The Effect of Video Intervention on Sensitivity in Early Childhood Teachers

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Abstract — At this time the world is experiencing rapid developments in science and technology, one of the factors that influences the world of education is an educator, especially early childhood teachers. Therefore, early childhood educators are required to be able to apply video media during learning. Educators in this era pay less attention to empowering learning videos in increasing teacher sensitivity. This research aims to find out how optimal the use of technology is. The method used in this research is qualitative research, data obtained from interviews with research objects. Based on the analysis carried out, research results were found which contained an increase in the effectiveness of early childhood teachers in carrying out the learning process by paying attention to video interventions. The conclusion of this research is that there is an increase in sensitivity by implementing video learning interventions for early childhood teachers. The limitation of this research is that it only focuses on video interventions, whereas there are many other learning media that function as alternatives for teaching and learning in the classroom. The researcher hopes that future researchers can conduct research related to teacher sensitivity using video intervention. This research also recommends that future researchers use the research as a reference in conducting research on video interventions.

Keywords: Early Childhood, Learning Media, Video Intervention

I. INTRODUCTION

In an increasingly sophisticated and modern era, technology has become a necessity that cannot be separated from human life, both adults and children cannot be separated from the use of technology (Yoo et al., 2021). Increasingly, technology is getting closer to people's daily lives to make things easier and provide new insights for users. Current developments in digital technology such as the use of telephones, multimedia computers, the internet and video media devices as well as other audio-visual learning and communication tools in relation to education are increasing (Clark-Wilson et al., 2020). In the digital era, technology has become an inseparable part of everyday life (Liang et al., 2022). This also applies
in the world of education, where technology has played an important role in improving and expanding the learning process (Robinson, 1991). One technology that can be used in the world of education is video (Stross, 2020). As a good teacher, teachers must be able to utilize technological developments in student learning (Committee on Protecting Critical Technologies for National Security in an Era of Openness and Competition et al., 2022), not only following developments, but also taking advantage of them so that technological developments are not wasted (Talmon, 2019). In general, young children are always interested in new things, so teachers must be able to utilize technology to improve students’ results and interest in the learning process.

Early childhood education is education for children aged 0-6 years, early childhood education is for children aged 0-8 years who receive early childhood education services (“Early Childhood Caries,” 2019). Currently is the golden age or what is called the golden age. This age period is the age when a child's brain's thinking ability develops rapidly and reaches 80% (Sconce, 2019). As an educator, you must be good at conveying education to students, especially to young children, you need to be diligent and patient in teaching (Molstad, 2022), because children still need a lot of guidance and attention. This is the main basis for why education is important for early childhood as in the stages of child development (Ashford, 2019). There are six aspects of development that can be stimulated in early childhood education, namely aspects of the development of moral and religious values, aspects of physical motor development, aspects of language development, aspects of social emotional development (Li et al., 2018), aspects of cognitive development and aspects of artistic development. Early childhood education in question is aimed at turning young children into children who can become the nation's successors and be useful to society.

Learning is the development of new knowledge, skills, or attitudes when an individual interacts with information. The learning environment has various methods of delivery to students (Thurmond et al., 2019). Early childhood learning is child-friendly learning that is adapted to the child's age level by developing a curriculum in the form of a series of plans that include multiple game-based learning experiences and that are prepared by teachers by preparing learning materials (Yamaguchi & Sanefuji, 2018). Early childhood learning consists of people, learning tools, space, devices and processes that influence each other to achieve learning goals (Karniadakis et al., 2021). An effective learning process, if supported by a conducive learning environment and atmosphere, requires good will and cooperation from all participants (Sagi & Rokach, 2018). In the learning process in early childhood education, educators convey learning messages which are the content of the learning theme (Nordquist et al., 2019). Educators need to consider the use of media and learning methods according to the characteristics and needs of children (Golob et al., 2023). Therefore, in the learning process in early childhood education, educators should at least use video media so that children are better able to receive and understand the information conveyed (Ellemers, 2018). In other words, media helps children concretize abstract learning concepts or messages so that they are easier to understand.

Etymologically, the word "media" is the plural form of "medium" which comes from the Latin "medius" which means middle. Meanwhile, in Indonesian the word, "medium" can be interpreted as "between" or "medium" so that the meaning of media can refer to something that delivers or transmits information (message) between the source (message giver) and the recipient of the message (Deuze, 2011). So researchers can conclude that media is a component of learning that plays an important role in achieving goals and results (Mayer, 2019). Abstract concepts can be conveyed more simply through the use of learning media.
(Lemanski & Dobrzański, 2020). Abstract concepts can be conveyed more simply through the use of learning media (Holmes et al., 2019). Utilizing the learning environment is not an additional activity, but rather an independent activity that contributes to achieving goals and effective learning.

