

## The Effectiveness of *Big Book Media Stimulation and Hand Puppets* In The Language Development of Children Aged 3-4 Years

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### ABSTRACT

**Background:** Children's brain development reaches 50% by the age of four, 30% until the age of eight, and 20% until adulthood. Compared to other developments, language is the main key for children to be used as a means of communication. To optimize it, media in the form of big books and hand puppets are needed to stimulate children's language. This study aims to determine the effectiveness of big book and hand puppet media stimulation in the language development of children aged 3-4 years.

**Methods:** The cluster sampling method was used to determine the number of children to be studied based on a population of 80 children in 7 play groups in Secang sub-district, because the working area of the Secang Community Health Center is divided into 2 areas, namely: Both Secang I and Secang II Health Centers have the same criteria the researcher considered all playgroups in the area Secang District has the same characteristics, 1 play group refused to be a respondent, 4 play groups were taken with an equal division between secang I and secang II, so that the population became 51 children who were then calculated using the Slovin formula to obtain a sample of 46 children.

**Results:** The results of the Mann-Whitney Test obtained a p-value in each media, namely 0.00 with a mean value of 17.65 in big book media and a mean value of 8.13 in hand puppet media.

**Conclusion:** The use of big book media has proven to be more effective in stimulating language development and being able to captivate children's attention and know the story in the big book which has advantages in terms of size, text, and large big book images compared to other story books.

Keyword : language development, stimulation, *big book media*, *hand puppet*

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**Background.** Toddlerhood is the most important period, especially in the first three years of life. Unfortunately, the prevalence of toddlers *stunting* is still a parameter to determine the quality of children in Indonesia, but *stunting* not enough to describe child development, evidenced by the percentage of language and speech development in children is lower than other developments that must be achieved, in fact, child development in Indonesia, namely language development (64.6%), social and emotional development (69.9%), physical and learning skills (95%), emotional development (69.9%), physical and learning skills (95%). Activities to stimulate growth and development from the family to increase children's skills in literacy in literacy skills through the process of reading storybooks is still shows a fairly low

percentage, namely 17.35%. (Badan Pusat Statistik, 2021).

Children's communication skills have an important role as a determinant of whether children will be able to adapt to the surrounding environment or not, therefore language development is the most important part that must be mastered by children. (Lestarinigrum *et al.*, 2021). Stimulation is needed to train children in speaking so that later children are able to express their hearts and thoughts to others (Kurnia, 2019). If stimulation, especially in speaking, is not given optimally, then the increase in child growth and development also applies (Kemenkes RI, 2016). In order for the stimulation provided to be of quality and optimal, a forum in the form of media is needed to convey information that can increase children's attention (Aprinawati,

2017). The use of media in storytelling or storytelling activities can enrich children's vocabulary so that intelligence in children's language is growing (Lestarinigrum *et al.*, 2021). Research conducted by (Brodin and Renblad, 2020), states that storytelling and reading aloud have an effect on children's speech and language development. Media that can be used to stimulate children's language skills are big book and hand puppets because based on the results of research conducted by (Septiyani and Kurniah, 2017) the use of big book media in the learning process in the learning process at PAUD Dharma Wanita Persatuan Bengkulu effect on children's speaking ability, in the learning process learning process, the use of big book media makes children talk more, able to express opinions related to the picture so that children are able to develop more optimal develop more optimal, while the results of research on the use of hand puppets with storytelling conducted by oleh (Puspita, 2019) on group B children in kindergarten. ABA 3 Prabumulih City in the 2018/2019 school year, shows that the the use of hand puppet media is able to make children eager to talk by acting out hand puppets so that their ability to speak demonstrating hand puppets so that the ability to speak is also improved.

