

Use the Phonetic Methods towards on the Speech Ability Vowel and Consonant (H, K, M, R) for the First Grade of Mentally Disabled Student

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Abstract: Use the Phonetic Methods Towards on the Speech Ability Vowel and Consonant (H, K, M, R) for the First Grade of Mentally Disabled Student. This study aims to describe the effect of using the phonetic method on the first grade mentally disabled students' speech ability, especially in the pronunciation of vowel and consonant (h, k, m, r). The method used is Single Subject Research (SSR) with the design of A-B-A. The study results showed that in the baseline-1 phase, the subjects' scores were still low then increased in the intervention phase. The trend increased in the baseline-2 phase and showed stable values in each condition, as well as the results of hypothesis testing with overlapping percentages, which showed results that small, which is 0%. That trend shows that the phonetic method can increase and influence the first-grade mentally disabled student's speech ability.

Keyword: Phonetic Method; Speech Ability; Mentally Disabled Student

INTRODUCTION

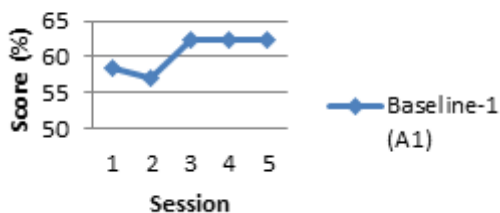
In the 1945 Constitution of the Republic of Indonesia Article 31 Paragraph (1) states that "every citizen has the right to education" (Government of Indonesia, 2002). The need for education is the right of all people, including Children with Special Needs (ABK). Somantri (2012) states that mental retardation is a term for children who have below average intelligence levels. Warren and Yoder suggest that in general language development for mentally retarded children is the same as normal children, but usually the development is late, slow in progress, and will eventually stop at a lower level of language development (Mangunsong, 1998). The reality shows that compared to normal children speaking problems are more experienced by retarded children (Kemis & Rosnawati, 2013).

Based on a preliminary study in SLB Tunas Bangsa Blitar City, researchers found the problem of speech disorders in a mentally retarded student who had difficulty when pronouncing the sounds of several vowels or consonants. The researcher conducted a speech assessment on the child by asking the child to say all the sounds of the alphabet. For the pronunciation of the vowel sounds the child has not been able to pronounce it well. Whereas in the pronunciation of consonant sounds there are a number of pronunciations of letter sounds that are not in accordance with the correct and proper articulation such as letters / h / pronounced / a /, letters / k / pronounced / ta /, letters / m / pronounced / en /, and letters / r / pronounced / el /.

In the initial speech ability assessment, students are also asked to say a few words in which there are vowels or consonants which are placed at the beginning, middle, and end of a word. Words given to the subject, for example for the letter / m / the researcher asks the subject to pronounce the word car which is spoken by the subject, the guava word is pronounced ja-bu, and the word pool is pronounced ko-lan. For letters / b / subjects are asked to say the word shirt is pronounced a-ju, the word mother is pronounced mother, the word hijab is pronounced hijab. For letters / r / children are asked to say the word wheel pronounced lo-da, the blue word is pronounced i-yu, and the word room is pronounced kamal. For letters / a / children are asked to say the word apple pronounced apple, the word string is pronounced string, the word eye is pronounced a-ta, and so on. Mistakes of speech that are often experienced by mentally retarded students, namely when saying the sound of a word, students often eliminate the sound of letters in a word (omissi) and also replace the sound of one letter with the sound of other letters in a word (substitution).

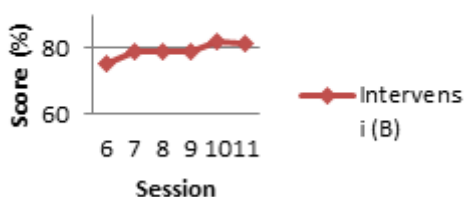
Based on information obtained from the class teacher, it is true that the student has difficulty or disruption in speaking, which causes the pronunciation to be incorrect and unclear when heard. Someone who experiences articulation disorders usually also have trouble speaking sounds (Efendi, 2013). The class teacher also explained that the school had never given a specific speech training to deal with speech problems or disorders experienced by retarded students.

