Research Article

Improving Language and Social Skills Using Digital Storybooks for Playgroup Children at KBIT Permata Hati Jebres, Surakarta

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Abstract.

This study aims to improve early childhood language and social-emotional skills through the use of digital storybooks at KBIT Permata Hati Jebres, Surakarta, Indonesia. A descriptive qualitative approach was employed, using in-depth interviews, observations, and documentation for data collection. The research focused on children in the playgroup who exhibited delays in language and social-emotional development. Prior to the intervention, several children demonstrated difficulties with two-way communication and limited vocabulary, as well as challenges in emotional regulation and peer interaction. Contributing factors included insufficient interaction and communication between children and parents, as well as a lack of engaging stimulation at school. Following the use of digital storybooks, significant improvements were observed in both language and social-emotional skills. Children showed improved vocabulary, ability to recognize characters, and the ability to retell stories. Social-emotional skills such as empathy, sharing, and cooperation also improved. Parental and teacher involvement played a crucial role in the successful implementation of digital storybooks. The study concludes that digital storybooks are an effective tool for supporting early childhood language and social-emotional development, especially when supported by active adult guidance. The findings revealed a 71.43% improvement in language development and a 62.5% increase in social-emotional skills. The digital storybook developed from this research is accessible at https://s.id/mutibook.

Keywords: digital storybooks, language skills, social-emotional, early childhood, early childhood education (ECED)

1. Introduction

At the golden age, brain cells develop well; children begin to think abstractly. They are very interested in new things, and parents and teachers need to help children grow and use what they have as best as possible[1]. Language development is one of the critical aspects that children must develop [2]. According to [3], language is the primary tool for children to communicate and convey their wants and needs. Children's language

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development consists of receptive language and expressive language. Expressive language development can be characterized by children's ability to master vocabulary and syntax and listen quickly [4]. Social development is significant in a child's future life to interact with others besides their family and closest people [5]. According to language problems [6], they mentioned that cases of speech delay have increased 20% of children in Indonesia experience speech delay. This means that for every 1 million children, 200,000 children experience speech delay. Speech delay in early childhood can affect cognitive to develop social behavior [7].

In today's digital era, educational institutions must adapt to advances in information technology to improve education [8]. One method that can improve education is the use of learning media [9]. Empirical evidence indicates that digital modalities, including e-books and interactive educational resources, can enhance the literacy acquisition experience by rendering the learning process more accessible and engaging. For instance, an investigation underscored the efficacy of digital pedagogical materials in advancing literacy competencies among primary school learners. Students who utilized interactive resources exhibited superior reading comprehension abilities compared to their peers who employed traditional instructional approaches [10]. Moreover, empirical studies have demonstrated that digital picture books exert a beneficial influence on children's vocabulary acquisition, reading comprehension abilities, and overall engagement, thereby suggesting that digital literature possesses the potential to enhance the development of literacy skills substantially [11].

In addition to language development, digital books can also affect the development of social interaction. This is like research [12] stating that digital books affect social interactions between parents and children. The form of interaction is reading digital books together. These three studies show that digital books positively influence children's language and social development.

Some previous studies [13] have examined digital books' effect on social skills. Other studies have examined digital books about language skills. These studies have not discussed the combination of the influence of digital storybooks on language and social skills. Therefore, this study discusses the combined effect of digital storybooks on the ability to develop language and social skills in early childhood.

Providing media for children's language and social-emotional development is a problem often faced by educators. To overcome this learning media problem, researchers are

interested in using digital storybooks. Students can develop their language and socio-emotional aspects using digital storybooks while using new learning media. From the description above, this research discusses improving language and social skills using digital storybooks in Playgroup children at KBIT Permata Hati Jebres Surakarta in the academic year 2023/2024.

2. Materials and Methods

2.1. Materials

This research uses three data collection techniques: interviews, observation, and documentation. 1). Interviews are conducted when researchers want to conduct a preliminary study to determine the problems that must be researched; interviews or interviews are used as a data collection method [14]. Interviews were conducted with teachers and parents, both face-to-face and via WhatsApp, to obtain information about language development, social-emotional, and the use of digital storybooks in children. Interviews were semi-structured, allowing questions to develop during the conversation. 2). Observation is a unique data collection method compared to other methods. The process of memory and observation are two of the most important [14]. Participant observation is done by the researcher engaging in the subject's daily activities to observe the child's behavior. 3). Documentation is a data collection method in which the personal records of the respondent are studied. This is similar to how a psychologist or counselor studies the development of a client through his notes [15]. Research documentation in the form of photographs of children's activities with parents when reading digital storybooks and observation checklists is used as evidence of the implementation of the study.

