with this research topic. As a result, the

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eight articles were used as the foundation of this research. Figure 1 shows the visual representation of the search and selection.

The eight articles that matched the inclusion criteria mostly discuss the impact of Mobile-Assisted Language Learning (MALL) on student's reading comprehension especially, in senior high school level (see Table 1). All of the articles are from English Foreign Language (EFL) context. Also, the eight articles are conducted in Indonesia. Finally, the final findings from previous studies focus on the impact of Mobile-Assisted Language Learning on student's reading comprehension in senior high school level. In addition, the eight articles are from Indonesian context and it used different types of Mobile-Assisted Language Learning (MALL) in improving student's reading comprehension.

Furthermore, thematic and sub-thematic data analysis was employed in this research to find out the findings related to the discussion section. Thematic analysis is used to help the selection process in which it is used to develop the themes and sub-themes (Riley, Moons, Snell, Ensor et al., 2019). It means that thematic and sub-thematic analysis is used to identify, analyse, and interpret the patterns. Then, this research employed thematic analysis in order to make the presentation of the result systematically. As Utami and Santosa (2023) applied in their systematic review research on the previous study, they used a narrative synthesis framework that involves of three steps. First is emerging a preliminary synthesis. Second is determining the correlation between the objects of the study. The last is accessing the strength of the synthesis. Therefore, this research also used a manual analysis process as the researcher reads every article that match the inclusion criteria on discussion and conclusion.

#### 3. RESULTS AND DISCUSSION

## Results

As mentioned above that the researcher selected the eight articles that matched the inclusion criteria through a systematic review. Then, Table 2 is an overview of the selected articles of the previous studies in which it published in the year of 2019 to 2023. The articles are under the topic of the impact of Mobile-Assisted Language Learning (MALL) on student's reading comprehension especially, in senior high school level. Also, it is in the English Foreign Language context.

In addition, the use of Mobile-Assisted Language Learning as a teaching media in improving student's reading comprehension is often used both outside or inside Indonesia. However, the types and functions of Mobile-Assisted Language Learning (MALL) that used to improve student's reading comprehension are different. Also, every year started from 2019 to 2023, there is always a new research concerning the use of Mobile-Assisted Language Learning (MALL) to improve student's reading comprehension, especially in the Senior High School level. Thus, Table 2 shows the explanation of the findings of the eight articles that matched with this research.

Table 2 shows that all of the studies are from Indonesia. The actually, there are many studies from other countries but it did not match the inclusion criteria. As well, most of studies are used experimental research design as pre-experimental and quasi-experimental and for the other research designs are used mixed-method, Research and Development, and qualitative research. Then, the following is Table 2.

**Table 2**. An overview of the selected article of using MALL to improve student's reading comprehension

No	Authors	Aims	Findings	Methods	Limitations
1.	Dewi, Santosa and Dewi (2023)	To find out the effect of MALL, Nearpod on students' reading skills	<ul> <li>Nearpod gives a positive impact on student's reading skill</li> <li>It makes learning English to be more effective, flexible, attractive and student-cantered</li> </ul>	Explanatory sequential mixed-method design	• It focuses only on reading skill with 51 participants
2.	Hamzah (2023)	To find out the effect of MALL, Quizizz platform on student's reading comprehension	<ul> <li>Learning through Quizizz application can improve students' reading comprehension scores.</li> </ul>	Pre- experimental Design	<ul> <li>It only used one group (experiment al group)</li> <li>It did not explain the effect size</li> </ul>
3.	Mukti, Rachmawati , and Tarwana (2021)	To find out teachers' strategies on the use of MALL Google Classroom to teach reading comprehension in narrative text. Also, to find out student's teachers' perceptions.	<ul> <li>The teachers used active and cooperative learning strategies</li> <li>Both teacher and students agreed that using MALL especially, Google classroom makes the class to be more structured and fun.</li> </ul>	Qualitative research (case study)	• The researcher did not observe the class directly
4.	Muhfiyanti, Mulyadi, and Aimah (2021)	To find out the validity, effectiveness and practicality of using Android-Based Mobile Learning Media on Student's reading comprehension using report text	<ul> <li>Android-Based Mobile Learning Media gives a positive impact on</li> </ul>	R&D	<ul> <li>It did not mention the effect size in the experiment phase</li> <li>It did not test the homogeneity of the data</li> </ul>