Baseline-1 (A1)



Graph 1 Baseline-1 (A1) Condition Measurement Data for the Mental Ability of the Students' Speech

Intervensi (B)



Graph 2 Data on Implementation of Baseline-1 (A1) Speech Ability of Students with Developmental Disabilities

There is an expert research that aims to find the relationship between the level of language skills of a person with the level of intelligence possessed. The results of this study prove that the level of intelligence with language maturity and speaking have a positive relationship (Efendi, 2009). This positive relationship occurs because of a reciprocal relationship, language becomes limited due to limited intelligence, and vice versa (Efendi, 2017). In general, mentally retarded children experience impaired sound quality, articulation, and rhythm and speech development is also late (Somantri, 2012).

Because many mentally retarded children experience speech articulation disorders, therefore for the speech development program it needs to be given articulation training. Articulation exercises are correct words. One of the methods contained in speech articulation exercises is the phonetic method. Phonetic method is a method that teaches letter sounds and then associates each letter sounds with meaningful words and images (Suwarsi, 2014). In the practice of implementing phonetic methods children are required to pay attention to the position and motion of their speech organs, so that children can pronounce sounds correctly (Kamilaturahmi, Hasan, & Kasiyati 2013).

Based on the above background, the purpose of this study was to determine the effect of the use of

phonetic methods on the ability to speak vowel sounds and consonants (h, k, m, r) grade 1 mentally retarded students.

METHODS

This study uses a research design with a single subject (SSR) to find out how much influence a treatment that is given repeatedly to subjects. Rosnow and Rosenthal say that what is taken as a research sample in a single subject research is focused on individual data (Sunanto, Takeuchi, & Nakata 2005).

The design used in this study is the A-B-A design, in this design there is a baseline-1 (A1) phase, which is the phase before being given treatment, the intervention phase (B), and the baseline-2 (A2) phase, which is the phase after no more treatment is given. The single subject in this study was a retarded grade 1 student at SLB Tunas Bangsa Blitar City. Subjects in this study experienced problems in speech development such as having difficulty pronouncing the sounds of some vowels or consonants.

Data collection was carried out by researchers using oral tests. Students are asked to pronounce the sounds of vowels and consonants (h, k, m, r) placed at the beginning, middle, and end of words in the baseline-1 (A1) and baseline-2 (A2) phases and use the phonetic method in the phases intervention (B). Then, the data obtained were analyzed using graphical visual analysis techniques using data analysis in and between conditions based on the components obtained in each condition.

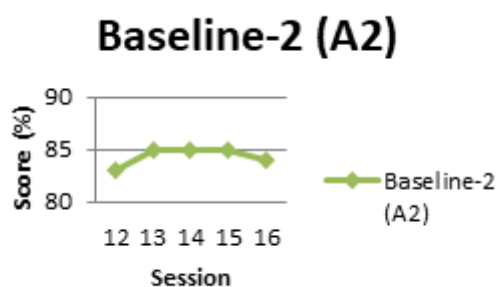
FINDING AND DISCUSSION

Finding

The data collected in the form of data on the ability to speak vowels and consonants (h, k, m, r) with the correct articulation. Data collection was carried out in 16 sessions, namely 5 sessions in the baseline-1 (A1) phase, 6 sessions in the intervention phase (B), and 5 sessions in the baseline-2 (A2) phase. Calculation of the score of each indicator is done by means of the score obtained by the subject divided by the maximum score multiplied by 100%.

The following is an overview of research data, Baseline-1 (A1) conditions. The data obtained in the baseline-1 condition is by observing the initial pronunciation of the child in pronouncing vowels and consonants (h, k, m, r) that are at the beginning, middle, and end of words before the intervention is given. The results are shown in Figure 1.

Intervention conditions (B). This phase is carried out as many as 6 session sessions. The intervention given to the subject is in the form of phonetic methods. Measurement data obtained are shown in Figure 2.



Graph 3 Data on Implementation of Baseline-2 (A2) Speech Ability of Students with Developmental Disabilities

Baseline-2 (A2) conditions. Baseline-2 conditions are the condition of the subject after treatment or intervention has been given. The baseline-2 was conducted in 5 meeting sessions. Measurement data obtained can be seen in Figure 3.