Media in the learning process can enhance children’s learning process in learning which in turn is expected to improve the learning outcomes they achieve (Papi et al., 2018). Learning is essentially a communication process, namely the process of conveying a message from the message source via certain media channels to the recipient pesan (Ciotti et al., 2019). The learning environment is a medium or tool that becomes an intermediary for transferring learning to young children, because early childhood cannot be separated from the learning environment, but in essence the tools used as a learning environment must be able to stimulate every development and prevent boredom from being overcome. Children must learn effectively (Özisik & Orlande, 2018).

Using various learning media does require certain and special skills. The following are various types of learning media for playing while learning activities in early childhood (Bateman, 2021), among others:

- Media is generally referred to as audio media which can convey messages through sound and sounds such as voice tones, music and sound effects can be combined to strengthen the content of the message.
- Visual media is media by which information/messages can be conveyed visually in the form of visual symbols.
- Audio visual media is media that can convey messages through sound, images and writing.

Learning media also has an important role for education (Gliński & Stępniewski, 2018). Learning media is very much needed in delivering learning material. Learning media can facilitate interaction between educators and students so that learning interactions in the classroom can run well (Song et al., 2019). The role of utilizing learning media is to increase children's learning motivation, provide and increase variations in children's learning, provide structure to learning materials, provide core information to children, stimulate children to think and analyze, and create conditions and learning situations without pressure (Sturmberg, 2018).

If you experience problems, it will have a big impact so that the learning material will not run optimally and effectively (Alzheimer’s Association, 2018). There are no obstacles experienced by educators during the learning process. The solution that can be provided is that educators must be able to manage and optimize the use of learning media, attend training, practice frequently at home, improve their competence and quality, and use learning support applications. In order to provide optimal benefits for students.

The same research conducted by Mawakhadah, Cahya Khairini in 2022 concluded that the use of video media in the learning process was very effective, relevant, and could improve knowledge, attitudes and skills (Gamsakhurdia, 2020). Furthermore, carried out by Farida Mayar, et al in 2022 in her article entitled the influence of movement learning videos and songs to improve physical motor skills for young children, they concluded that videos as a result of the learning process can increase student enthusiasm (Pagano, 2023). Further research carried out by the same research also conducted by Siti Maymunah, Sri Watini in 2021 in her article entitled the use of video media in early childhood learning during the Covid 19 pandemic concluded that video media is the most suitable media to use to improve children's learning outcomes (Luciano, 2022). The difference between current researchers and previous researchers is that previous researchers examined the influence and benefits of video in the learning process only, while current research focuses on video intervention on sensitivity in early childhood teachers (Sim & Waterfield, 2019). In the context of early childhood education, sensitivity is very important because it can influence the quality of
interactions between teachers and children, and can have an impact on children's development and learning and in this research it also has the potential to provide new information and recommendations in the development of more effective intervention programs in improving teacher sensitivity towards early childhood.

Based on the explanation above, researchers are interested in choosing a title regarding the influence of video media intervention on sensitivity in early childhood teachers. This research was conducted to address existing problems and to find out how learning innovations carried out using video media affect the sensitivity of early childhood teachers. Video is a popular and effective medium for communicating information.

