The Use of Visual Learning Media in The Development Optimization of Children with Mild Mental Retardation

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Abstract
Children with mild mental retardation are different from normal children in general. Mild mentally retarded children have learning difficulties evident in the academic field. Therefore, to teach learning materials to children with mild mental retardation, teachers need to provide learning media. One of them is visual media. So this study aims to analyze the use of visual learning media in optimizing all aspects of the development of mildly retarded children. This research uses the literature review method with thematic structure data collection techniques and Critical appraisal analysis techniques. In this study, all results obtained in the reviewed literature showed that visual learning media significantly influenced the development of children with mild mental retardation. The visual learning media used in the research that has been carried out are blocks, counting boards, drawing cards, word walls, busy books, and picture crosswords. This is undoubtedly very helpful for teachers in the learning process because visual media can contain various learning materials to increase the interest and enthusiasm for learning of children with mild mental retardation.

Keywords: Visual Learning Media, Child Development, Mild Mental Retardation

Introduction
Children with mild mental retardation differ from normal children because they have below-average intellectual abilities. Many mildly impaired children are found who have learning difficulties while in school. However, this does not mean that children cannot learn. The learning ability of children with mild mental retardation is limited, mainly to abstract things (Khoiriyah & Pradipta, 2017). For example have difficulty remembering alphabets, letters, or symbols. It can be said that children with mild mental retardation tend to have trouble reading, writing, and reading words and sentences (Wijaya, 2014).

Learning difficulties in mildly impaired children are lacking in terms of remembering academics. Children with mild mental retardation can still be given training, guidance, opportunities, and learning support to optimize their potential. Providing education from an early age is the most important stage in improving all aspects of child development (Setiawan, 2014). Because, in essence, all have the right to a proper education, including children with mild mental disabilities (Prabowo & Praherdhiono, 2018). Thus, the provision of learning materials
in the educational process expects that children with mild mental retardation will be able to live independently in the future.

The learning materials given to children with mild mental retardation must be gradual, from easy to complex, so that the mindset of children with mild mental retardation can develop properly (Hastuti, 2020). It is intended that children with mild mental retardation can use it in daily life, including in work, family, and society. Therefore, in the learning of children with mild mental retardation, it is necessary to give it gradually, starting from the introduction of basic concepts to being able to solve problems.

The learning process of mildly disabled children has difficulties in terms of attention, cognitive functions, memory, and self-regulation. The problem occurs spontaneously in the internal brain of mildly impaired children (Rachmawati & Ummah, 2016). Suppose the problem can continue and not be solved properly without a solution. In that case, it will result in reduced learning outcomes, learning objectives cannot be adequately achieved, and will result in the ability to receive the learning material provided next. So, those abstract concepts can be understood by the child. Teachers must strengthen children's understanding during the learning process so they are attached to their thinking patterns and actions (Hastuti, 2020).

Teachers who act as education facilitators play an essential role in providing learning to children. For learning to run effectively, several things need to be considered in teaching children with mental disabilities, namely: a) the material presented needs to be broken into small parts and arranged sequentially; b) each part of the learning material needs to be taught one by one over and over again; c) learning activities are carried out in concrete situations; d) motivate so that children can be motivated to learn the material being studied; e) creating a comfortable and pleasant learning atmosphere; f) using concrete learning media or teaching aids to help children with mild mental retardations understand concepts (Hastuti, 2020).

Learning media is one of the components of the learning system that occupies a somewhat important position. Dahlan et al. (2020) state that the media is an intermediary or connecting channel. The media is an intermediary for communication between teachers and children when associated with learning. The learning process in children with mild mental retardation is improving by using learning media in a class that can take place optimally. Therefore, to teach learning materials to children with mild cognitive disabilities, it is necessary to provide learning media that can actively involve children (Nurfaidah et al., 2020).

Media can make it easier for teachers to deliver learning materials to children with mild mental disabilities. Media use in the learning process can show a significant difference between learning without media and learning using media to improve children's abilities (Zaman & Eliyawati, 2010). Therefore, it can be concluded that using media in learning is very important to optimally enhance all aspects of the development of mildly impaired children.