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5.	Pahamzah and Juniardi (2020)	To find out the students and teachers' perceptions on the use of Quizizz as reading comprehension learning media	<ul> <li>It can make students to be more enthusiastic</li> <li>It can help the students in learning reading comprehension</li> </ul>	Qualitative research (case study)	<ul> <li>It is small scale research (did not mention the number of the participants)</li> <li>It needs more explanation how the Quizizz application can impact student's reading comprehensi on</li> </ul>
6.	Priyanti, Santosa, and Dewi (2019)	To find out the impact of gamification through Quizizz on student's reading comprehension	• It gives significant effect on student's reading comprehension score, especially in experimental group	Quasi- experimental	<ul> <li>It gives small significant effect</li> </ul>
7.	Nugrahini (2019)	To find out the impact of MALL on student's reading comprehension in TOEIC	<ul> <li>The use of MALL can improve the student's reading comprehension score</li> </ul>	Quasi- experimental	• It did not mention the effect size and prerequisite test results
8.	Prastya (2019)	To find out the impact of using MALL strategy integrated with Padlet on student's reading comprehension	It can improve student's reading comprehension score in the experimental group	Quasi- Experimental	<ul> <li>It did not mention the effect size</li> <li>The numbers of the participant in the control and experiment groups are not equal</li> </ul>

As the result of data analysis, it found that there are eight articles that matched with this research and all of the articles are from Indonesian context. Also, the research subjects in all of the articles are Senior High School students. Then, after reviewing the previous studies, it found that mostly are used experimental research design. there are two articles that applied qualitative research. Three articles are used quasi-experimental and there is only one article

that applied mixed-method, but in the first phase of this article was used experimental research to obtain quantitative data. Also, there is one article that used pre-experimental. It means that there is only one group involved which is experimental group. The last is one article that used Research and Development and to find out the effectiveness of the product, the researcher used experimental research. In addition, the setting of these studies is conducted in different school or area. Therefore, the results of analysis are used to reveal the two research questions in this study as the first research question is about the impact of Mobile-Assisted Language Learning on student's reading comprehension and the second research question is about the roles of Mobile-Assisted Language Learning that has been used to improve student's reading comprehension especially, in senior high school level.

# The impact of Mobile-Assisted Language Learning on student's reading comprehension

Table 2 shows that all of the findings from the eight articles display the use of Mobile-Assisted Language Learning (MALL) can improve student's reading comprehension in Senior High School level especially in Indonesia. All of the results show that using MALL in teaching reading comprehension can give positive impact to the students. As the study from Dewi, Santosa, and Dewi (2023) was used explanatory-mixed method design to test MALL on student's reading comprehension. There were 51 participants involved in their study. The study proves that MALL can enhance student's reading skill especially in the form of reading comprehension. Another study that used different research design as quasi-experimental from Priyanti, Santosa, and Dewi (2019) also agree that MALL can make an improvement on student's reading comprehension although the result of the effect size was small. Additionally, in relation to the effect size, there are some studies that did not mention the result of the effect size (Muhfiyanti et al., 2021; Nugrahini, 2019; Prastya, 2019). These studies are used R&D and quasi-experimental research design. Even though, it did not mention the results of the effect size and have different number of the participants but the analysis of inferential statistics data result showed that the use of Mobile-Assisted Language Learning (MALL) gives a positive impact on student's reading comprehension. Lastly, the result of qualitative data by Mukti (2021) and Pahamzah (2020) indicate that by using MALL in the class can make students to be more enthusiastic in learning and it can help the students in comprehending the text. Besides, Mukti (2021) linked MALL with cooperative learning strategies and it can make the class to be more fun and structured. Overall, integrating Mobile-Assisted Language Learning (MALL) in the EFL class make significant improvement on student's reading comprehension because it makes learning becoming effective, flexible, and student-centred. Then, the first research question is revealed.

