

Survey on Implementation of Early Literacy Interventions by Parents of Deaf Children

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Abstract: This study aims to determine whether parents of deaf children in Lampung conduct early literacy interventions. This research used a survey type quantitative method. The research subjects were 6 parents of deaf children aged 4-8 years. It collected data using a questionnaire distributed via Google Form to parents of deaf children. The study results found that 83% did early literacy intervention at home. Parents' activities to carry out early literacy intervention are reading aloud, natural intervention, using video, and making DIY media. All parents did the planning. The planning and implementation of early literacy intervention activities carried out by parents encountered various obstacles. Most of the solutions chosen were discussed with experts/therapists/ teachers. So it can be said that most parents of deaf children in Lampung Province carry out early literacy interventions planned and carried out through collaboration with families and expert assistance.

Keywords: deaf children, early intervention, literacy Interventions, parents, early literacy intervention.

INTRODUCTION

Early literacy intervention is a service or program provided to children aged 0-6 years through literacy. Early literacy is a process of reading and writing characterized as reading and writing demonstrations, the interactive collaboration between parents/teachers and children based on daily needs, and minimally direct teaching methods ((Permatasari, Inten, Mulyani, & Rahminawati, 2017)). The peculiarity of early literacy is the informal learning process carried out by parents/teachers, so the children feel they are not learning. The essence of the material from literacy is emphasized in things close to children's lives (Permatasari et al., 2017). Literacy provides children with experience with the concept of letter knowledge, phonological awareness, vocabulary understanding, writing and reading (L M Justice & Sofka, 2013; Rosemary & Abouzeid, 2002)

The ability to read and write is part of cognitive activities, such as awareness of phonemes, vocabulary, the ability to retell, understanding story content, and so on (Afnida & Suparno, 2020). One strategy in the practice of literacy for children is storytelling. The availability of reading and writing sources in the home environment can be integrated with writing games, drawing, and playing dramas to support children's literacy experiences concretely (Prioletta & Pyle, 2017). Early childhood parents need to create activities related to all domains of child development (cognitive, language, physical-motor, social-emotional, interaction-communication) in a fun way (Elliott & Olliff, 2008). It aims to promote the development of literacy skills in children at preschool age.

Based on several research results, it is stated that there are various forms of literacy intervention programs. An example, "Read It Again-Prek!" (RIA) aims to facilitate the development of early childhood language skills (L M Justice & Sofka, 2013). Another example is the Early Reading Intervention (ERI) program. Through word fusion and

identification of words. ERI Program aims to develop children's ability to apply phonics and analyze the structure of written pronunciation of words or the use of stimulus cards for alliteration and rhyme (VanDerHeyden, Snyder, Broussard, & Ramsdell, 2008).

Literacy has a close relationship with children's language development abilities. This is because both are related to the meaning of letters, words, sentences and retelling. Children actually have language skills since in the womb, listening is the first stage that children can do. Then, the child's language skills will be influenced by the environment because the child will go through a period of imitation. Typically, children will imitate the sounds generated by their environment and repeat the sounds, called the babbling stage (Pratiwi, 2016). In deaf children, their language development stops at the babbling stage because of the hearing impairment they experience. The students with hearing impairment have hearing loss, either in whole or in part, thus having difficulties in receiving stimuli through audio sensory and impacting their communication (Sani, Rochyadi, Wardany, Hufad, & Sunardi, 2021). In terms of language, deaf children will experience several problems such as lack of vocabulary, difficulty interpreting abstract words, and difficulty understanding rhythm and language style (Purbaningrum, 2008).

Hearing barriers cause deaf children at an early age to need the role of parents in providing language experience. This income aligns with the government's program on the "National Movement for Parents Reading Books", which began in 2019, revealing the importance of literacy for all early childhood children, including deaf children. The culture of reading through literacy that starts at an early age significantly influences the development of children's language skills (Arsa, Atmazaki, & Juita, 2019). In addition, there have been many studies that discuss early childhood literacy in kindergartens. Such as early childhood literacy development programs (Basyiroh, 2018), the development of bilingual big book storytelling to improve early childhood literacy skills (Yansyah, Hamidah, & Ariani, 2022), and parental involvement in early childhood literacy (Amariana, 2012).