II. RESEARCH METHODS

The method used by researchers in conducting this research is a quantitative method. This quantitative method is a research method carried out to obtain data that contains numbers (Hosny et al., 2018). The procedure carried out by the researcher to obtain this data is that the researcher can make observations and share the Google Form link which is distributed to correspondents (Sirunyan et al., 2018). The population in this study were early childhood education teachers in Indonesia. The sample for this study was 58 people (Osborne, 2006). The sample came from early childhood education teachers who used learning methods using video interventions for the sensitivity of early childhood teachers (Delgado-Bonal & Marshak, 2019). The characteristics of teachers interviewed in this research include 1) teachers who can provide clear answers 2) teachers who teach using video interventions 3) teachers who can provide information related to the questions asked 4) know specific information. The instrument that can be used by researchers in conducting this research is to use a survey method which can be carried out by distributing a questionnaire using a Google Form link containing questions related to video interventions on sensitivity towards early childhood education teachers as well as answers in multiple choice form and short answer (Burger et al., 2020). In this research, researchers distributed the Google Form link via WhatsApp to early childhood teachers who were used as samples in this research. The forms of questions asked by researchers in conducting this research are 1) teachers who use intervention videos tend to be more skilled in motivating children to learn 2) video media can increase children's enthusiasm for learning 3) video media makes learning more effective 4) educators feel complicated or have difficulty using video media in the learning process 5) learning media is very important in the teaching and learning process 6) video intervention is very useful as a learning medium for early childhood 7) video media makes the teaching and learning process more efficient 8) video media makes it easy for children understand the learning material 9) through video media you can show the results of children's abilities directly 10) video media is too much to watch as a learning media 11) video intervention tends to provide effective feedback to children 12) video intervention can increase teachers' sensitivity to the needs and emotions of early childhood 13) teachers who use video intervention can improve their ability to better identify the needs and problems of early childhood 14) video intervention can help teachers be more responsive to behavior 15) video interventions tend to prevent children from developing their social and emotional skills 16) video interventions can help teachers improve their ability to evaluate and reflect on their teaching practices 17) video interventions make it easier and more patient for teachers to understand children's differences 18) video intervention can help increase teacher confidence in teaching early childhood 19) video intervention can develop creativity in early childhood 20) the role of technology in video intervention influences study results. The number of teachers who participated in conducting this research was 58 people. The data
collection technique used by researchers in conducting this research is by using interviews, observation and documentation. The interviews in this research can be seen to find out how the video intervention affects the sensitivity of early childhood teachers.

### III. RESULT DISCUSSION

Video intervention on teacher sensitivity is an example of a learning method that aims to help teachers and students during the learning process. The results obtained in research on video interventions on teacher sensitivity were obtained through several stages in quantitative research. The stages of obtaining data using a quantitative approach are preparing the data starting with data validation, editing the data and then coding the data using descriptive statistical analysis. By carrying out this quantitative research step by step, the researcher's goal in conducting research entitled the effect of video intervention on sensitivity in early childhood teachers will be achieved. The stages of quantitative research can also produce accurate data because it is obtained by distributing questionnaires, interviews and observations.

Table 1.1 Results of Questionnaire Distribution

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>Strongly agree</th>
<th>agree</th>
<th>Don't agree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Teachers who use intervention videos tend to be more skilled at motivating children to learn</td>
<td>15,5%</td>
<td>82,8%</td>
<td>0%</td>
<td>1,7%</td>
</tr>
<tr>
<td>2.</td>
<td>Video media increases children's enthusiasm for learning</td>
<td>28,1%</td>
<td>70,2%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>3.</td>
<td>Video media makes learning more effective</td>
<td>22,4%</td>
<td>77,6%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>4.</td>
<td>Educators find it complicated or difficult to use video media in the learning process</td>
<td>8,6%</td>
<td>51,7%</td>
<td>37,9%</td>
<td>1,7%</td>
</tr>
<tr>
<td>5.</td>
<td>Learning media is very important in the teaching and learning process</td>
<td>34,5%</td>
<td>62,1%</td>
<td>3,4%</td>
<td>0%</td>
</tr>
<tr>
<td>6.</td>
<td>Video intervention is very useful as a learning medium for early childhood</td>
<td>17,2%</td>
<td>77,6%</td>
<td>5,2%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Video media makes the teaching and learning process more efficient</td>
<td>17.2%</td>
<td>79.3%</td>
<td>3.4%</td>
<td>0%</td>
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<tr>
<td>8.</td>
<td>Video media makes it easy for children to understand learning material</td>
<td>15.5%</td>
<td>81%</td>
<td>3.4%</td>
<td>0%</td>
</tr>
<tr>
<td>9.</td>
<td>Through video media you can show the results of children's abilities directly</td>
<td>12.1%</td>
<td>79.3%</td>
<td>8.6%</td>
<td>0%</td>
</tr>
<tr>
<td>10.</td>
<td>Video media is also watched as a learning medium</td>
<td>8.6%</td>
<td>44.8%</td>
<td>46.6%</td>
<td>0%</td>
</tr>
<tr>
<td>11.</td>
<td>Video interventions tend to provide effective feedback to children</td>
<td>12.1%</td>
<td>82.8%</td>
<td>5.2%</td>
<td>0%</td>
</tr>
<tr>
<td>12.</td>
<td>Intervention videos can increase teacher sensitivity to the needs and emotions of young children</td>
<td>8.6%</td>
<td>77.6%</td>
<td>13.8%</td>
<td>0%</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>Agree (%)</th>
<th>Strongly Agree (%)</th>
<th>Very Agree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.</td>
<td>Video intervention can help increase teacher confidence in teaching early childhood</td>
<td>8.6%</td>
<td>81%</td>
<td>10.3%</td>
</tr>
<tr>
<td>19.</td>
<td>Video intervention can develop creativity in early childhood</td>
<td>10.8%</td>
<td>80%</td>
<td>9.2%</td>
</tr>
<tr>
<td>20.</td>
<td>The role of technology in video interventions influences study results</td>
<td>12.1%</td>
<td>86.2%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

