



Home Literacy Environment: The Solution to Improve Early Reading Skills of Students in Primary School During COVID-19

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Abstract: This research is motivated by the lack of research analyzed the early reading skills of students in a primary school in term of literacy activities at home. The literature indicates that both in-school and at-home experiences impact children's reading development, yet most developing world studies focus on children's in-school experiences exclusively. Whereas in the era of the Covid-19 pandemic literacy activities at home have an important role. In this article, we review the literature on the impact of home literacy environment on primary school student's early reading skills. After defining the home literacy environment, we present a brief historical overview of the home literacy environment, including persistent questions regarding their effectiveness for early literacy skills, vocabulary, and phonological awareness in primary school students. Meta-analyses reveal that the home literacy environment has a positive effect on early reading skills indicate that they are effective in significantly increasing children's early literacy skills, vocabulary, and phonological awareness. This finding lends empirical support for the home literacy environment and reading acquisition. We conclude by suggesting implications for practice and future research.

Keywords: Early reading skills, Bahasa Indonesia, COVID-19, Home literacy environment, Primary School

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INTRODUCTION

The Covid 19 pandemic has infected the world globally, it's spreading rapidly and causing disruption in several aspects of life that cannot be predicted (Dinh & Nguyen, 2020, Du Toit, 2020; Horton, 2020; Tang, et al, 2020; Zhou, et al, 2020; Size, 2020). Since March, schools in Indonesia have been gradually closed and learning has been carried out at home, this is based on the Minister of Education and Culture Circular Number 4 of 2020 concerning Implementation of Education in an Emergency for Coronavirus Disease (Covid-19) which is then complemented by Circular Number 15 of 2020 concerning Guidelines Implementation of Learning from Home in an Emergency for the Spread of Covid-19

School closure suddenly has led to the formation of transformation in technology and digitalization, including in the context of education (Selwyn 2012; McFarlane 2019, Carrilo & Flores, 2020). Learning carried out online makes teachers, parents, and students

face completely new and unfamiliar situations (Huber and Helm 2020; Linh, 2020, Carrilo & Flores, 2020). Wahyudin (2020) said this situation is a learning crisis. As a result, teachers face significant challenges in adapting to online-based learning. Of course, online learning requires good communication with those who can support student learning and development at home, none other than parents (König, Jäger-Biela & Glutsch, 2020). Besides that, almost all research in developing countries to date to address the learning crisis only examines school factors while neglecting children's homes, as evident in several reviews and meta-analyses (Conn, 2017; Ganimian & Murnane, 2016). Whereas, home factors can be the solution to optimize the development of children's learning face learning crisis during Covid 19.

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Parents can support the development of children's learning achievement and competence by providing learning activities at home and facilitating children with meaningful learning activities (Niklas, 2015). Families, especially parents can be a rich resource for children's literacy development (Mui & Anderson, 2008). The home environment that is specifically related to literacy skills, especially reading and writing skills is mentioned Home Literacy Environment (HLE) (Hood, Conlon, & Andrews, 2008; Niklas & Schneider, 2013, 2015, 2017b; Sénéchal & LeFevre, 2002).

The purpose of this article is to review empirical studies that have documented the impact of home literacy environment programs on primary school student's literacy development. We first present the definition that we draw on. Then, we canvas meta-analyses that have examined the effects of home literacy environment program on primary school children's language and literacy development. We conclude by discussing the implications of the home literacy environment.

LITERATURE REVIEW

Home Literacy Environment

The environment and people in which children grow affect the development and achievement of children's learning outcomes (Vygotsky, 1978). All elements of the home environment that facilitated the acquisition of children's linguistic skills such as parents' reading behavior, children's reading frequency, parents' attitudes towards literacy, and the number of children's books and books at home are called HLE (Niklas, Cohrssen, & Tayler, 2016b; Niklas, Nguyen, Cloney, Tayler, & Adams, 2016).

Besides, Teale and Sulzby (1986) said that activities made the home environment can provide literacy experiences to children, namely the interaction of parents and children in reading and writing activities, exploring children's literacy artifacts independently, and children's experiences of seeing parent interactions with literacy activities. In line with this, Sénéchal et al in several studies focused their research on the interaction between parents and children in literacy activities at home. These interactions are categorized into two (Sénéchal, 2006; 2015; Sénéchal & LeFevre, 2002, 2014, Sénéchal, Whissell, & Bildfell, 2017) The first is related to code or formal, namely activities by involving children directly with activities such as teaching letters, words, and spelling. The second is related to meaning or informality, namely activities related to reading books by parents or in other words oral language skills such as vocabulary.

Home literacy environment development in primary school students reading skill

Reading skills are skills essential skills to compete in the global era. Reading is an important and valuable thing in learning, problems in reading skills can have serious consequences on learning from not graduating to not completing basic education (Crouch, 2012; Hernandez, 2011; Stanovich; 1986; Wigfield, Gladstone, & Turci, 2016).