The fact that deaf children need early literacy intervention is the question in this study. The main problem in this study is, "Do parents of early deaf children in Lampung conduct early literacy interventions?". This research needs to determine whether parents have intervened in early literacy or not. Because research on early literacy interventions for deaf children conducted by parents, especially in Lampung Province, is limited. Therefore, this study aims to determine the implementation of early literacy interventions by parents who have deaf children in Lampung Province.

METHOD

This research is quantitative research that uses a survey method. The study was conducted at the kindergarten level in Lampung Province. The research subjects were parents of early deaf children living in Lampung Province who were selected purposely. The researcher gave the instrument of questions to the parents of the deaf child. The instruments were distributed and filled out by respondents through Google Forms. The distribution of the instrument via Google Forms will take place in March 2022. Overall, six parents were willing to fill out the research questionnaire and become research subjects. The instrument used is a questionnaire in the form of closed questions about literacy interventions for early deaf children. The instrument aspect consists of family demographics, parental acceptance, planning and implementation of early literacy interventions, and parental barriers in carrying out these interventions. The results will be analyzed descriptive quantitatively. Thus, the data obtained will be presented in numbers, tables, or graphs.

RESULT AND DISCUSSION

Result(S)

Respondent demographics

Respondents came from Bandar Lampung City, Metro City, South Lampung Regency and East Lampung Regency. Based on the questionnaires distributed, six respondents filled in. Of 6 parents, 5 are mothers, and 1 person is the father. The background profile of the respondents can be seen in Table 1 below.

Table 1. Background of Respondents

Current age (in years)					
	<20	21-30	31-40	>40	
n	-	1	5	-	
%	-	16,7%	83,3%	-	
Mother's age when the child was born					
	<20	21-30	31-40	>40	
n	1	2	3	-	
%	16,7%	33,3%	50%	-	
the latest education					
	Junior high school	Senior high school	S-1	S2/S3	
n	1	1	4	-	
%	16,7%	16,7%	66,7%	-	
Profession					
	House wife	government employees	Farmer	Entrepreneur	General Employees
n	1	2	1	1	1
%	16,7%	33,3%	16,7%	16,7%	16,7%

From Table 1, it is known that most of the respondents (83,3%) are between the age of 31 to 40 years. It can see that the age and occupation of respondents who have children with hearing impairment at an early age are varied.

Respondent's child profile

The age of deaf children ranged from 4 to 8 years, with the most age being 4 years (33,3%). Table 2 presents the profile of deaf children filled out by respondents.

Table 2. Profile of deaf children

The current age of the child (in years)					
	4	5	6	7	8
Σ	2	1	1	1	1
%	33,3%	16,7%	16,7%	16,7%	16,7%
Child's age at diagnosis of deafness					
	1-2 y.o			2-3 y.o	
Σ	4			2	
%	66,7%			33,3%	
Age the child received the first intervention from the therapist/expert (in years)					
	Not at all		2	4	
Σ	1		3	2	
%	16,7%		50%	33,3%	
Child wearing a hearing aid/cochlear implant					
	Yes			No	
Σ	5			1	
%	83,3%			16,7%	
Children are trained to learn sign language					
	Yes			No	
Σ	0			6	
%	0			100%	

Based on Table 2, it is known that (66.7% children received a diagnosis of deafness at the age of 1 to 2 years. Furthermore, as many as 3 children (50%) received intervention related to language and speech at the age of 2 years, and 1 child had not received language and speech intervention. Regarding assistive devices, 83.3% or as many as 5 children wore hearing aids or had cochlear implants installed. As for sign language, all parents admitted that they did not train or teach sign language.

Figure 1 shows the early intervention children get from therapy given by the therapist. This question provides answer options parents can choose more than 1 answer. Based on the data from Figure 1, parents are not fixated on just one therapy in the early intervention given to their child. Parents understand the various needs of their children who are deaf so that they optimize the treatment they choose.