2.2. Methods

This research uses a qualitative data analysis method with a descriptive approach, describing the field research data in this qualitative research using the Coreq methodology [14]. This method consists of three steps, namely 1) determining the research team and reflexivity, 2) making a study design, and 3) analyzing the findings. The research procedure starts with determining the topic, namely how to improve language and socio-emotional development using digital storybooks as a media for playgroups at KBIT Permata Hati Jebres Surakarta in the academic year 2023/2024. Furthermore, the

researcher determines the material to be studied, determines the research subject, and formulates the problem in detail. Data were collected by observing children's behavior and interviewing resource persons. Using a descriptive approach, the research was conducted on Playgroup children at KBIT Permata Hati Jebres Surakarta, totaling 13 children aged 3 - 4 years. The data collection technique uses observation, interviews, and documentation. The data collection instruments used are human or researchers, interview guidelines, and observation sheets.

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This research analysis was carried out by comparing the results of pretest and posttest observations. The results of the comparison were then compared with the relevant literature review.

3. Results and Discussion

According to the researcher's initial observation on 4 March 2024 and interview with the teacher on 8 March 2024, the researcher found that children's language and social skills were still low in the KBIT Permata Hati Jebres Surakarta Playgroup in semester one (odd). Seven children are categorized as underdeveloped at the language development stage, and 13 are in the KBIT Permata Hati Jebres Surakarta Playgroup. In comparison, eight children are categorized as underdeveloped at the socio-emotional development stage of 13 children. In addition to the children, teachers and parents were also observed.

Observations of teachers were conducted using the interview method as shown in Figure 1.

Figure 1: Early Childhood Development Interview with Teacher.

The observed young children were subjected to a pretest. This is done to measure initial conditions. This initial data will later be compared with the data after treatment.These conditions indicate the lack of success in language and social-emotional development activities in children in the KBIT Permata Hati Jebres Surakarta Playgroup. Data on pretest results can be seen in Table 1 below:

According to this social-emotional development, adults or educators can effectively provide developmentally appropriate environments and activities by understanding children's sentence development [16]. Children raised in an unsupportive environment tend to exhibit behavioral and emotional problems, especially those who also have language delays [17]. Factors that can cause speech delay in children include seizure disorders, asphyxia at birth, oropharyngeal deformity, family history, lack of parental education, and low socioeconomic status [18].

Proper stimulation at an early age can help avoid language delays and improve social-emotional development later in life. Stimulation of language and social-emotional development in children aged 3 to 4 years can be done in various ways, namely: reading storybooks and telling stories so that they become more sensitive in communicating

TABLE 1: Digital Storybook Pretest Results.

No	Name	Language	Social Emotional
1	Rn	√	√
2	Sk	×	√
3	Ec	×	√
4	Sr	×	×
5	Yl	√	√
6	Nr	√	√
7	Pt	√	×
8	Az	×	×
9	Dn	√	×
10	Rf	×	×
11	Ar	√	×
12	Hm	×	×
13	Mh	×	×
	Total	7	8

and conveying information, singing, and role-playing, which can help children to interact with dolls or with other people [19].

A critical component of the success of learning activities is learning media [20]. One of the learning resources is media, which can channel messages from sender to receiver. Educational media can help people with different learning styles, intelligence interests, sensory limitations, body defects, or time distance barriers. The term "media" comes from Latin and is the plural form of the word "medium," which means "middle, intermediary, or messenger from sender to recipient [21].

Teachers must be creative teachers in education, especially when making learning media. Because there is a level of education, teachers must consider what media is most suitable for their students [22]. Teachers must consider the selection of media and materials that are easy to understand so that students can access the material. One method that can improve education is using learning media[23].