In this study, researchers packaged storybooks in the form of *big books* and the use of *hand puppets* with storylines that not only instilled moral values but also stages of stimulation that must be given to children aged 3-4. This study aims to determine the effectiveness of *big book* and *hand puppet media stimulation* in the language development of children aged 3-4 years

**Methods.** The type used is Quasy *Experiment with Pre-Post Test design with Control Group Design*. The population in this study was all 80 students aged 3-4 years from 7 Playgroups located in the Secang District Area. The sampling technique to be used is *cluster sampling*, because The working area of Secang Health Center is divided into 2 areas, namely Secang I and Secang II with the same criteria and the same characteristics. Therefore researchers considered all playgroups in the Secang have the same characteristics. In the working area of Secang I working area, there were 3 playgroups, but 1 playgroup refused to be used as a respondent,

refused to be a research respondent so there were 2 playgroups were willing to be respondents. In the working area of Secang II there are 4 playgroups. To adjust with the working area of Puskesmas Secang I, then in the working area of Puskesmas Secang II the researcher also took 2 playgroups. Secang II working area, the researcher also took 2 playgroups. Based on this, from 7 playgroups to 4 playgroups with a total of 51 children. Sampling using the Slovin formula calculation resulted in a sample of 46 children with division, 23 respondents are stimulated using *big book* media and 23 other respondents were stimulated with *hand puppet* media based on *proportionate random sampling techniques* are used to determine the size of the sample and the distribution of treatment.. The characteristics of respondents who were sampled were for children aged 3-4 years, both boys and girls, children who received consent from parents to become respondents and children who attended 4 meetings during the study. *proportionate random sampling techniques* are used to determine the size of the sample and the distribution of treatment so that a sample of 46 respondents is obtained. The process in this study is, the pre-test researchers conducted an assessment according to the 3-4 year old language development questionnaire by the PAUD education curriculum which has been modified with the use of media and has been approved by 2 judgment experts storytelling activities are carried out for 2 weeks with 1 week 2x meetings, then *post test* That is, researchers evaluate with assessment. Statistical tests were used to assess the difference in *pre-post* increase in each variable using the Wilcoxon signed rank test, *followed by testing the average difference to determine effectiveness using the mann-whitney test.*

### Result and Discussion

Differences in children's language development before and after being given *Big Book media stimulation*

Table 1 Differences in Language Development Before and After *Big Book Media Stimulation*

Language Development	Median	Min	Max
Pre-Test <i>Big Book</i>	23	89,00	66 104

Post-Test <i>Big Book</i>	23	105,00	89	111
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Table 2 Wilcoxon Test of Language Development Before and After Big Book Media Stimulation

	PreTest-PostTest <i>Big Book</i>	Conclusion
Increased	23b	Ha accepted
Decline	0a	
Remain	0c	
Asymp. Sig (2-tailed)	0,000	

There was an increase of 16 seen from the median value between before and after the intervention. Based on the results of the *Wilcoxon signed rank test* analysis,  $p = 0.000$  ( $P < 0.05$ ) which means there is a difference in the form of an increase in the language development of children aged 3-4 years. This shows that stimulation carried out using *big book* media can improve respondents' language development.

In connection with this, storytelling activities are carried out by including images such as media *Big Book* Able to build a fun situation for children because this media can encourage children's enthusiasm to retell a story they heard. In harmony with the theory put forward by (Akbar, 2020), that the delivery of information through stories is one way that is often used for children in learning something because through stories, children not only develop in their language but also intelligence, socio-culture, and moral values that exist around so that they can form a good civilization.

Provision of stimulation with media *Big Book* which has the characteristic size of an A3 book, larger than other story books is able to train children's reading beginnings which usually begin by asking the meaning of a picture in the book because children with an age range of 3-4 years cannot read. Statement from (Pamela, Hayati and Insani, 2019) Also, he states that the use of *Big Book* With the size of the letters, images that are enlarged with various colors as an attractor for children's attention can provoke their curiosity to ask or answer about the pictures listed in *Big Book*.