The learning media used in learning is very diverse. One of them is visual media. Asnawir & Basyiruddin (2002) stated that visual media effectively visualizes things more concretely and realistically. The information conveyed will also be easily understandable because the results presented are closer to the reality show, and the results received will be the same. Visual media can include various learning materials combined with interesting media
concepts to increase interest and enthusiasm for learning for children with mild mental retardation.

Based on the description above, this study aims to analyze the use of visual learning media in optimizing all aspects of the development of children with mild mental retardation by collecting some literature related to the discussion. This research also provides insight and knowledge to teachers in the form of information about the use of visual learning media on the abilities of children with mild mental retardation.

**Literature Review**

This research indeed refers to various previous studies that are relevant. The following are some relevant research results used by researchers. Dyan Indah Purnama Sari. et al. (2018) “Learning Dance Creations of Children with Mild Grahita Through an Imitative Process.” Concluded that learning the creation of Creation Dance is expected that children with mild mental retardation can learn dance with imitation methods for their motor and cognitive development.

Slamet Sukriadi and Muhamad Arif (2021) “Game-Based Adaptive Physical Education Learning Model for Mildly Impaired Children.” This study resulted in 17 game models that were validated feasibly by six validators for mildly impaired children. The description above shows the differences and similarities between the two previous studies. The similarity is that it talks about children with mild retardation. However, Dyan Indah Purnama Sari et al.’s research discussed Creation Dance Learning using qualitative research, while Slamet Sukriadi and Muhamad Arif discussed adaptive physical education learning models.

While in this study, the researcher focused on analyzing the use of visual learning media in optimizing all aspects of the development of children with mild mental retardation. The researchers used the literature review method by discussing several related literature. So this research is different from previous studies, so it is feasible to be tested and continued research.

**Methods**

The method used is the study of literature review. Literature review, which means tracing and researching literature by reading journals, books, and publications related to the research topic, to produce writings related to the topic being discussed. This study examines the use of visual learning media to develop children with mild mental retardation. The data collection method in this study uses a thematic structure, where researchers group and discuss sources according to the theme or research topic. The analysis technique of this study uses Critical appraisal. Critical appraisal is an analytical process used to form the basis of theories related to differences, similarities, and shortcomings of literature searches nationally using sources such as Google Scholar, Mendeley, and SINTA. The criteria reviewed in this study are presented in Table 1 as follows.
Then filtering is carried out by looking at the abstract and reading the full text of the article. Research that does not meet the inclusion criteria is excluded. Then, the literature is critically analyzed in terms of theory, methods, and previous findings. Based on the data of the research findings of articles with similar themes and content of the research objectives, the authors found criteria that matched the topic of discussion in as many as seven articles.

**Result and Discussion**

Based on the results of this research review according to researchers, the relevance of the last seven years of research from 2016-2022 on the use of visual learning media in optimizing all aspects of the development of mildly handicapped children includes research from, Masruroh (2017), Khoiriyah and Pradipta (2017), Diningtias and Mahmudah (2019), Ramadhan (2019), Anfaudyna and Yuliati (2019), Sari and Rianto (2020), Idawati (2021). The study results can be seen in Table 2 as follows.

**Table 1. Journal Criteria**

<table>
<thead>
<tr>
<th>Criteria for Journal</th>
<th>Description</th>
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<tbody>
<tr>
<td>Paper Publication</td>
<td>Period last seven years (2016-2022)</td>
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<tr>
<td>Language</td>
<td>Indonesian</td>
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<tr>
<td>Subjects</td>
<td>Children with Mild Mental Retardation</td>
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<tr>
<td>Types</td>
<td>Original research articles</td>
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<tr>
<td>Themes</td>
<td>The use of visual learning media</td>
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<tr>
<td>Method</td>
<td>Pre-Experimental Designs</td>
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**Table 2. Visual Learning Media in optimizing aspects of the development of children with mild mental retardation**

