

# Glenn Doman Method Improves Early Reading Ability in Children With Autism

Shinta I. Pertiwi<sup>1,\*</sup>, Wagino<sup>1</sup>, Mudjito<sup>2</sup>

<sup>1</sup> Department of Special Education, Universitas Negeri Surabaya, Indonesia

<sup>2</sup> Department of Management Education, Faculty of Education, Universitas Negeri Surabaya, Indonesia

\*Corresponding author. Email: shinta.19009@mhs.unesa.ac.id

## ABSTRACT

Children with autism have a disturbance in getting information with characteristics easily to be bored and visual learners so that it affects their reading difficulties. So that the right method is needed to improve their reading skills. The purpose of this research is to examine the influence of the Glenn Doman method on early reading ability in children with autism. The Glenn Doman method introduces children to a word consisting of two syllables first and then raised on words that have more than two syllables with visual media assistance that can attract children's interest. Participants in this research were 7 autistic children in low-grade elementary whose ages ranged from 8 to 9 years. This research uses a quantitative approach with a pre-experimental One-Group Pretest and Posttest design. Data were collected using written and oral tests of initial reading ability given to subjects before and after interventions. Data were analyzed using non-parametric statistics with Wilcoxon match-pair test. The result shows that the Glenn Doman method significantly improves early reading ability in autistic children.

**Keywords:** autism, early reading, Glenn Doman method

## 1. INTRODUCTION

Children with special needs or exceptional children are children who have deficiencies in mental, physical, sensory, neuromuscular, social-emotional, and social abilities, as well as a combination of two or more of the above deficiencies so that the children require special modifications to school work, special learning methods or other related services to optimally develop their potential or capacities [1]. Thus, children with special needs, including autistic children, require special treatments and methods in their learning services. Autistic children are children who suffer from autism spectrum disorder (ASD). Children with this disorder generally have one or a combination of disorders in social communication, repetitive behavior, very limited interests, and sensory behaviors that begin in their early lives. Because of these deficiencies, autistic children tend to have difficulties in absorbing information and understanding concepts [2]. More

specifically, interference in the field of communication causes autistic children to experience limitations in language, especially in reading. Reading is an interactive activity to capture and understand the meaning contained in writing. Reading is an ability that must be possessed by all children because through reading, children can learn a lot and can better understand learning material in various fields of study [3].

Children who are skilled in reading from an early age and are always introduced to the readings will have a great curiosity and always want to expand their knowledge [4]. Children who have slower reading skills are usually caused by a mismatch of material with the abilities they have, as a result, the reading fluency will affect other academic areas, and the failure will get worse as the rise grade level of children [5].

The results of research by Mulyati, the age of 5-8 years, low-grade elementary school children should be able to read simple phrases. However, autistic children aged 6-9 years still requires an increase in initial reading, especially in letter

recognition and syllable reading [6]. This is under the results of observations made by researchers at SLB Dewi Sartika who stated that autistic children in the school still needed an increase in the ability early reading in the lower grades, more specifically children could not read simple words or phrases. A difference in the ability to start reading in children is influenced by the teaching methods and techniques used by teachers[7]. The use of appropriate methods is support in achieving success in early reading, one method that can be used as an alternative intervention in teaching early reading is the Glenn Doman method.

Glenn Doman Method allows children to be involved in the learning process because this method is like a game that is inserted learning to recognize words that are applied in a short session. This session was very short so the children wanted to continue the session [8].

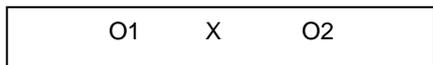
Based on the above description, this research aimed to examine the effect of the Glenn Doman method on early reading ability in children with autism. In this research, the Glenn Doman method is limited to learning to read by following 4 steps that are recognizing meaningful words, reading words, reading phrases, and filling in blank phrases. In strengthening the learning process, this method uses words that are connected to concrete images to make it easier for children to understand what they are trying to read. in this research using material limbs to read the introduction.

**2. METHOD**

**2.1. Research Design**

This research is classified as a pre-experimental research design with a one-group pretest-posttest research design. The research process starts with preparation, which is a research permit, and set the schedule, then conducts research and followed by data collection, data analysis, conclusions, and suggestion. Data were collected through giving a pre-test and post-test.