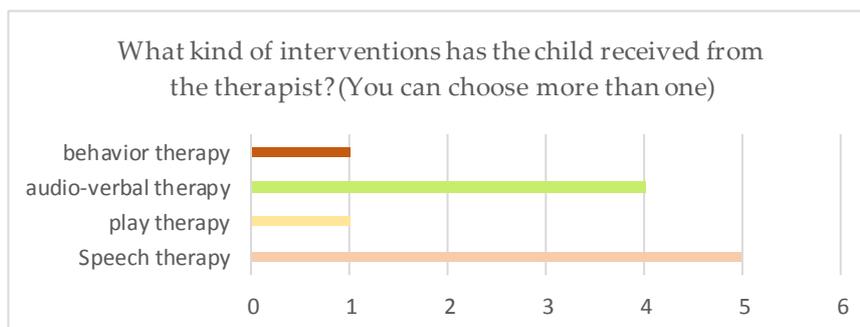


Figure 1. Interventions received by deaf children at an early age

Parental acceptance

Parental acceptance affects the efforts of parents in accompanying children and providing opportunities for children to develop. It is known that as many as 5 parents (83.3%) have sincerely accepted their child's hearing loss. Meanwhile, a respondent answered that he was still trying to get it. Regarding parents' expectations of their children's speaking ability, 50% of parents responded according to expectations, and 50% answered not yet.

Regarding parental acceptance, Florantisya (2015) found that all respondents (parents) elicited various reactions such as shock, sadness, regret, and anger when they found out that their child was deaf. All respondents in the study experienced a phase from not accepting their child's condition to gradually receiving and consulting appropriate services. Parental acceptance of the child's condition can be seen in the attachment of communication with the child. To provide opportunities for children to get a stimulus at the stage of development (Rachmayanti & Zulkaida, 2011). Parents who have accepted or are trying to accept their child's situation will focus on dealing with the child's problems and no more protracted struggle with feelings of grief.

Planning and implementing early literacy interventions at home

Based on respondents' answers, 5 out of 6 respondents, or as many as 83%, claimed to have provided early literacy interventions for their deaf children at home.

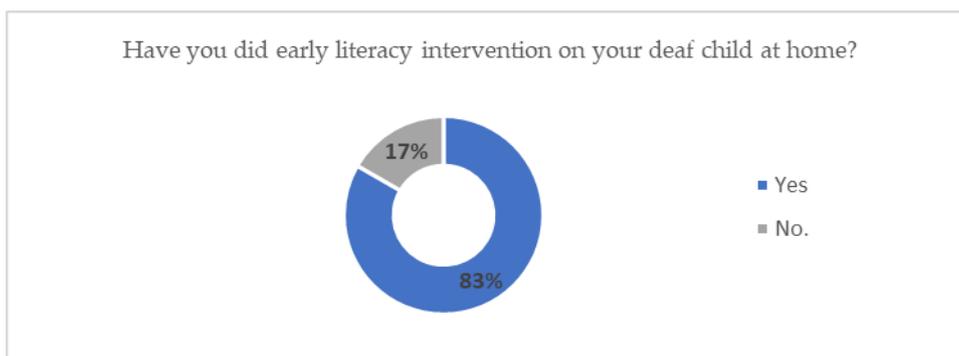


Figure 2. Percentage of parents who carry out early literacy intervention at home.

Of the 5 parents concerning starting the early intervention, 2 parents (40%) did it when the child was 1-2 years old, 1 parent (20%) at the age of 2-3 years, 2 parents (40%) at the age of 3- 4 years. Next, there is the question of what activities parents choose to intervene with their children at home. Parents can choose more than one answer to this question. Figure 3 shows the activities carried out by parents to carry out early literacy intervention.