# The roles of Mobile-Assisted Language Learning that has been used to improve student's reading comprehension especially, in senior high school level

Mobile-Assisted Language Learning (MALL) is a technology that refers to portable electronic devices as cell phone (Priyanti, Santosa & Dewi, 2019). MALL can be used as teaching tool to improve student's reading comprehension. MALL has many types and each type has different function. According to eight articles, there are different types of MALL that used by the teachers to teach reading comprehension in Senior High School, in Indonesia. From the eight articles, there are three studies that used Quizizz integrated with MALL. Teaching reading comprehension through Quizizz flatform is effective since it can improve student's reading comprehension. Besides, learning reading through Quizizz also can motivate the students since Quizizz is used as learning media for giving students' assessments and it is for gamification. In addition, another study used Nearpod integrated with MALL in

teaching reading comprehension in the tenth-grade and the result shows that by using Nearpod, the reading comprehension score of the students are improving. As defined by Dewi, Santosa, and Dewi (2023), the teachers can utilize Nearpod for search and make contents related to the teaching materials.

Padlet integrated with MALL is also effective to teach reading comprehension, especially for senior high school level since both teachers and students can use Padlet as online discussion tool. Another flatform was Google Classroom integrated with MALL. Google Classroom is used for online learning and discussion since it provides easy-features to use. As well, the last experimental study is comparing Computer-Assisted Language Learning (CALL) and Mobile-Assisted Language Learning (MALL) in teaching reading comprehension especially in TOEIC test. This study found that using MALL is more effective than CALL because MALL brought the flexibility and personalized learning for the students. Similarly, the last study is R&D study. It attempts to design an android-based mobile learning to teach report text and in the experimental phase, it proves that this application is effective in teaching students to comprehend the report text because MALL can contribute the effective and interactive learning for the students. Therefore, the results of the eight articles show that MALL has numerous functions and it can be used to teach reading comprehension in Senior High School and the second research question in this research is revealed.

# Discussion

This part highlights the important findings from the two research questions regarding the impact of Mobile-Assisted Language Learning (MALL) on student's reading comprehension and the roles of Mobile-Assisted Language Learning (MALL) that has been used to improve student's reading comprehension. Then, this research reviewed the eight articles related to the use of MALL on student's reading comprehension in Senior High School level. The eight articles were conducted in various schools in Indonesia as private senior high school, public senior high school, and vocational school. From the results of the study, it can be concluded that using MALL to teach English in senior high school have a positive impact toward reading comprehension (Dewi & Santosa, 2022; Klimova & Zamborova, 2020; Rajendran & Md Yunus, 2021; Zain & Bowles, 2021). By integrating Mobile-Assisted Language Learning in the EFL classroom, it can help the students comprehend the text in term of flexibility and motivating the students. This strengthen by Zain and Bowles (2021) who did a systematic literature review research on the use of MALL in EFL and ESL context. However, this study did not explain further the difference between EFL and ESL students in comprehending the text.

In addition, since this current study only focuses on reviewing the articles that used of MALL in Indonesian context, it is same as Dewi and Santosa (2022). They conducted a study under systematic literature review method which focuses on the MALL to secondary students in Indonesia. Even thought, it has different background of the study with the current research, but the results showed that using MALL in EFL classroom especially in Indonesia can be effective way to help the students in comprehending English text because as well as it can improve students' motivation, participation and interaction in the class. hence, it is also in line with Klimova and Zamborova (2020) who explained that MALL can give significant impact on students' L2 reading acquisition since by using MALL the students feel motivated. Lastly, other contributions of MALL are it brings flexibility and personalized learning (Muhfiyanti et al., 2021; Nugrahini, 2019).

Furthermore, there is one study that used pre-experimental research in which it did not have a control group. The result of this study shows that using MALL in teaching reading comprehension was effective but this study had small number of participants and this study was conducted by Hamzah (2023). The other studies did not show the result of pre-requisite tests as the normality and homogeneity since it used to indicate the data of the research considering normal and homogeneous (Muhfiyanti et al., 2021; Smith et al., 2021). Nevertheless, all the studies agreed that the use of MALL can give a significant impact on student's reading comprehension performance especially in senior high school level in Indonesia.

