

Completeness of Shopping Skills Media Features for Students with Mental Retardation at Special Junior High School: A Literature Review

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Abstract

The students with mental retardation ability in the shopping skills show that students are still not able to do it well. Several factors cause the inability of students with mental retardation in shopping skills, namely: students do not understand the concept of money, are often confused about arithmetic operations on money material, cheap and expensive concepts, and shopping activities. This study uses a systematic literature review method from articles that have been published and a descriptive method that aims to determine the variety of shopping skills media and the completeness of features that must exist in shopping skills media for students with mental retardation. The research results obtained from several studies on shopping skills media for students with mental retardation are relevant. It can be seen that there is still minimal development of shopping skills media. Another result is that using several types of shopping skills learning media can improve the shopping ability of students with mental retardation from the material aspect. From theory to practical aspects, they are iPad-based animated image and video media.

Keyword: *Mental retardation, Shopping Skills, Assistive Technology; Learning Media*

I. Introduction

The success of the education process for children with mental retardation schools can be seen from the services and programs they receive. Unlike other typical students who receive learning materials to sharpen their cognitive abilities, students with mental retardation need material that sharpens their cognitive abilities and needs learning with a functional approach [1] Learning with a functional approach is the provision of learning materials that emphasize the benefits for students in daily life according to their level of development. Learning with this approach follows the characteristics and

needs of students with mental retardation, hoping that students can take advantage of the knowledge gained in daily activities, both individual and social life.

Observations in one of the special schools in Blitar on the shopping skills of students with mental retardation show that students are still not able to perform these skills well. Several factors cause the inability of students with mental retardation in shopping skills, namely: students do not understand the concept of money, are often confused about arithmetic operations on money material, cheap and expensive concepts, and words/sentences/language/ used when shopping.

The provision of primary material on spending skills about money in teaching and learning activities in the classroom still uses conventional learning. Conventional learning makes children with mental retardation quickly bored [2] so there is a need for assistive technology. Assistive technology is needed to consider the characteristics of mental retardation children such as short attention, limited language vocabulary, quickly bored due to lack of motivation, lack of concern for the environment. The characteristics of mental retardation who have limited intelligence, namely mental retardation children have a lack of abstract thinking such as minimal ability to write, count, and read [3].

Assistive technology is a general term that includes assistive devices, technology, adaptive, and rehabilitation for individuals with disabilities and includes almost anything that might be used to compensate for the lack of a particular ability [4]. The approach to the use of assistive technology in education focuses on using technology to practice and assist in the learning process. The success and application of assistive technology tools can be measured based on their suitability to the user and their environment, cheap and easy to buy, and easy to use

Learning to use assistive technology, multimedia, which contains audio and visual elements, can train children's thinking and memory, especially those with mental retardation. Therefore, the use of multimedia is a suitable choice [5]. The more complete the features in assistive technology, the more impact it will have on the target users. For mental retardation, it is not enough just to audio and visual, but also pay attention to the selection of attractive colors, the presence of moving objects to attract attention, then the need for a quiz and game feature.

So far, research and development of materials and media on shopping skills are very limited. So, it is necessary to conduct a deeper study of various learning media for shopping skills and what features need to be loaded or developed in learning media. Learning media can create shopping skills media that are useful and meet the needs of students in the class, especially students with mental retardation.

II. Method

This research was conducted using a systematic literature review research method from published journals and articles and the results of previous research. The systematic literature review is done by sorting and selecting articles from peer-reviewed journals that have been published. The steps applied in this study were to choose search keywords according to the central questions related to the media for shopping skills of students with mental retardation. After finding articles, systematic identification of theories was carried out. The articles found are then analyzed and selected, which can provide answers to the main questions. Finally, the analysis study results were carried out using descriptive analysis to answer the main question, namely explaining the completeness of features in the media for shopping skills of students with mental retardation.

There are about five articles that have been reviewed from 2014 to 2021. Then, five articles are analyzed for their relevance to the linearity with the current study topic. The limitation of the problem in this study so that the discussion is not too broad, namely knowing the variety of shopping skills media and the completeness of the features that must exist in shopping skills media for students with mental retardation.

III. Results and Discussion

The first media that can improve the shopping skills of students with mental retardation is image media. Intervention through image media can improve the shopping ability of students with mental retardation, which includes three aspects, namely the ability of students to shop at supermarkets and buy items and the ability to concept expensive and cheap. Students with mental retardation have difficulty remembering the items that must be given, which is one of the reasons behind the research [6].