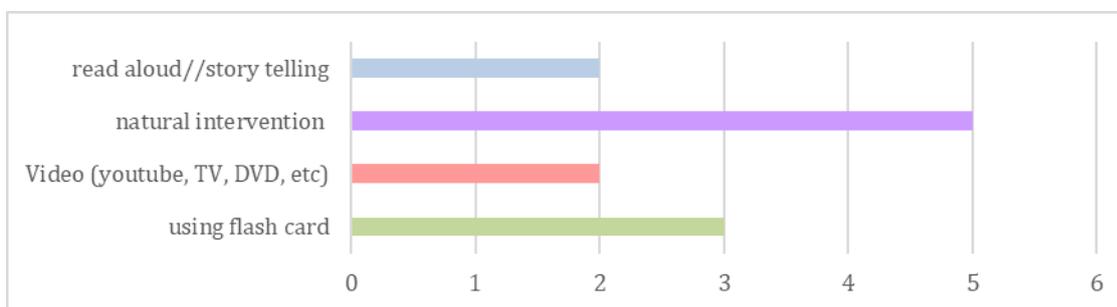


Figure 3. Activities chosen by parents to carry out early literacy intervention for deaf children at home.

Based on Figure 3, natural intervention in habituation to learn spontaneously was chosen by 5 parents. The total number of parents who intervened in early literacy was 5 people, meaning that all parents intervened naturally at home. Furthermore, some parents do learning activities with flashcards, watch videos, and read stories with their children. Next, Figure 4 presents the media that parents use. Similar to the previous question, parents may choose more than 1 answer. The results show that 4 out of 5 or 80% of parents use flashcards, 60% use videos, 40% use picture books, and 40% use media that they made themselves.

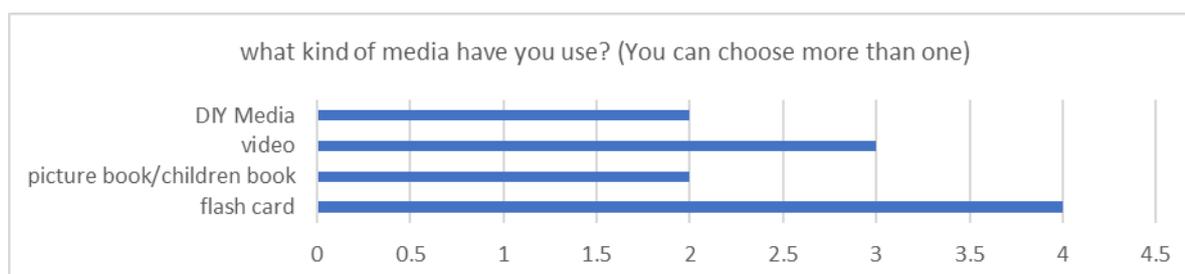


Figure 4. Media selected by parents to conduct early literacy intervention for deaf children at home.

In addition to activities and media, Table 3 shows how parents plan and implement interventions. Based on previous data, it is known that 5 respondents carry out early literacy intervention at home. Table 4 shows how the five respondents planned and implemented early literacy interventions.

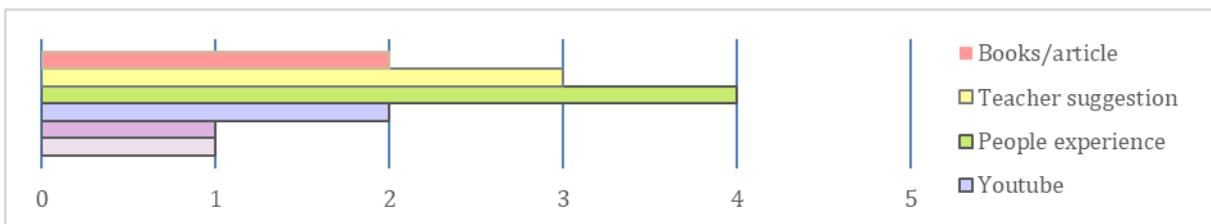


Figure 5. Source of parents' ideas

Based on the data obtained at the point of planning and implementing early literacy interventions at home, it can clearly describe that parents have carried out early literacy interventions for their children who are deaf at home. Although not directed and not well documented, parents show their full attention to their children through simple, early literacy at home. Parents have also tried to use technology to help them find literacy references to do with their children. A study states that parental sensitivity in capturing interest/disinterest is important as a provision for parents when the literacy intervention process is carried out. On the other hand, the provision of facilities that are varied, interesting, and can be used to play need to be considered by parents in providing early literacy interventions (Amariana, 2012). In line with that, the results of other studies say that early childhood is very happy with pictures, contrasting colors, and colorful writing. Based on this interest, literacy intervention can do through storytelling.

