



## The Effect of the Cooperative Learning Model in Improving the Ability to Recognize Number Symbols for Students with Intellectual Disability

Vivin Andriani<sup>1</sup>, Grahita Kusumastuti<sup>2\*</sup>

<sup>1,2</sup> (Special Education, Universitas Negeri Padang, Indonesia).

\*E-mail: <sup>2</sup> [grahita.kusuma@fip.unp.ac.id](mailto:grahita.kusuma@fip.unp.ac.id)

Receive: 13/07/2022

Accepted: 23/08/2020

Published: 01/10/2022

### Abstract

A number symbol is a symbol that expresses an amount using numbers. a number symbol is a value that is an abstract or symbol of a number to determine an amount as an enumeration or measurement. Introducing this symbol of numbers to children with mild mental disabilities is not in an easy way, because this mildly impaired child has an IQ below average, therefore teachers must be patient and the learning media used by teachers is also creative and innovative so that children with mental disabilities are not bored and understand during learning. Therefore, this study will examine the influence of the horay course review (CRH) type cooperative learning model can improve the ability to recognize the number symbol one to five for children with mild mental impairment. This type of research is experimental research with a single subject or Single Subject Research (SSR), designed A-B-A. This study was conducted using a Creative Learning model of the Course Review Horay (CRH) type as a free variable, and related variables in the form of recognizing the symbol of numbers one to five. This study uses analysis in conditions and between conditions which can be described in benthic tables and figures. The results of this study can be proven from the tendency to stability at the mean level A1, which is 0%. Then there was an increase when given an intervention (B) where the mean level was 49% and after being given the intervention, namely the condition A2 mean level was 72%. So it can be concluded that there is an increase in each condition which means that the child is able to recognize the symbol of the numbers one to five.

**Keywords:** Children With Special Needs, Course Review Horay, symbol of numbers

### Introduction

Children with Special Needs (ABK) are children who need special services as a result of the disorder they carry, without special services or services they cannot achieve optimal development, including special needs in educational services (Iswari, 2007). Children with mental disabilities are children with below-average intelligence so that they have difficulties in academic learning as well as communication and social. Based on the type of mental impairment, it is grouped into three parts, one of which is mild mental impairment (Khasanah, 2020).

Children with mild mental impairment are children who experience obstacles to the development of ingenuity, and obstacles to aspects of development, making it difficult to

learn academically. One of them is in the mathematics learning section. one of the mathematical sections that studies addition operations, subtraction operations, multiplication operations, and division operations.

To be able to perform counting operations the child must be able to recognize the symbol of the number. Knowing the symbol of numbers is very important in our daily lives. Such as, looking at the hour number, the nominal number on the money, looking at the number on the date, and others. If the child does not know the symbol of numbers, they will have difficulties in the next mathematical material, because this number symbol is very important as a prefix in mathematics learning.

A number symbol is a symbol that expresses an amount using numbers. the symbol of a number is a value that is abstract. Introducing this symbol of numbers to children with mild mental disabilities, is not in an easy way, because this mildly impaired child has an IQ below average, so teachers must be patient and the learning media used by teachers is also creative and innovative so that children with mental disabilities are not bored and understand during learning.

From the above problems, the researcher wants to provide a solution in improving the ability to recognize the symbol of numbers one to five through the Horey course review type (CRH) Cooperative learning model. This CRH-type Cooperative Learning model is fun for students with mild mental disabilities, because if students answer the questions correctly, it will be "horee" (Huda, 2013). This CRH-type cooperative learning, makes students with disabilities happy and do not feel bored in participating in learning. For this reason, the CRH-type Cooperative Learning model is expected to have an effect in increasing the ability to recognize number symbols.

Therefore, the purpose of this study is to determine the influence of the CRH type cooperative learning model in improving the ability to recognize symbols numbers one to five in children with mild mental impairment class IV / C at SLB Perwari Padang.