Reading skills are defined as the process of sounding out letters, interpreting words to get the meaning of the text being read (Best, Floyd, & McNamara, 2009; Ozuru, Best, &



McNamara, 2004). Reading is divided into two, namely early reading skills and reading comprehension. Early reading skills are a prerequisite for someone to be able to master subsequent reading skills.

Early reading skills are sometimes referred to as lexical functions related to reading techniques which are closely related to the letter and sound recognition (Kiiveri & Määttä, 2012). In line with this, Chall (1970) suggested that pre-reading skills were closely related to the ability to decode or sound out letters.

Primary school students are in the age range 7-11 and are at the concrete operational stage (Piaget, 1972). Learning should be by the stage of development of students who need concrete things to be used as learning material. Furthermore, Chall (1970; 1983) categorizes the stages of reading development of students according to the stages of intelligence development proposed by Piaget. Based on the opinion of Chall (1970; 1983), the early reading activity is in stage one, namely the initial stage of reading and decoding, and stage two, namely fluency and confirmation.

Formal reading skills began to be learned in elementary school. Grade 1 elementary school students must face the transition from the habit of learning while playing in kindergarten into a learning situation towards a formal one (Solchan, 2008).

The main problem that becomes the focus of learning for grade 1 elementary school students is the acquisition of *calistung* skills (reading, writing, arithmetic). As stated in Government Regulation Number 17 of 2010 concerning Management and Implementation of Education, Article 69 paragraph (5) states that the admission of grade 1 SD / MI students or other equivalent forms is not based on the results of tests of reading, writing, and numeracy skills. or some other form of test. This makes it clear that *calistung* skills are not taught in kindergarten and are only beginning to be taught in primary schools.

Studies suggest that parent interactions in literacy activities at home have positive results on students' reading skills before entering primary school and in the early grades of primary school (Hewison, 1988; Hewison & Tizard, 1980; Meyer, Wardrop, Stahl, & Linn. , 1994, Tichnor-Wagner, et al, 2015) and also in higher grades, grades two to six of elementary school (Boerma, Mol, & Jolles, 2017; Boerma, Mol, & Jolles, 2018; Katzir, Lesaux & Kim, 2009; Park, 2008; Yoe, et al. 2014; Inoue, et al (2018), even Niklas & Schneider (2017a) examined this from the beginning of the age of the park right to the end of elementary school.

There is a positive relationship between academic skills (including reading skills) in primary schools and literacy activities carried out at the homes of Hemmerechts, Agirdag & Kavadias (2016), Kloosterman, et al (2010), Research conducted by Park (2008) shows that students who have a lot of books at home affect reading comprehension skills. This is because the number of books at home has many benefits for children. After all, the more books the more reading activities can be done (Evans, Kelley, & Sikora, 2014; Evans, Kelley, Sikora, & Treiman, Katzir, Katzir, Lesaux & Kim, 2009; Niklas & Schneider, 2013; Park, 2008; Tichnor-Wagner, et al., 2015), children who grow up in a home literacy environment that is rich in books can also show good language and reading skills (Mol & Bus, 2011). This is recognized by the frequency of reading together at home (Niklas, Cohrssen, & Tayler, 2016c) Good book content (Dickinson, et al., 2012) as well as proper reading strategies (Cohrssen, Niklas, & Tayler, 2016a; Duursma. 2016).

HLE can improve basic literacy skills (phonological awareness, letter knowledge, word knowledge, and object naming quickly) reading, reading fluency, and reading comprehension in kindergarten and elementary school children (Inoue, et al, 2018). In line with this, HLE has a positive impact on phonological knowledge, vocabulary, and cognitive abilities of children (Niklas & Schneider, 2013).



Parents' involvement in reading activities usually decreases as the child gets older. Parents usually focus more on reading activities before children enter elementary school age (Boerma, Mol, & Jolles, 2018; Klauda, 2009, Mol, Bus, De Jong, & Smeets, 2008). Home literacy environment activities for primary school students have many benefits, various activities can be carried out, such as discussing books that children are reading, choosing books for children (Boerma, Mol, & Jolles, 2018; Klauda, 2009), listening to children reading aloud, discuss reading activities in class, as well as help reading activities related to schoolwork (Hemmerechts, 2019; Hemmerechts, Agirdag & Kavadias, 2016).

Meta-analyses of HLE

Friedlander (2019) conducted a meta-analysis on the effectiveness of HLE in elementary school students' pre-reading skills. Friedlander studied 466 primary school children with a mean age of 7 years 8 months and their parents. As many as 46.4% of respondents were mothers, 40.6% were fathers and the rest were siblings and extended family members.