Parental difficulties and obstacles

Figure 6 shows parental difficulties and obstacles in planning and implementing. It can be said that parents find it more difficult to plan what to do than to implement it.

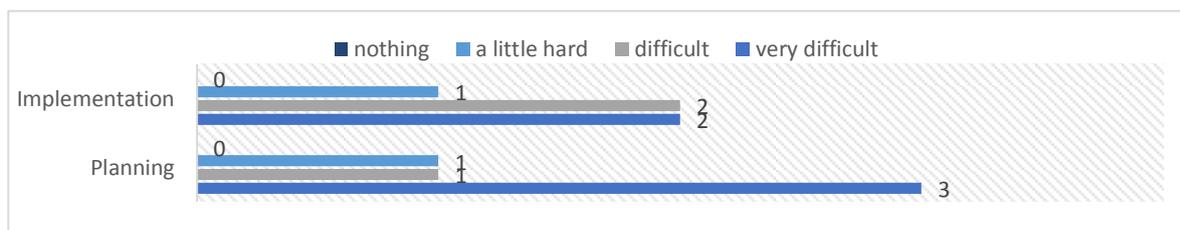


Figure 6. The level of difficulty experienced by parents in planning and implementing early literacy intervention

Furthermore, Table 3 shows the difficulties experienced by parents. No parents found it difficult to coordinate with their partner or family, which means that the respondent had fairly good family support.

Table 3. Difficulties experienced by parents when planning and implementing early literacy intervention

No	difficulties	Σ	%
1	Difficult to manage time due to busy work	2	33,3%
2	What is done is not as expected	1	16,7%
3	Difficult to use existing media	2	33,3%
4	Difficult to coordinate with partner or family	0	0
5	Limited in owned media	3	50%
6	Lack of insight and creativity to teach children	3	50%
7	Children don't like/don't want to intervene with parents.	2	33,3%

Finally, regarding how parents deal with the problems they face in planning and implementing early literacy interventions, all parents chose to discuss with therapists/experts/teachers to

overcome problems. Furthermore, 60% choose to discuss with other parents, 20% discuss with partners, and 20% look for solutions from books and the internet.

Discussion(s)

The family, especially parents and the school environment, are the closest agents of socialization in early childhood life (Bronfenbrenner, 2005). In line with this, parental backgrounds such as knowledge, education, age and parents' free time have an essential role in helping children's development (Fikriyah, Rohaeti, & Solihati, 2020). Therefore, knowledge and parental care are needed at the stage of child development and growth to minimizing the obstacles experienced by children at an early age.. Knowing as early as possible the disturbance in a child's hearing will make it easier to choose the intervention strategy needed (Escobar-Ipuz et al., 2019). A typical problem in deaf children due to their deafness is speech-language problems. This problem then gave rise to language and speaking skills problems and academic, emotional, and social problems (Heward, 2013). If not intervened as early as possible, problems will continue to arise for deaf children. Such as the problem of meaning and problem of retelling will arise at a later stage of development because development and growth are integrated. Therefore, early literacy is needed to minimize further speech-language problems in deaf children. Based on the data obtained, parents who have deaf children at an early age already know that there is an early intervention strategy through literacy for speech-language problems. Then, it can interpret that half of the parents know that deaf children need language and speech intervention from an early age so that their language acquisition follows the proper developmental stages.