<table>
<thead>
<tr>
<th>No</th>
<th>Author</th>
<th>Year</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Siti Masruroh</td>
<td>2017</td>
<td>This study showed a significant improvement in children's ability to count, sort, and write numbers 1-10, where the application of three-dimensional visual media that has a length, width, and height and can be enjoyed from any perspective in learning can improve the mathematics learning outcomes of children with mild mental retardation.</td>
</tr>
<tr>
<td>2</td>
<td>Putri Almira Khoiriyah, Rizqi Fajar Pradipta</td>
<td>2017</td>
<td>In this study, the counting board media significantly affected the ability to calculate summation in children with mild mental retardation. Children are required to be active in learning activities to remember material through learning better while doing. This calculation board media also provides a sense of pleasure and makes it easier for children</td>
</tr>
</tbody>
</table>
to complete the addition calculation operation questions in the form of 20 written and ten oral test questions.

3 Rintis Diningtias, Siti Mahmudah 2019 The results of this study show that the method of storytelling based on serial image media affects the ability to recognize the concept of time in children with mild mental retardation. This serialized image has the advantages of being attractive and not using too much writing so that it does not put too much pressure on reading. It avoids boredom in children with mental retardation.

4 Ganang Alief Ramadhan 2019 The conclusion of the results of this study shows that busy book media affects the ability to recognize the color of children with mild mental retardation. This busy book media facilitates children's understanding of mentioning colors and types of primary and secondary colors because it can arouse curiosity and make the child interested in completing existing game activities without help from the teacher.

5 Devy Ana Anfaudyna, Yuliyati 2019 The word wall media in this study influences the ability to recognize flat-wake children with mild mental retardation. The design of the research word wall media was modified in the form of word cards and image cards which were then pasted according to the instructions given by the teacher.

6 Adinda Puspita Sari, Edy Rianto 2020 The results of this study show that the media of pictorial crossword puzzles affects the mastery of the vocabulary of family member recognition in children with mild mental retardation. In this medium, some pictures show meaning to fill in the answers in the boxes about family introduction, including father, mother, grandfather, grandmother, sister, uncle, and aunt.

7 Rita Tri Idawati 2021 The use of picture word card media affects the reading ability of children with mild mental retardation. The illustrated word cards in this study contain images related to the learning material presented in two dimensions of continuous images.

Thus, in optimizing all aspects of the development of children with mild mental retardation, teachers need to provide something concrete, provide simple examples, use learning media and explain in language that is easy to understand (Suparman, 2015). This is in line with the opinion that it is challenging for children with mild mental retardation to understand learning material without providing concrete media. Based on this, learning media in every learning material for children with mild mental retardation is necessary to improve their abilities (Prabowo & Praherdhiono, 2018).
Children with mild mental retardation are undoubtedly different from normal children in general. Compared to normal children, children with mild mental retardation have far below-average intelligence. However, children with mild mental retardation are included in the group of children who can be educated, so it can be said that children can still be taught basic skills in the academic field. In line with this, children with mild mental retardation have an IQ between 50-70. Therefore, children with mild mental retardation often experience some problems (Apriyanto, 2012).

It is not uncommon to find that children with mild mental retardation often have difficulties in academic learning. Children with mild mental retardation can still learn, for example, in the ability to read, write or count at a superficial level (A. P. Sari & Rianto, 2020). However, the learning media given to children with mild mental retardation can be modified according to their needs and abilities. In addition, visual learning media must also be attractive so that children with mild mental retardation can pay attention enthusiastically and be motivated to learn. So that all aspects of its development can develop optimally.

Based on the results of research that has been carried out, it is proven that children with mental retardation have limitations in thinking, are easily bored, their attention easily distracted, and it is challenging to understand learning materials that are considered convoluted or complicated (Wardani & Iriyanto, 2014). So in teaching concepts to children with mild mental retardation, it is necessary to be actively involved in physical, psychological, and social aspects. In addition, learning is carried out repeatedly and using learning media. In line with this statement, children with mild mental retardation in learning activities should use engaging learning media (Nurfaidah et al., 2020).