The table of statements and data validity above is a statement as well as an explanation of video intervention on sensitivity in early childhood teachers. Be it the influence, benefits, goals and advantages of learning media. Having data will make it easier for researchers to complete their research because the questionnaires that have been distributed have been filled in by respondents, especially early childhood teachers. And with this data, researchers can explain the effect of video intervention on the sensitivity of early childhood teachers. The statement about teachers who use video interventions tend to be more skilled in motivating children to learn obtained a percentage of 82.8% in the agree category. The statement that video media increases children's enthusiasm for learning obtained a percentage of 28.1% in the strongly agree category and 70.2% in the agree category. The statement about video media making learning more effective received a percentage of 77.6% and 22.4% in the agree and strongly agree categories. The statement about educators finding it difficult and complicated to use video media in the learning process obtained a percentage of 8.6% in the strongly agree category, 51.7% in the agree category, and 37.9% in the disagree category. The statement about learning media is very important in the teaching and learning process obtained a percentage of 34.5% in the strongly agree category and 62.1% in the agree category. The statement about videos being very useful as a learning medium for early childhood received a percentage of 17.2% in the strongly agree category and 77.6% in the agree category. The statement about video media making the teaching and learning process more efficient obtained a percentage of 17.2% in the strongly agree category and 79.3% in the agree category. The statement about video media making it easy for children to understand the material obtained a percentage of 15.5% in the strongly agree category and 81% in the agree category.

The statement about how through video media can show the results of children's abilities directly obtained a percentage of 12.1% in the strongly agree category and 79.3% in the agree category. The statement about video media being too monotonous as a learning medium received a percentage of 46.6% in the strongly agree category and 44.8% in the agree category. The statement about video media tends to provide effective feedback to children with a percentage of 12.1% in the strongly agree category and 82.8% in the agree category. The statement about intervention videos can increase teachers' sensitivity to the needs and emotions of early childhood obtained a percentage of 8.6% in the strongly agree category and 77.6% in the agree category. The statement about teachers who use intervention videos can improve their ability to better identify children's needs and
problems received a percentage of 12.1% in the strongly agree category and 82.8% in the agree category. The statement about video intervention can help teachers be more responsive to children's behavior obtained a percentage of 10.3% in the strongly agree category and 81% in the agree category and 6.9% in the disagree category. The video intervention statement tends to make children not develop social skills and emotionally obtained a percentage of 13.8% in the strongly agree category and 60.3% in the agree category and 24.1% in the disagree category. The statement about intervention videos can help teachers improve their ability to evaluate and reflect on teachers' teaching practices obtained a percentage of 10.3% in the strongly agree category and 79.3% in the agree category and 10.3% in the disagree category. The statement about making teachers more patient in understanding children's differences received a percentage of 12.1% in the strongly agree category and 79.3% in the agree category. The statement about video intervention can help increase teachers' confidence in teaching early childhood obtained a percentage of 8.6% in the strongly agree category, 81% in the agree category and 10.3% in the disagree category. The statement about video intervention can develop creativity in early childhood received a percentage of 10.8% in the strongly agree category, 80% in the agree category and 9.2% in the disagree category. The statement about the role of technology in video interventions influencing the study results obtained a percentage of 86.2% in the agree category. The statements and validity of the data in the table above show that the role of technology in video interventions has an influence on the study results because the highest percentage of agreed data was 86.2% and the lowest percentage was 44%.

The lowest percentage data statement in the graph above shows that educators feel it is complicated or difficult to use video media in the learning process, which is 51% in the agree category. To get answers or reasons for these statements, interviews are conducted. Based on the interview tests conducted by the researcher and also in accordance with one of the methods in the quantitative method, the researcher can conclude that educators do not feel complicated or difficult anymore by using video media in the learning process because there are many features of using video media in an interesting learning method and can increase the learning creativity of early childhood. This research explains the effect of video intervention on sensitivity in early childhood teachers.