This research was carried out in 12 meetings from 14 May to 27 May 2019. At each meeting, the time given was 45 minutes. The intervention was followed by 7 autistic students, with learning guided by researchers using the Glenn Doman method and with the help of visual word wall media along with flashcards so that learning is not only fixated on picture cards, but children can play with the words and pictures provided.



**Figure 1.** Pre-test and post-test design

Information:

O1: Pre-test score aims to assess the ability of an early reading of an autistic child before an intervention is given

X: Treatment or intervention that will be given to children with autism through the Glenn Doman method

O2: Post-test score to assess the early reading skills of autistic children after an intervention has been given [9].

**2.1.1. Research Subjects**

The subjects in this research were autistic students of low grade I, II, and III elementary levels, totaling 7 autism students with characteristics that can make eye contact, hold a pencil, can write/draw lines, and have formed compliance. Participant in this research can be seen in the table below:

**Table 1.** Research Subjects

No	Name	Age	Gender
1	ZA	8 years old	M
2	KE	9 years old	M
3	YA	8 years old	M
4	RE	8 years old	M
5	SO	9 years old	F
6	AR	8 years old	M
7	JE	8 years old	M

**2.1.2. Instrument**

The instrument used in this research is the pre-test and post-test oral manuscripts, which contain words that must be read by the participants and written pre-test and post-test manuscripts that contain questions that participants need to work on.

**2.1.3 Data Analysis**

In data collection using test techniques with oral tests and written tests. Then in this research used non-parametric statistical data, because the number of subjects studied was less than 30 people and fulfilled the minimum requirements of 6 subjects. Therefore, the data obtained are assumed to not meet the test of normality and homogeneity. Then the research data were analyzed in a non-parametric way using the Wilcoxon Match Pairs Test formula.

$$Z = \frac{T - \mu T}{\sigma T} \tag{10}$$

Information:

Z: The value of the Wilcoxon match pairs test

T: Small number of ranks

μT: Mean (average value)

σT: Standard deviation

### 3. RESULT AND DISCUSSION

Based on the result of data analysis, it is proven that the Glenn Doman method has a significant effect on improving early reading skills in autistic children. This can be seen from the reading ability of autistic children who have increased and become better. The assessed aspects of early reading are understanding the meaning of words, reading words without pictures, reading the phrase, and identifying the phrase.

The pre-test was given to student 1 time before being given intervention, was carried out for 4 minutes. During the pre-test, the researcher gave the written test and oral test. In this pre-test, the researcher did not assist students in answering the questions.

The intervention was carried out in 10 meetings, and each was held for 45 minutes. This intervention is guided by researchers using the Glenn Doman method and with the help of word wall visual media so that children can play with the words and images provided. The presentation of the material using the Glenn Doman method does not focus on learning to sound letters or syllables, but on word combination patterns as learning to start reading. The early reading is a basic level in reading, in this level children need to pay attention to two important things, namely the regularity of forms and patterns of letters that compose a word [11]. The material given is part of the body, including teeth, nail, hair, hand, feet. The body parts material is divided into 4 learning steps using the Glenn Doman reading method. First, students pair pictures of body parts with words. The two students were guided by researchers to read the word body part. Third, the researcher prepared phrases about body parts (I cut my nails, brush my teeth, wash my hands, cut mother's hair, I wash my feet). and finally, students fill in incomplete phrases.

The post-test results are in the form of scores to determine the ability of an early reading of autistic children after being treated using the Glenn Doman method (See Table 2). The test given in the post-test is the same as the test given at the pre-test which is for 45 minutes.

**Table 2.** Result of Pre-Test and Post-Test

Name	Pre-test (O1)	Post-test (O2)
ZA	50	87,5
KE	62,5	87,5
YA	37,5	75
RE	50	81,25
SO	37,5	50
AR	43,75	93,75
JE	56,25	81,25
Avarage	48,21	79,46

Based on the result of the pre-test and post-test recapitulation showed that after being given learning with the Glenn Doman method, the ability to read early on in autistic children had increased. The results of the pre-test showed that 7 autistic children before being treated using the Glenn Doman method were still low at the with the acquisition of an average value of 48.21 and after being given intervention using Glenn Doman on the initial reading ability the number of posttest scores increased to 79,46. of the 7 students, the reading skill of SO is the lowest. SO is an autistic child who still quite often parries and sometimes acts at will, but SO already understands instructions and has formed compliance. Meanwhile, AR received the highest score and had an impact on the post-test results. AR is an autistic child who is quiet, easily conditioned, and very obedient to instructions and easy to capture learning so that he can participate in learning well. AR has a high initiative when researchers doing AR intervention, he always writes and repeats independently. And the other students can follow the learning well.