This is reinforced by research that has been conducted by (Sulistyawati and Amelia, 2020) which states that there is an

improvement in the ability to speak through the media *Big Book* when before and after its application. The average increase in the value of children who scored 3 on each indicator per cycle from cycle I to cycle II on the indicator of communicating orally cycle I by 0% increased to 90% in cycle II, on the indicator of constructing simple sentences in a structured manner cycle I by 0% increased to 85% in cycle II. The occurrence of this increase in storytelling using media *Big Book* Because it has special characteristics that are full of color, interesting images, and words that can be repeated. So children are interested in focusing on teachers because of the media *Big Book* itself is very attractive to the child.

However, there were still respondents whose increase was not as significant as others, especially in the part where children began to recognize writing from their own names. The way that can be done is to provide stimulation not only once but repeatedly consistently according to the age of the child. Stimulation using media *Big Book* What is done repeatedly is able to develop children's language and speech skills because children are interested in existing images, in addition to the text elements contained in *Big Book* Help the child to early recognition of letters of the alphabet both vowels and consonants. In accordance with the statement stated by (Wulyani, Djibran and Lamadang, 2022), the letter elements in each text listed in the story can increase the attractiveness of children so that their oral skills increase.

Differences in children's language development before and after receiving Hand Puppet media stimulation

Table 3 Language Development Before *Hand Puppet Media Stimulation*

Language Development	Median	Min	Max	
Pre-Test <i>Hand Puppet</i>	23	86,00	65	102
Post-Test <i>Hand Puppet</i>	23	94,00	79	104

Table 4 Wilcoxon Test Differences in Language Development Before and After Hand Puppet Media Stimulation

	PreTest-PostTest <i>Hand Puppet</i>	Conclusion
Increased	23b	Ha accepted
Decline	0a	

Remain	Oc
Asymp. Sig	0,000
(2-tailed)	

The increase occurred when viewed from the median value of 4, none of the respondents experienced a decrease or remained in their abilities. The results of the statistical test showed  $p = 0.000$  ( $P < 0.05$ ). It can be known that stimulation of *hand puppet* media can improve language development in children, especially those aged 3-4 years

Use *hand puppet* Not only training children to speak by retelling but also channeling their understanding through body language, namely while demonstrating it. This is emphasized on the basis of the cone the experience of Edgar Dale (1945) in (Nurjanah *et al.*, 2021) The stimulation given to improve the child's ability through the level of how much the child understands it will get a level of 90% by being carried out directly by the child, role playing, field trips and performances.

The media used such as hand puppets, designed with safe flannel cloth and formed into various kinds of animals can help children to develop, in addition to children getting excited to tell stories on the one hand also increasingly foster a sense of confidence in themselves to dare to retell in front of their classmates. Research conducted by (Fikri and Suwiti, 2019), to 28 children at RA Muslimat Nurul Mutaqqin children's language skills increased by 3.57 in three interventions with storytelling using hand puppet. In line with the use of hand puppets stated by (Marwah, 2022), namely children's mathematical, logical intelligence will increase when stimulated through activities that involve children to think about events with logic, experimental and imaginative.

The skills that must be achieved by children in their language development are not only about oral skills but also reading and writing skills so that the stimulation provided is not dominated by the verbal part only. This is confirmed as explained by (Novita, 2021) that the child needs to be trained to understand if reading and writing to enrich the dictionary of words are included in the language section.

In the intervention of providing hand puppet media to stimulate, there are still indicators that most respondents have not experienced a significant increase, namely the child's ability to recognize the writing of his

own name, indicating that it needs to be given continuous stimulation by starting to be taught about letters. This statement is reinforced by the theory from (Rantina, Hasmalena and Karmila, 2021) regarding the stages of stimulating children, namely the first time by pointing to the letters so that children are more familiar with letters followed by writing their names repeatedly to get maximum results. In addition, (Rofi'ah, Setyowati and Idhayanti, 2018) stated that providing stimulation to children can be carried out with the family and not only when the child is at school. In line with the results of research by (Setyatama and Damayanti, 2023), the role of parents is very important in providing stimulation to children so that the more stimulation provided, the faster the increase in child growth and development.