## Method

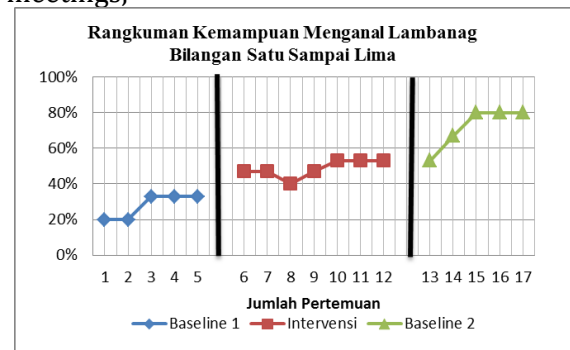
The type of research used in this study is experimental research in the form of single subject reasearch (SSR). The form of the Single Subject Reasearch (SSR) design that researchers will use in this study is the A-B-A design. This research was conducted by analyzing data in the form of an asis in conditions and between conditions

## Results and Discussion

### Results

This study was conducted as many as 17 meetings, where in the baseline phase (A1), namely the baseline phase before the intervention was given, which was carried out as many as 5 meetings. Furthermore, the intervention phase (B) was carried out as many as 7 meetings, and the baseline phase

(A2) which was carried out as many as 5 meetings,



The analysis in this study uses analysis in conditions and analysis between conditions, data analysis aims to determine the influence of the Cooperative Learning (CRH) model in improving the ability to recognize number symbols, the analysis carried out is analysis in conditions and between conditions.

Analysis under conditions analyzes components such as condition length, estimation in directional tendency, stability tendency, Data footprint tendency, Stability level and range and level of change. Prior to the analysis in the presented conditions a table of changes in values from Baseline (A1), Intervention (B), and Baseline (A2)

The following is an explanation of the analysis under the following conditions:

1. Is known that the length of the phase condition baseline-1 (A1)= 5, Intervention (B)= 7 and baseline-2 (A2)= 5.
2. The results of the estimated tendency to increase during the baseline-1, intervention and baseline-2 phases.
3. Stability tendency, for baseline-1 phase = 0% result interpreted as stable, intervention (B) = result 43% interpreted stable, and baseline-2 = result 20% interpreted stable.
4. Tendency to trace data during the baseline-1, intervention (B), and baseline-2 phases whose direction is increasing.
5. The stability level and range for the baseline-1 phase are stable with a range of 20% - 33%, the intervention phase with variables 40% - 53% and baseline-2 stable with a range of 53% - 80%.

6. Change the baseline-1 (A1)= 13, Intervention= 13, and baseline-2 = 27 levels.

After analysis is carried out in conditions, then proceed with analysis between conditions. Before the inter-condition analysis is presented with images of changes in values from Baseline (A1), Intervention (B), and Baseline (A2).

Based on Figure 4.5, an inter-condition analysis is carried out. As for what is analyzed between the conditions in this study, it has the following components: the number of variables changed, changes in directional tendencies, changes in stability tendencies, levels of change, and percentage of overlap.

Analysis in conditions based on data that can be done with the following steps:

1. It is known that in this study many of the number of variables that were changed was one variable, namely the reduction of omission in writing. Variables were changed from baseline condition (A1) to intervention (B) and from intervention (B) to baseline condition (A2).
2. Change in direction, baseline (A1) the tendency of the direction at this stage is to increase where there is a change, in the intervention condition (B) the tendency of the direction increases as well as the baseline condition (A2) has increased. So it was concluded that the provision of interventions, namely the horay course review (CRH) model to recognize the symbol of numbers one to five, had a positive effect on this variable, it was seen that there was an increase after being given the intervention.
3. Changes in Stability Tendencies from baseline-1, intervention and baseline-2 phases have stable values. To determine the tendency of stability can be seen from the components of the analysis data in the conditions.
4. The level of change, in determining the change in levels between conditions, namely in the following way:
  - a. Determine the final point value on the baseline condition (A1) which is 33%, then determine the value of

the initial point on the intervention condition (B) which is 47%.

- b. Determine the final point value on the baseline condition (A2) which is 80%, then determine the initial point value on the intervention condition (B) which is 47%.
- c. Percentage of Overlap, it is seen that the percentage of overlap of baseline condition data (A1) and intervention (B) is 0%. For the percentage of overlap data the condition of baseline (A2) and intervention (B) was 14%. So it is concluded that the intervention given has a good influence on the target behavior.