Learning media certainly has several benefits in the process of learning activities. To efficiently channel teachers' messages, attract children's attention, and clarify learning materials (Sadiman, 2014). In more detail, the benefits of learning media include: (1) making learning in the classroom more interesting, (2) increasing children's interest and motivation in learning, and (3) learning materials easier for students to understand. For children to achieve learning objectives, (4), the learning process is not just speech from the teacher, (5) and children's learning activities become more varied. The use of media in the process of learning activities to channel messages from teachers to children efficiently, attract children's attention, and clarify learning materials

Learning media is considered capable of representing teachers to convey things that are not clear if they are only spoken through words. Therefore, in using learning media for children with mild mental retardation, teachers must first master the media to convey material learning messages to children easily. Several factors need to be considered in choosing learning media, including media that must be scientific, practical, and cheap (Mashuri, 2019)

The central aspect of writing this article is to examine the use of visual learning media in optimizing all aspects of the development of children with mild mental retardation. Visual media has several dimensions, namely two-dimensional and three-dimensional. Two-dimensional visual media is a medium that has only length and width. At the same time, three-dimensional visual media is a medium with a length, width, and height. The difference between
two-dimensional and three-dimensional visual media lies in the size of the medium. Visual media with various dimensions can be used in learning counting operations in children with mild mental retardation.

Based on the results of relevant research and in accordance with the provisions of the literature criteria sought, several similarities were found, including seven studies using Pre-experimental research methods. All the subjects in various studies were children with mild mental retardation. The visual learning media used in the research that has been carried out are blocks, counting boards, picture cards, word walls, busy books, and illustrated crossword puzzles.

The visual learning media used by researchers in the findings analyzed by the author include (1) counting boards as a visual medium to improve children's numeracy ability. This media makes it easier for students to ask questions without asking and seeing. How his friends are doing, making the child able to work according to their respective abilities; (2) blocks have a length, width, and height it can be enjoyed from various points of view. Made of wood with a size 19 x 6 x 23 cm, painted colorful colors (yellow, green, pink, red) and on each side of the beam there is a figure of a number, from the numbers 1-10; (3) picture cards, containing images related to the learning material presented, the picture cards themselves can be two-dimensional in shape such as serialized images; (4) word wall, a collection of words that have been categorized into groups of words and placed on the classroom wall so that children can easily see and learn to read terms designed in various forms, can use word cards and illustrated words and then paste them according to the instructions given by the teacher; (5) busy book, made of flannel and formed into a book of various colors and containing simple game activities that can stimulate the child's fine motor skills; (6) illustrated crossword puzzles, teaching aids in measuring children's understanding of vocabulary mastery skills, the use of which is that children are instructed to pay attention to the pictures in the learning media, children are given questions, children are asked to mention any images in the media and fill in the blanks. Crossword puzzle box.

The author can see from the literature analysis that has been carried out that although the visual learning media used in the literature are different, the results displayed remain the same. All the results obtained in the literature that have been reviewed with the Pre-Experimental Designs type of research show that visual learning media significantly influence the development of mildly handicapped children.

Conclusion

The results of the literature review that the author has analyzed found that visual learning media significantly influence the development of children with mild mental retardation. These results are by the ability of children with mild mental retardation, so there is no coercion. Visual learning media that have been shown to affect the development of children with mild mental retardation in this study analysis include block media, counting boards, picture cards, word walls, busy books, and illustrated crossword puzzles. Visual learning media dramatically influences the understanding of children with mild mental retardation in learning delivery.
This is undoubtedly very helpful for teachers in the learning process. It is easy to understand because the results shown are closer to the displayed reality, and the results received will be the same. Visual media can contain various learning materials combined with interesting media concepts to increase interest and enthusiasm for learning for children with mild mental retardation. Therefore, visual learning media needs to be modified with an attractive and more innovative appearance, especially for learning in children with mild mental retardation.

The suggestions based on this study are as follows. First, visual learning media needs to be modified by teachers with an attractive and more innovative appearance, especially for children with mild mental retardation. Hence, children are more enthusiastic about participating in learning. Second, the teacher's teaching can be applied repeatedly and using learning media. Third, this study only analyzes the results of the research carried out to proceed to the following study.

References