The ability of students with mental retardation to shop at supermarkets is carried out through a task analysis consisting of 21 stages of shopping at supermarkets. Initial data shows that shopping skills are still low. Then after being given intervention through image media, students' shopping abilities increase, and it does not take long to change from the baseline phase to the intervention phase. Data on the ability to buy shopping items for students with mental retardation was obtained by asking students to shop for at least 1 item. The results obtained at the beginning of the buying activity were relatively low, and there was a gradual increase after the intervention. While the data to measure the ability to master expensive and inexpensive concepts is done by providing a written test instrument. The results at the beginning of data collection to get data on increasing the ability to master expensive

and cheap concepts to require several times of intervention, which means it takes a longer time to apply image media as a means of intervention.

[7] also researched the shopping skills of students with mental retardation through iPad-based animated video media. In contrast to previous studies, which contained three shopping activities, this study focuses on shopping activities at supermarkets/supermarkets. Ten stages need to be done to carry out shopping activities. Of the three research subjects, two were able to do shopping activities after studying the animated video of shopping activities and testing 5 times with 70%. One other subject was able to do shopping activities independently with a percentage of 100%. After several times studying and using the media, students could shop independently with a percentage of 100% for the three subjects.

Using iPad-based animated video media, other results obtained by students with mental retardation can still carry out shopping activities, ideally even ten days after the intervention. It is a pretty significant achievement considering the characteristics of students with special needs who are easy to forget. Furthermore, when the data related to the interactional shopping ability in supermarkets developed through the practice of animation with the iPad were analyzed, it was seen that the data on all participants was higher than at the beginning. Therefore, it can be said that the iPad-based interactional shopping skills proved to be successful in reaching the 100% level in the three participants.

Shopping skills are functional activities that need to be mastered by students with mental retardation. The aspects of shopping skills activities are not only about shopping at supermarkets/supermarkets, buying items, and the ability to concept expensive and cheap. Nevertheless, the aspect of the ability of the concept of money needs to be mastered first. The need for the ability to understand the concept of money is that at the end of shopping activities, money transactions are carried out when currency counting operations occur. If students do not master the concept of money, the shopping activity will not be completed, and no goods will be purchased.

Currently, research and media for shopping skills for students with mental retardation are still minimal. There are no media that has complete specifications according to aspects of shopping skills. Furthermore, the media that have been developed about shopping skills have not yet contained the concept of money, even though the criteria for using the developed media include reading text, counting up to 100, and recognizing the form of money and its nominal value. In order to improve effective and efficient learning media according to the needs of students with mental retardation, it is better to add features about the concept of money. Several previous studies have developed media to improve the ability to master the concept of money.

Research conducted by [8] stated that using media based on an Android-based IDR currency calculation game application with mathematics learning materials adapted to students with mental retardation was right on target and interesting for students with mental retardation. Therefore, the development of this game design can improve learning outcomes for students with mental retardation, especially learning to add and subtract rupiah currency. Furthermore, this game-based media is interesting for students with mental retardation, evidenced by their high enthusiasm for playing. While playing, students focus on watching the game and listening to the commands in the game. Students want to repeat when the game is over, although some students need assistance, and others try to help when their friends play.

[9] Also developed learning media regarding rupiah currency information based on android games. This Android game utilizes gadgets because it is more often used in modern times than conventional media such as books. The media game developed was launched for free on the Playstore to allow all students with mental retardation to access and play while learning both at school and outside the school environment. The main media for Android games contains information about the introduction of various nominal rupiah notes and three practice tests to hone knowledge.

IV. Conclusion

The current study can be concluded that the research and development of media on shopping skills for students with mental retardation of Special Junior High School is still very limited. This study finds that through the use of several kinds of shopping skills, learning media can improve the shopping ability of students with mental retardation from material/theory to practical aspects. Assistive technology in learning media with material for shopping skills based on animated images and videos via iPad. The material contained in the majority of image media is still limited to aspects of shopping activities. Shopping skills require basic skills, namely the concept of currency.

Suggestions for further systematic literature review research can add good literature. Researchers who develop shopping skills media should add several features in addition to the three shopping aspects, namely the basic concepts of money and fun and motivating games.

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