As the main purposes of this study to find out the effect and roles of Mobile-Assisted Language Learning (MALL) that has been used to improve student's reading comprehension. Then, this study also found that there are some types of MALL used by the previous studies in helping the students in comprehending the English text. The eight studies used different types of MALL. It means that every types of MALL can be utilized in different ways. One of them is using Quizizz a media for assessment and gamification to make the class more flexible and interactive (Hamzah, 2023; Pahamzah & Juniardi, 2020; Priyanti et al., 2019). Similarly, Dewi and Santosa (2022) also found Quizizz can be used as a media in teaching reading. Meanwhile, Dewi, Santosa, and Dewi (2023) used Nearpod to teach students reading comprehension because Nearpod provides the contents that can be utilized by the teachers for making and searching the material in teaching. The other learning flatforms that integrated with MALL are Padlet and Google Classroom. Prastya (2019) used Padlet as a flatform for online learning especially, for making discussion between students to teacher or students to students. On the other hand, Mukti, Rachmawati and Tarwana (2021) makes discussion and online learning through Google Classroom. It is supported by Dewi and Santosa (2022) who used Google Classroom as an online learning. They also add other types of MALL that also can be used in online learning such as Edmodo, Line Webtoon, and WhatsApp.

Even though, all the studies' results in Table 2 show that using MALL on student's reading comprehension in Senior High School level gave a positive impact to student's reading comprehension performance but there are some studies did not mention the effect size as Hamzah (2023), Muhfiyanti, Mulyadi, and Aimah (2021), Nugrahini (2019), and Prastya (2019). These studies used different research design but experimental research was involved as pre-experimental and quasi-experimental. In addition, there is one experimental research that conducted by Priyanti, Santosa, and Dewi (2019). This study mentioned the effect size of using MALL on student's reading comprehension but the effect size was small.

Overall, teaching reading comprehension in EFL classroom, especially in Indonesia through MALL give a positive impact. Indonesian English teacher can integrate MALL in the classroom can be linked with some framework as the framework of Zone of Proximal Development (ZPD), Technology Acceptance Model (TAM), Community of Inquiry (CoI), Cognitive load theory, TPACK, and SMAR (Zain & Bowles, 2021). Further research is needed to improve the applicability and validity of the study, including the consideration of different educational levels and contextual issues.

# 4. CONCLUSION

The current study aims to explore; firstly, the impact of Mobile-Assisted Language Learning (MALL) on students' reading comprehension especially Indonesian senior high school. Secondly, it attempts to find out the types and roles of MALL that had been used to teach

reading comprehension in the classroom in the periods of 2019 to 2023 through systematic literature review (SLR) study. Therefore, the result of this systematic review research uncovers the impact of using MALL on student's reading comprehension. The integration of technology in EFL classroom as MALL can make students easier in comprehending the text. The use of Mobile-Assisted Language Learning (MALL) gives a significant effect for the students reading comprehension score. In addition, the types of media integrated with MALL used in the eight articles reviewed are also different and it has different roles as Padlet and Google Classroom is used for online discussion between students to teacher and students to students. The Quizizz is utilized for assessment and Nearpod is used by the teachers for making a content of learning. Lastly, Mobile-Assisted Language Learning gives the flexibility and personalized learning for the students. Then, it can be concluded that the two research questions in this research are revealed.

This Systematic Literature Review (SLR) study has some limitations. Firstly, it only discusses senior high school level. Further researchers must conduct at other educational levels such as higher education, secondary school, and primary school to make more comprehensive studies. Secondly, the scope of this study is only in EFL context especially Indonesian senior high school level. Then, for future studies, they can include various countries and focuses on both EFL and ESL context. Thirdly, this study only reviewed eight articles within five years as 2019 to 2023. Future studies also can add more articles with long period to be reviewed so they can make more detailed and comprehensive study.

## 5. AUTHORS' NOTE

No potential conflict of interest was reported by the authors and authors confirmed that the paper was free of plagiarism.

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