## Discussion

Based on the results of data analysis, it is known that the horay course review (CRH) model has an effect in improving the ability to recognize number symbols in students with mental disabilities at SLB Perwari Padang. This is shown by the increase in students' scores in recognizing the symbol of the baseline condition (A1) to the intervention condition, even when the intervention is released baseline (A2). This is because the Horay course review (CRH) type Cooperative Learning model helps students understand the symbol of numbers in stages using fun steps such as horey's speech.

Cooperative learning or Cooperative Learning can also be said that learning together is a type of learning that is included in the theory of constructivism, (Syaifurahman & Ujati, 2013). This cooperative learning has several types, one of which is the horay course review (CRH). The CRH type cooperative learning model is one type of cooperative learning that is packaged very pleasantly (Aksiwi & Sagoro, 2014).

The CRH type cooperative learning model has advantages and disadvantages, some of its advantages according to (Huda, 2013) are: an interesting structure and can encourage students to be able to jump into it, this model is not monotonous because it is interspersed with horee shouts or yel-yel, the enthusiasm for learning increases, because it feels fun. This is also shown during the research, that is, if students are able to answer the questions correctly, then students say the word horey.

This research is in line with research that has been conducted by Afifah, (2017), namely cooperative learning of horay course review type in the process of learning mathematics in children with mild mental impairment in SLB. The results of this study show that the learning model can be applied in mathematics learning, namely the summation material for children with mild mental disabilities. In this study, the similarity with the author's research is the same as using a horay course review type cooperative learning model for mildly impaired children, Afifah's research, (2017), uses this model, for mathematics learning of summation material for children with mild mental impairment. Meanwhile, the study used this model to recognize the symbol of numbers one to five for children with mild mental disabilities.

Another study that also shows the influence of CRH is Fatimah's research (2018), which is a horay course review type cooperative learning in improving social studies learning outcomes of elementary school students. The results of this study show that the learning model can be applied in improving student social studies learning outcomes. In this study, there are similarities in the steps of using success expressions such as Horay when students answer questions correctly.

cooperative learning type course review horay has an influence in improving the ability to recognize symbols of numbers one to five in children with mild mental impairments. This is indicated by an increase in the value of the baseline condition A1 to the intervention, even when the intervention is released(A). Based on this, it can be concluded that cooperative learning type course review horay (CRH) can be used in increasing the ability to be given the ability to recognize the symbol of numbers one to five for children with mild mental impairment.

## Conclusion

Based on the results of data analysis, it can be concluded that the horay course review type cooperative learning model has an influence in improving the ability to recognize the number symbol one to five in children with mild mental impairment. This is indicated by an increase in the value of the baseline

condition A1 to the intervention, even when the intervention is released(A). Based on this, it can be concluded that the learning program type of horay review course (CRH) can be used in increasing the ability to recognize the symbol of numbers one to five for children with mild mental impairments.

## References

- Afifah, N. (2017). Pembelajaran Kooperatif Tipe Course Review Horay Dalam Proses Belajar Matematika Pada Anak Tunagrahita Ringan Di SLB. *Jurnal Pendidikan Khusus*, 2(9), 1-11.
- Aksiwi, R. D., & Sagoro, E. M. (2014). Implementasi Metode Pembelajaran Course Review Horay Untuk Meningkatkan Aktivitas Dan Hasil Belajar Jurnal Penyesuaian. *Jurnal Pendidikan Akuntansi Indonesia*, 12(1).<https://doi.org/10.21831/jpai.v12i1.5161>
- Fatimah, S. (2018). *Penggunaan Model Cooperative Learning Tipe Course Riview Horay Dalam Meningkatkan Hasil Belajar Siswa Pada Mata Pelajaran IPS SDN 4 Kotagajah Lampung Tengah Tahun Pelajaran 2018/2019*. Institut Agama Islam Negeri (IAIN) Metro.
- Huda, M. (2013). *Model-model Pengajaran dan Pembelajaran*. Pusataka Pelajar.
- Iswari, M. (2007). *Pendidikan Kecakapan Hidup Bagi Anak Berkebutuhan Khusus*.
- Khasanah, W. (2020). Gaya Belajar Siswa Tunanetra Dalam Pembelajaran Pai Di Sekolah Umum (Studi Kasus SMA Taman Siswa Bekasi). *Turats*, 13(2), 15-31.
- Syaifurahman, & Ujati, T. (2013). *Manajemen Dalam Pembelajaran*. PT Indeks.