1. Differences in the effectiveness of *big book* and *hand puppet stimulation* on children's language development

Table 4.5 Test of Differences in the Effectiveness of *Big Book* and *Hand Puppet Media* Stimulation on Children's Language Development

Media Stimulation	Average	p-value
<i>Big book</i>	17,65	0,00
<i>Hand Puppet</i>	8,13	

The table above shows the results of analysis using the *Independent T-Test* found that the p value of 0.000 ( $p < 0.05$ ) with *big book* media has a higher average value with a difference of 9.52 compared to the average value of using *hand puppet* media as a means of stimulation. It can be concluded that stimulation with *big book* media is more effective than stimulation with *hand puppet media* in improving the language development of children aged 3-4 years

Based on the results of this study, this is due to the media *Big Book* which is used as a means of stimulating language development in children, especially with the age of three to four has more advantages than ordinary picture story books. Size *Big Book* The larger picture, writing and colors are so that the child not only focuses on the picture but begins to understand the distinctive shape of each alphabet, indicating that *Big Book* Not only putting forward the story but also tucked into

stimulation that must be stimulated both in terms of listening, speaking, reading and writing. This statement is reinforced by theory (Khasanah, Suparman and Wibawa, 2022) who has suggested when *Big Book* It has covered aspects of the overall development of language namely listening, writing, reading and speaking so that it raises various questions about the story inside *Big Book*.

This is evidenced by research that has been conducted by (Supiani, Rahmat and Budiman, 2021) stated that the results showed that the two student learning outcomes posttest data had a t-count value of 0.000 so that it could be concluded that there was a difference because Sig (2 tailed) < 0.05. Based on this, it can be concluded that there are significant differences in learning outcomes between students who are taught using *Big Book*. This indicates that the use of *Big Book* Very effectively used to improve learning outcomes.

The study also states, media *hand puppet* still shows improvement. Stimulation with this media is proven to be able to affect the level of children's language skills, especially in verbal communication, this is because the use of various plays makes children eager to interact with characters that are implemented in the form of *hand puppet*. Theories presented by (Silaen, 2022) also states that the use of media *hand puppet* In learning activities in children have their own advantages such as building a more encouraging learning environment and providing opportunities for children to interact directly with dolls, give questions or answer questions, besides that children's creative ideas can be channeled well, so that *hand puppet* It focuses more on adding a dictionary of children's words. Research conducted by (Setyatama and Damayanti, 2023) also states that the application of the demonstration method is proven effective for stimulating children's growth and development because this method is supported by real objects that can involve the five senses of children so that children's skills are developing.

The variety of colors that exist in each hand puppet character is able to foster children's enthusiasm in telling stories. This is reinforced by the statement conveyed by (Sukini and Chunaeni, 2020), through games decorated with various images and colors affect the condition of the human heart.

**Conclusion and Suggestions:** The independent t-test scores have demonstrated a significant difference in effectiveness between big book and hand puppet media stimulation. Big book media, when used to stimulate the development of children aged 3-4 years, particularly in language development, has proven to be more effective. This superiority can be attributed to the inherent characteristics of big books – their A3 size, vivid images, vibrant colors, and enlarged letters, all of which capture children's interest effectively. Furthermore, big books have the capacity to encompass all aspects of language development, including listening, writing, reading, and speaking.

To maximize the utilization of this media, particularly for fostering children's language development, we hope that village midwives can provide guidance to mothers during posyandu activities. This guidance can include introducing Big Books as a tool to enhance their children's language skills. Additionally, early childhood education (PAUD) students can continuously apply Big Book media with creative variations to ensure that children remain engaged and avoid boredom during classroom learning.

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