Data Analysis In Condition. Based on the results of data analysis in the conditions in table 1 has been summarized as follows: first, the length of the conditions in each condition consists of several sessions that are determined in number to show stability. Second, the estimated trend towards the results of the acquisition of data analysis in the baseline-1, intervention, and baseline-2 conditions has increased and changed so that it shows a positive effect. Third, the stability trend in all conditions is stable. Fourth, trace data on all conditions tend to increase and have a positive influence on target behavior. Fifth, the level of stability and range contained in baseline-1 (A1) obtained stable results with a range of 57% -62.5%, intervention conditions (B) obtained stable results with a range of 75% -82%, and baseline-2 conditions (A2) stable results also obtained in the range 83% -85%. Sixth, the level of change found in the baseline-1 (A1) condition is 4% and positive, in the intervention condition (B) the results are 6.5% and positive, and the results obtained in baseline-2 (A2) 1% is also positive.

Data Analysis Of Conditions Based on the results of data analysis between conditions in table 2 has been summarized as follows: first, the number of variables between conditions is 1 variable, namely the ability to speak. Second, the change in direction and effect between conditions indicates an upward direction and has a positive effect on the target behavior. Third, changes in stability tendencies between conditions show data from stable to stable. Fourth, the change in level between baseline-1 (A1) phases is 62.5% and the first data point in the intervention phase (B) is 75% with a difference of 12.5%. From the intervention phase (B) to the baseline-2 (A2) phase it increased to 75% obtained in the intervention phase and the first

data point in the baseline-2 (A2) phase was 84% with a difference of 9%. Fifth, the results of calculating the percentage overlap between the intervention phase (B) and baseline-1 (A1) is 0%. The smaller the overlapping percentage results, the greater the effect of a treatment on the target behavior.

Discussion

Intellectual abilities possessed by mentally disabled children are below the average child in general. So the reality shows that more mental retardation children who experience problems in speaking than children in general (Kemis & Rosnawati, 2013). Children with intellectual disabilities in general experience barriers to problems in sound quality, articulation, and rhythm and the development of speech becomes late (Somantri, 2012). Therefore, mentally retarded children also need a speech training program with an appropriate method to deal with the speech problems experienced.

One method of speaking articulation exercises that can help children with intellectual disabilities improve the ability to speak the sound of letters and words is to use the phonetic method. In the implementation of phonetic methods, children are required to pay attention to the position and motion of their speech organs so that they can pronounce sounds correctly (Elly, 2013).

This research was conducted during 16 meeting sessions conducted in three conditions viz 5 sessions in the baseline-1 (A1) phase, 6 sessions in the intervention phase (B), and 5 sessions in the baseline-2 (A2) phase. In the baseline-1 (A1) condition, the meeting is held from the first session to the fifth session. The ability of children in pronunciation of vowels and consonants (h, k, m, r) has increased and decreased, but showed stable results in the third to fifth session, namely 62.5%. So researchers stopped observing in the fifth session. The score obtained by the subject for vowel pronunciation was 72% and for the pronunciation of consonantal letters (h, k, m, r) obtained a score of 53%.

In the intervention condition (B) the child's ability to speak has increased or increased. Although the scores obtained on the pronunciation of consonantal letters (h, k, m, r) are lower than the pronunciation of vowels. However, the scores obtained in this intervention condition have shown many improvements from the baseline-1 condition before the intervention was given. This intervention condition was carried out as many as 6 sessions, in each session the subject's speaking ability tended to increase little by little. In the sixth session the subjects scored 75% and the results showed improvement from the last session baseline-1 conditions. The ability to speak the subject improved and showed stability in the seventh to ninth session which was 79%. Then it increased again in the next session which was 82% in the tenth session and decreased slightly in the eleventh session to 81.5%.