**Table 3.** Score of Reading Aspect

Name	Aspect				Score
	Understanding word	Reading word	Reading phrase	Identifying phrase	
ZA	25	25	18,75	18,75	87,5
KE	25	25	18,75	18,75	87,5
YA	25	25	18,75	6,25	75
RE	18,75	25	18,75	18,75	81,25
SO	18,75	12,5	12,5	6,25	50
AR	25	25	25	18,75	93,75
JE	25	25	18,75	12,5	81,25
Average					79,46

In the pre-test and post-test results of the application of the Glenn Doman method in reading ability, the word recognition aspect has the lowest difference value. This is because the subjects already good enough to recognize words so that after the intervention is given, the improvement obtained is not too high. However, in the aspect of reading and identify phrases, using the Glenn Doman method has a fairly high increase seen from the scores on the pre-test in the aspect of reading phrase and the results of the post-test in the aspect of reading phrase. This is because in reading phrases, the child has previously recognized the meaning of the words arranged in the phrase so that in reading the phrase the child has understood the meaning contained in the picture and remembers the combined pattern of letters that are printed and then voiced. This intervention is repeated until the students learn to read the phrase without the aid of pictures and independently. With the intervention of the Glenn Doman method in this period of 10 meetings, the students have an increase in initial reading with an average value of 9.82 on the pre-test, after being given intervention to 18.75.

The test result data were then analyzed using non-parametric statistics using the Wilcoxon match pair test formula to obtain the test results. The results of the data

obtained show that Z value ( $Z_h$ ) = 2.37 (value (-) is not taken into account because the absolute price) is greater than Z table ( $Z_t$ ) with a crisis value of 5% = 1.96. Based on the results of the analysis, the data obtained by the Z value in ( $Z_h$ ) is 2.37 greater than the crisis value Z table ( $Z_t$ ) 5% = 1.96 ( $Z_h > Z_t$ ), so  $H_0$  is rejected and hypothesis ( $H_a$ ) is accepted, thus it can be interpreted that there is the effect of using the Glenn Doman method on the early reading ability of children with autism.

The results of this research indicate that in providing learning materials, children need methods and techniques that support learning interest and are fun so that children can easily absorb information and do not feel overwhelmed by the material. A monotonous and non-varied learning atmosphere is one of the factors for children's failure in the learning process [12]. The early reading ability of autistic children in this research has increased because the material used by Glenn Doman's method provides material for starting reading with meaningful words and phrases that are known to the child. In reading intervention words repeated so that the child feels accustomed and fluent in saying words independently. Followed by reading simple phrases with the help of pictures continuously. [12] Learning media will stimulate students to be interested in teaching materials so that attractive, innovative, and supportive media are needed.

In this research, familiarize children with writing patterns to be spoken with the help of visual media, so that children do not need to be burdened with reading spelling and children feel attracted to the media provided, namely the word wall increased by flashcards. With the word wall and flashcard provided by the researcher, children can directly play with concrete words and images on the word wall. Learning media will stimulate students to be interested in teaching materials, so that media that is attractive, innovative, and supports children's interests are needed [13]. So that in this research with field results that have shown that the use of the Glenn Doman method on the early reading of autistic children has an increasing effect.

#### 4. CONCLUSION

It can be concluded from this research that there is an effect of using the Glenn Doman method on the early reading ability of autistic children. The use of the Glenn Doman method has been proven to improve early reading skills of autistic children and increase learning motivation with the help of visual media that supports the learning styles of autistic children who are visual learners. Therefore, in the practice of learning, practitioners should be more creative in choosing learning methods to create a learning atmosphere that encourages the motivation of autistic children and is adjusted to the characteristics of the child. Further research is expected to apply more creative and innovative methods to develop advanced reading skills.

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