Digital books as a learning resource still need to be applied in the school learning process. Digital storybooks are books or readings available in softcopy or electronic form that can be read through digital devices, such as smartphones or computers [24]. Digital books are referred to as e-books, publications published as digital books containing text, images, videos, and sounds [25]. According to [26], e-books, also called digital

books, are electronic versions of books that contain digital information, which can be text or images. At some point, readers of electronic books will also be able to open sheet by sheet using the swipe of their finger on the screen of their electronic or digital device. As a result, the appearance and content of an electronic book will remain the same as a physical book.

The Canva application and several other programs, such as Heyzine Flipbooks, created this visual-based digital picture storybook. To improve children's language and social skills in playgroups, this study aims to create a visual-based digital picture storybook [13].

In addition, digital storybooks are more exciting, and there are some vocabulary words that children like. With this digital storybook, it is hoped that students will feel happy and quickly absorb the characters in the storybook later so that the goal of researchers to improve the language and social skills of students at KB Permata Hati Jebres can be realized. The following is a glimpse of the digital storybook product entitled "Indahnya Bersyukur," which can be accessed at https://s.id/mutibook.

According [27], the benefits of digital storybooks are that they can replace the role of teachers in teaching children and encourage them to think and imagine like the characters in the story. Meanwhile [28] it can attract students' literacy interest and improve English language skills.

The results of observations and interviews on June 10, 2024, with Menik Nurmalasari as an educator, and several parents of students, namely Bunda Rafi, Morula, and Mauza, show that the use of digital storybooks has a positive impact on the language and social-emotional development of children aged 3-4 years at KBIT Permata Hati Jebres Surakarta.

"Children whose language and social-emotional development was still low yesterday, thank God, are now starting to improve. There are several children whose vocabulary has increased. Of the five children whose language development was lacking, four children have improved, while of the six children whose social-emotional development was still lacking, four children have improved" (Menik).

"In my opinion, this digital storybook is quite effective as a distraction media, so children have varied learning. This requires parental assistance, but there is also wisdom: parents can build bonding closeness with children so that parental involvement is evident" (Menik). "Alhamdulillah, Dn has been able to tell the story of the digital book in her language." (Mother Dn)

" Digital storybooks are very helpful in improving my child's language and social-emotional skills; by reading this storybook, my relationship with my child is getting closer. He is eager to learn and wants to be able to read storybooks himself. My child can add some vocabulary to the book. In addition, the story's content in the book provides wisdom to help him recognize his emotions and the feelings of others, as well as to empathize and love his friends." (Mother Rf)

"My child, although still being lured, can retell the story's contents" (Mother Ar).

Of the seven children whose language development was lacking, five children have improved, while of the eight children whose social-emotional development was still lacking, three have improved. These results can be seen in Table 2.

TABLE 2: Digital Storybook Postest Results.

No	Name	Language	Social Emotional
1	Rn	√	√
2	Sk	√	√
3	Ec	√	√
4	Sr	√	√
5	Yl	√	√
6	Nr	√	√
7	Pt	√	√
8	Az	√	√
9	Dn	√	×
10	Rf	√	√
11	Ar	√	√
12	Hm	×	×
13	Mh	×	×
	Total	2	3

Of the seven children whose language development was lacking, five children had improved. This means 71.43% have improved. Out of eight children whose social-emotional development is still lacking, five children have improved, according to the post-test results. This means 62.5% has improved.

This medium captures children's attention and enriches their vocabulary and social skills. In addition, parental involvement in using digital storybooks plays a vital role in children's development, helping to build emotional closeness and provide necessary support. This study shows that digital storybooks can help stimulate early childhood

language and social-emotional development but require an integrated approach with parental support. Digital storybooks can help children develop language skills, recognize and express emotions, and build better social skills with proper use.

4. Conclusion

The use of digital storybooks can improve children's language and social-emotional development. Parents' involvement in accompanying children when using digital storybooks is crucial in building emotional closeness and supporting children's development. The assistance of parents and teachers in using digital storybooks greatly influences their effectiveness. Children are more interested and motivated when there is consistent assistance. Exciting and varied stimulation, such as digital storybooks, can help children not get bored quickly and absorb learning better. This research showed an increase in language by 71.43% and 62.5% in social-emotional development.

Acknowledgment

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