The diversity of parental backgrounds influences the way they choose the early intervention techniques and strategies they do. Therefore, it is imperative to know family demographic data before formulating plans and implementing services for early childhood. Concerning early intervention, parents are one of the implementers or direct service providers needed in early childhood to minimize the obstacles they experience (Makka & Ainin, 2020). Some parents who have early deaf children in Lampung Province have found out that the deaf need hearing aids, so they use cochlear implants for their children. Using cochlear implants accompanied by the proper method can help the language acquisition of early deaf children. In addition, the age when the child gets a cochlear implant is very influential (Sani & Wardany, 2022). Deaf children who use hearing aids or cochlear implants need some assistance from external interventions such as speech therapy, audio-verbal therapy, and various other therapies to support their listening and speaking abilities (Novialassafitri & Purbaningrum, 2020). If course, collaboration between therapists and parents is needed to implement the chosen therapy.

A study that examined the role of parents in the development of children's literacy described that the lack of development of children's literacy skills could be caused by several factors such as the profession and educational background of parents (Pancarrani, Amroh, & Noorfitriana, 2017). Other research mentions that whatever the educational background and occupation of parents, they have the potential to be involved a lot in child care through training and learning the latest parenting knowledge (Amini, 2015). Parents are the first educational foundation for children in a family environment that forms character, language, self-worth and so on. Parents who have low, medium or high educational backgrounds have the potential to nurture and educate their children well.

Implementing early intervention through literacy for deaf children at an early age, of course, requires techniques and strategies that can consider the interests of children according to their age. Early childhood, in general, is very happy with contrasting colors and body games and tends to use all their sensors in processing information from outside their bodies. Parents need this kind of knowledge to provide fun, hands-on learning for children. There are many

things parents can do to implement literacy, such as reading storybooks. Parents and children can take time before bed to read fairy tales together. Currently, there are many picture books available according to the child's age, making it easier for parents to intervene in children's literacy (Hibana, 2018). In particular, parents who have deaf children in Lampung Province have tried to start doing this. Still, many obstacles were found by parents, one of which was very difficult for parents to give meaning to their children about the importance of what they read. This program harms the motivation of parents to continue reading stories to their children. However, they are still trying to build attachment interactions with their children, even though it is difficult. Deaf children very much need this at an early age through their development period.

Providing early literacy intervention for deaf children is certainly not an easy matter. It takes appropriate planning so as not to cause problems when literacy interventions are carried out. Parents must take the time and be consistent in providing early literacy interventions in order to have a good impact on the development of the speech-language of deaf children (Ridwan, 2014). Suppose parents do not have free time every day because of work to do. In that case, it is necessary to consider other family members who are empowered to provide early intervention for their children. There are various early literacy intervention strategies that parents can do. For example, there is literacy through play, or parents can read books to children. Literacy is developed according to environmental conditions, departs from children's hobbies and interests, and is developed through local culture (Laura M Justice, Jiang, & Strasser, 2018). Therefore, parents must build cooperation with professionals to make it easier for parents to find ideas and deal with problems found when early intervention is carried out.

CONCLUSION

The results of the study found that 83% of parents did early literacy intervention at home. Parents carried out these activities with various reading-aloud, natural intervention, and using video and flashcards. Parents also use any media such as videos, picture books, flashcards, and DIY media. Then, planning is carried out by the mother, mother-father, or mother-father-other family. The plan is carried out by the mother, father, or other family members. Found when planning and implementing, parents got ideas from various sources. Parents claimed to have obstacles in planning and implementing interventions at various levels. This problem is caused by various things, where the lack of knowledge, creativity, and media are the main problems. Suppose they encounter problems in implementing early literacy interventions. In that case, parents immediately look for solutions such as discussing with teachers or experts, discussing with family members, or looking from other sources. So it can conclude that parents who have early deaf children in Lampung Province have carried out early literacy interventions planned in collaboration with families and expert companions. In addition, parents' educational background, age, and occupation are believed to influence the early intervention they choose. Their understanding of literacy, the importance of literacy, to planning and implementing early literacy for their children contributed to what interventions they carried out. It is also related to how they face the obstacles they experience.

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