The data validity statement with the lowest percentage in the agree category, namely 44%, was found in the statement about video media being too watched as a learning medium. Educators agree with this statement because educators are still unsure about selecting, adapting learning materials or creating simple media which requires more time because the learning environment must be in accordance with the objectives, materials and learning strategies. Therefore, the role of video media can foster children's interest in learning new things in learning material. Another advantage of video media is that it can attract children's attention, increase knowledge, imagination, critical thinking and trigger children to participate more and be enthusiastic so that children can be active in the learning process. In this way, researchers can conclude that the use of video intervention for sensitivity in early childhood teachers has a great influence on increasing children's learning motivation, can attract children's attention, and increase children's learning effectiveness.

Chart
Data from research tests on video interventions on sensitivity in early childhood teachers can be explained that in the agree category the highest first data acquisition was at a percentage of 86.2% on 1 question, and the lowest data acquisition for the agree category was at a percentage of 44.8% which there is 1 question. The data obtained for the two categories of strongly agree received the highest percentage, namely 34.5% and those who received the lowest data obtained for the strongly agree category, namely with a percentage of 5.2%. The highest percentage result for the three categories of disagreement was 46.6% and the lowest data was obtained by obtaining a percentage of data, namely 0% for the disagree category. The highest percentage results for the four categories strongly disagree, namely 3.4%, and the lowest data was obtained by obtaining a percentage of data, namely 0%, for the strongly disagree category. The conclusion based on the results of the overall response to 20 questions regarding the effect of video intervention on sensitivity in early childhood teachers is that teachers agree with the statement that technology in video intervention influences study results with the highest percentage, namely 86.2%, while teachers who do not agreeing and strongly disagreeing with this statement obtained data with a percentage of 1.7% and 0%.

The results of this research are the effect of video intervention on sensitivity in early childhood teachers. The use of this video intervention is to make it easier for teachers to increase children's interest in learning, children's study results and children's creativity during the learning process so that children do not feel bored in learning and children's interest in learning does not decrease. Using this video intervention, teachers have begun to see differences in study or learning outcomes between children who are taught using learning videos, getting better results because the meaning of the learning is clearer with the help of video teaching materials so that children can understand them more easily. Learning videos can be used to
stimulate development, especially cognitive development by stimulating children's skills. Video learning intervention is a tool used to engage children's thoughts, feelings and willingness to learn through the presentation of ideas, messages and audiovisual information. The presence of learning videos designed to attract children's attention to learning videos that display messages conveyed with the help of video media is more interesting and creates motivation/learning stimulation. Visual images can convey messages quickly and clearly, thus speeding up more comprehensive understanding of the message. Visual messages are more effective and efficient in the sense that images can make children concentrate and focus on the learning material.

Research examining the effect of video intervention on sensitivity in early childhood teachers shows that the number of students who like learning using video media. Because the researcher wanted to know the effect of video intervention on the sensitivity of early childhood teachers, the research method that the researcher took was a quantitative research method. This quantitative research data is obtained from the results of surveys or questionnaires according to a list of questions made by researchers as well as observations and interviews. This quantitative research makes it easier for researchers because the data obtained is more accurate because the data is in the form of numbers and is measured using systematic statistics. In this way, researchers can complete their research well and researchers can also conclude that there is a need for video intervention on sensitivity in early childhood teachers to improve children's learning outcomes and interest.

This research aims to determine the suitability of video intervention for the sensitivity of early childhood teachers in the learning process, which can be used to increase children's interest in learning. Because previous researchers were of the opinion that video intervention is very suitable for increasing children's interest in learning and can increase their creativity in the learning process. So the researchers here want to strengthen the argument and get the truth by conducting repeated research so that the results are that the effect of video intervention is indeed suitable for use in learning methods to increase children's interest in learning and creativity with its complete features and easy use of video media. So the researcher hopes that future researchers will be able to research and explain the effect of video intervention in detail and be able to develop video intervention on sensitivity in early childhood teachers so that they can increase children's interest in learning, creativity and children's learning outcomes.

IV. CONCLUSION

Based on the results and discussion above, it can be concluded that the influence of video intervention on the sensitivity of early childhood teachers is very influential, because many respondents agree that video intervention is good to use as a learning medium to increase children's interest in learning, creativity and can improve study results. Increasing children's interest in learning means using learning media that is interesting to children and can be a stimulus in the learning process. The advantage of video media compared to other media is that it explains a real event through process media and video is a combination of audio and images which makes the delivery of learning material more efficient and faster. Even though video media has many advantages, development of video interventions is also needed to minimize its shortcomings.

V. REFERENCES