Table 1. Summary of Analysis Results



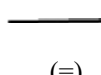

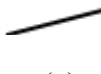
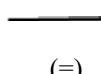
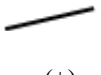
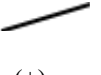
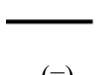

No.	Condition	A1	B	A2
1	Length conditions	5	6	5
2	Estimation of direction trends	 (+)	 (+)	 (=)
3	Tendency to stability	Stable 80%	Stable 83,3%	Stable 80%
4	Data trace	 (+)	 (+)	 (=)
5	Level of stability and range	stabil/(57%-62,5%)	stabil/(75%-82%)	stabil/(83%-85%)
6	Level change	(62,5%-58,5%)/((+4))	(81,5%- 75%)/((+6,5))	(84%-83%)/((+1))

Table 2 Results of Analysis Between the Speech Ability of Students Speech Conditions

No.	Condition comparison	B/A1	A2/B
1.	Number of variables	1	1
2.	Change in direction and effect	 (+)	 (+)
		 (=)	 (+)
3.	Changes in stability trends	Stable to Stable	Stable to Stable
4.	Level change	(75%-62,5%)/((+12,5%))	(84%-75%)/((+9%))
5.	Percentage overlap	0%	-

One of the supporting factors in providing interventions in this study is the presence of a picture card or flashcard media. With this media, it makes children become more interested in participating in this speech development program. Based on the facts in the field shows that most children prefer stories or learning that are accompanied by pictures. It is assumed that the image has a concrete nature, where the information to be conveyed seems more realistic, so that it is considered sufficient to facilitate students in understanding something or information.

Since mentally retarded children find it difficult to understand something abstract, to make it easier to understand something a mentally retarded child needs to be assisted with images that attract his attention. In addition, based on the facts in the field, the pictures motivate the child to learn, especially the colored pictures, this is because children with intellectual disabilities are easily bored with an activity.

Photos or images function as media in conveying messages through an image related to the visual senses (Afiffah & Soendari, 2017). The message

to be conveyed is realized in the form of visual communication symbols. In the baseline-2 (A2) phase, there are five sessions or meetings. The ability to pronounce vowels and consonants (h, k, m, r) has increased a lot even though intervention is no longer given. In the eleventh session subjects received 83% results and this showed an improvement from the last session on the intervention condition (B). In the twelfth session until the fifteenth session the stable results were 85% which was obtained from the vowel sound score of 88% and the consonant letter score (h, k, m, r) by 82%. And decreased slightly in the last session or the sixteenth session to 82%.

The treatment given to the ability to speak vowel sounds and consonants (h, k, m, r) retarded students in grade 1 is to use the phonetic method. It is proven that before the treatment is given using the phonetic method, the ability of the subject still tends to be low. However, when given treatment using the phonetic method the subject's ability to speak in vowels and consonants (h, k, m, r) has increased. Furthermore, after no intervention was given, it was seen that the subject's

ability continued to show improvement and stability. This proves that the phonetic method influences the ability to speak vowel and consonant sounds (h, k, m, r) retarded students in grade 1.

Based on the results of data analysis shows that after being given an intervention using the phonetic method in grade 1 mentally retarded students at SLB Tunas Bangsa Blitar City, it turns out the ability to speak vowels and consonants (h, k, m, r) shows increased results.

Subjects were given repeated training, with a length of conditions in the baseline-1 (A1) phase of 5 sessions, an intervention phase (B) of 6 sessions, and a baseline-2 phase of 5 sessions.

This can be proven by summarizing the results of data analysis in conditions and between conditions with careful and careful calculation of the data obtained in the field, and has also been proven by increasing the ability to speak through the line graphs that have been presented.

CONCLUSIONS

Based on the results and discussion of the above research, it can be concluded that the use of phonetic methods affects the ability to speak vowel and consonant sounds (h, k, m, r) grade 1 mentally retarded students at SLB Tunas Bangsa Blitar City.

Class teachers, are expected to provide articulation learning exercises to their students, especially mentally retarded students who generally also experience interference or speaking problems. Learning speaking exercises using phonetic methods can be applied, because it can help students practice their speaking skills in accordance with the correct articulation. Students of the Department of Special Education are expected to be able to learn deeper about the various characteristics possessed by children with special needs, so that later they can provide interventions and services that are appropriate to the needs of children. Researchers Furthermore, it is expected to develop similar research with different and wider scope.

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