Friedlander researched in Rwanda. The initial reading test was carried out using the EGRA (early grade reading assessments) test which has been widely used in many countries. The aspects assessed in this test were the ability to identify letters, sound out letters, reading fluency, and reading comprehension. This study examined 5 factors that influence HLE with initial reading skills, namely family literacy, and learning activities at home, parental literacy skills, reading sources, children's interests and interests, and reading activities related to religion.

Based on the results of this study, the 3 factors that most significantly influence elementary school students' beginning reading skills are family literacy activities, parental literacy competence, and children's interests. Another factor is the source of reading and religious reading activities. The interesting thing in this research is that there is a high correlation between family literacy

activities and the availability of reading sources with the beginning reading skills of elementary school students in Rwanda ($r = 0.37$). This is because literacy learning activities can't occur at home if reading sources are not available. Furthermore, the meta-analysis conducted by Sénéchal in several of his studies regarding HLE, early reading skills, and parental involvement in children's literacy activities has been carried out since 2002 (Sénéchal, 2006; Sénéchal, 2009; Sénéchal & LeFevre, 2002, 2014; Sénéchal, Whissell, & Bildfell, 2017; Sénéchal & Young, 2008) in these studies Sénéchal et al classified HLE activities into 2, namely formal and informal. One of them is in Sénéchal & LeFevre's (2014) study entitled *Continuity and Change in the Home Literacy Environment as Predictors of Growth in Vocabulary and Reading*. In this study, Sénéchal & LeFevre researched the continuity and change of HLE from kindergarten to grade 2 elementary school. The research was conducted on 143 kindergarten age children and their parents who were studied up to grade 2 elementary school. The test was carried out on children while in kindergarten, the beginning of grade 1 elementary school, end of grade 1 of elementary school, and end of grade 2 of elementary school, along with a questionnaire given to parents. The results show that HLE affects the reading skills of children in kindergarten and early grade 1 elementary school. Formal activities affect reading skills and informal activities affect speaking skills. Then, listening to children's reading activities turned out to have a good effect on students' reading development. formal shows the opposite, this shows that formal activities and teaching involvement should be reduced when the child can read.

The most recent meta-analysis was conducted by Niklas & Schneider (2013; 2017a; 2017b). Niklas & Schneider researched the relationship of HLE to the basic skills of children in both kindergarten and elementary school. The results of Niklas & Schneider's (2017b) research conducted on kindergarten to grade 4 elementary school children show that HLE has a positive impact on children's reading skills. The survey was conducted on 920 children



(46.8% girls and 53.2% boys) in Germany. The results of this study indicate that HLE has a long-term impact on children's language skills

DISCUSSION

Based on this meta-analysis, several things make HLE improve early reading skills in elementary schools in Indonesia. First, HLE can be done in developing countries, as done by Friedlander (2019) in Rwanda. Second, HLE can improve preparatory reading skills through formal activities in early elementary schools such as Sénéchal & LeFevre's (2014) meta-analysis. Third, HLE should be carried out sustainably to show good results for the development of children's literacy, as did Niklas & Schneider (2017b).

Factors that influence HLE, namely literacy learning activities at home, parental literacy skills, reading sources, and children's interests and interests are important things to consider (Friedlander, 2019; Teale and Sulzby, 1986) in literacy activities at home activities. divided into formal and informal activities (Sénéchal, 2006; 2015; Sénéchal & LeFevre, 2002, 2014, Sénéchal, Whissell, & Bildfell, 2017) but formal activities have more influence on children's reading skills (Sénéchal & LeFevre, 2014).

Also, HLE has a positive effect on children's early reading skills even to their beginning reading skills (Niklas & Schneider, 2013; 2017a; 2017b). This can be achieved if HLE activities are carried out according to the needs and level of children's reading development (Boerma, Mol, & Jolles, 2017; Boerma, Mol, & Jolles, 2018, Niklas & Schneider, 2013; 2017a; 2017b). Early reading skills that can be optimized by HLE are basic literacy skills (phonological awareness, letter knowledge, word knowledge, and fast object naming) reading accuracy, reading fluency, and reading comprehension in kindergarten and elementary school children Inoue, et al (2018).

CONCLUSION

Several implications can be drawn from the results of this study. Among them, first, there is now some evidence regarding the effectiveness of HLE on early reading skills in primary schools. Second, research on HLE from the beginning of kindergarten to the end of elementary school has been carried out showing that HLE is needed not only at the beginning of elementary school but during primary school. Third, the importance of involving parents in the learning of elementary school children, especially during the Covid 19 period. Fourth, education cannot only be focused on the school but must involve parents at home to support the success of learning. This should have implications for policymakers to consider parents and the home environment in making educational policies. For teachers and school staff, this HLE should be an additional agreement made with parents, so that there is the synergy between the school and the house, and in the end, we hope that there will be research on HLE in Indonesia that is sustainable from the beginning of school to the end of elementary school.

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