

THE SPEAKING ABILITY IMPROVEMENT ON THE PRESCHOOLERS WITH CEREBRAL PALSY THROUGH SPEECH THERAPY

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Abstract

The Speaking Ability Improvement on the Preschooler with Cerebral Palsy through Speech Therapy. This study aims to improve the speaking ability of the preschoolers with cerebral palsy through speech therapy, and describe the child's ability to speak before action, during action, and after action. The subject is preschoolers with *cerebral palsy* at *Sekolah Luar Biasa* YPAC Manado, who are 4 children. This study uses the action research conducted in three cycles, each cycle includes three phases, i.e. planning, execution and observation, and reflection. The results show that the speech ability can be enhanced through the use of speech quality improvement. The speech ability improvement is reinforced with a difference of the initial assessment results, which is 21.5%, and the final result (77.5%), that is significant.

Keywords: speaking ability, preschoolers, cerebral palsy, speech therapy.

Introduction

One of the development stages that has started since baby is talking. Sastra (2011) speaking is the speech that indicates a person's skills in uttering sound in a word. The children's ability in uttering sounds in a word or simple sentence is determined by many factors. One of the factors is the *cerebral palsy*. Furthermore, Sastra (2011) explains that *cerebral palsy* is a disorder or abnormality that occurs during the brain development which affects the motor cells within the central nerve arrangement; are chronic and not progressive due to the abnormalities or defects in the brain tissue

that has not finished growing. The disorders experienced by children will affect the difficulty in speaking. The children's speech is not clear and very difficult to understand. Children with this disorder will have trouble in interacting. The speaking difficulty that is experienced by each child is very different. The difference is caused by the factors that cause various cerebral palsy. Therefore, the treatment must be different too. The results of field observations indicate that the speech disorder experienced by each preschooler with *cerebral palsy* is various and generally their speaking is difficult to be understood because it is not clear. The problems faced by children are very complex. It is because the children do not get appropriate treatment with the difficulties that exist on them. It means the way in handling the disorder is the same. The method used by the teacher should be in accordance with the level of speech disorders and need to consider the existence of abnormalities carried by children. The existence of children's speaking ability has to be made reference to provide handling and provide appropriate therapy according to the children's disorder. If the treatment is not suitable with the disorders that exist, it will affect difficulties in handling the children's speaking problem. Therefore, the development of speech needs to be considered by the teacher early on. It needs for early detection on the speaking development of children with *cerebral palsy*, because it can be used as a benchmark for teachers to handle whether the child has speech development disorder or not. Meberg & Broch (2004) The most common cause of *cerebral palsy* is a lack of oxygen at birth, at the most common type of *cerebral palsy*, it is called *spastic*, i.e. the muscle is stiff and difficult to move. The causes of *cerebral palsy* affect the diversity of speech disorders experienced by every child. Sastra (2011) The speech disorders in children is one of disorders that is often experienced by children, that reach 5-8% of preschoolers. Speech disorder during early childhood should receive treatment according to the level of a child's speech development. To help dealing with speech disorders of children, the talk therapy will be tried. Salim (1996) Speech therapy is an attempt of healing for those who have abnormalities or obstacles in speech, language and rhythm through exercises tailored to the disorder. Speech therapy is performed to four children with *cerebral palsy*. Among the four children with *cerebral palsy*, there are children who have speech disorder because of mental disorders, there are children who have speech disorders due to stiff tongue, face writhing movements, there are children who experience voice disorders.

When doing speech therapy, teacher needs to consider the ability of children that are adjusted to the training materials. The training materials that will be provided are to pronounce vowel and

consonant sound; pronounce the syllable, pronounce words and simple sentences or short sentences. Speech therapy needs to be done slowly and repeatedly. This is done because there are children who experience stiffness of the tongue, upper lip and lower lip, and there is also among the children who suffer weak tongue which causes unclear speech. Eleanor Schonell (1989) The children with *cerebral palsy* have a disorder that can cause new abnormalities if they do not have rehabilitation and education services or they have obtained treatment but the treatment is wrong. The talk therapy is important so that the children can communicate in daily life. Therefore, the therapy for children with *cerebral palsy* should be done regularly. The objectives are: (1) to improve the speaking ability of the preschoolers with cerebral palsy through speech therapy and (2) to describe the child's speaking ability before action, during action, and after the action.

Research Method

This study uses action research methods, referring to the model developed by Kemmis and Mc Taggart (1988) in Arikunto (2010). This action research is divided into three cycles of treatment. The implementation of the cycle consists of three stages, i.e. planning, execution and observation, as well as reflection. Each cycle is conducted over four weeks, i.e. from February to May 2015. This action research is conducted in YPAC (Foundation for Development of Disabled Children) Kindergarten, Manado. The subjects are four preschoolers with *cerebral palsy*. Data collection techniques are done by observing the teaching and learning activities in each cycle, conducting interviews, analyzing document, and testing. The assessment of the actions is conducted qualitatively by comparing the real conditions should be. Qualitative research data are obtained from observations, interviews, and documentation and observation note study. The quantitative data are obtained from the tests before action, after action and formative tests at the end of each cycle. The data processing technique is qualitative descriptive data that describes the real condition or facts obtained. The success rate analysis is done in every cycle after the learning process with the action test evaluation. The data analysis of cycle I use the formula: the right number is divided by the total of questions and multiplied by 100%. The formative test analysis of cycles II and cycles III use the action test. Data processing is done the same way with the pre test and post test. To give meaning, it uses five categories, i.e.: > 80% (excellent), 75-79% (good), 60-74% (medium), 50-59 (low), and <49% (very low).

Result and Discussion

RESULTS

Data comparison of speaking ability of each child can be reported in Table 1 below.

Speech Scores

Speech Ability	Child's Name																				
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D					
	Initial Assessment				End of Cycle I				End of Cycle I II				End of Cycle I III				Mean				
	%				%				%				%								
- Say short sentence	20	20	22	24																	21,5%
- Utter letters Pronounce syllable					51	61	60	58													57,5%
Pronounce word									60	62,5	65	65									63%
- Say short or simple sentence													77	74	79	80					77.5%

Table 1. The Score of Children's Speaking Development

Table 1 describes the mean score comparison of the speaking development score is at the initial assessment of 21.5%; the end of the first cycle of 57.5%; the end of the second cycle of 63%; and the end of the third cycle of 77.5%. The four children are able to utter or pronounce the vowel sounds, consonants, syllables, say the word, and say a simple sentence or a short sentence. Action speaking exercise by applying speech therapy had a positive impact. The post test result is 77.5%, compared with the average of pre-test which is only 21.5%. It can be concluded that there is an increase in speaking ability of the four preschoolers with *cerebral palsy* from the first cycle to the

second and to the third cycle. This indicates that there has been an increase in the ability to talk on the first cycle, second cycle and third cycle.

DISCUSSION

The preschooler with *cerebral palsy* has difficulty in speaking. His speech is not clear. Salim (1996: 32) explains that many children with *cerebral palsy* are difficult or cannot speak as if his speech tools cannot be coordinated, children sometimes bend over backwards to speak but his voice is not clear, so people cannot understand. Santrock (2009) The *cerebral palsy* disorder results in a lack of muscle coordination, shaking, slurred speech. Disorders experienced by children with *cerebral palsy* affects on their study. Based on the fact, the child with *cerebral palsy* has weakness in speech. Therefore, to help overcoming the problem of speech, the speech therapy which is appropriate to the presence of abnormalities experienced by each child which *cerebral palsy* is needed. The speech exercise emphasize on the word recognition through a process of listening and then imitate the sound of vowels, consonants sound; then utter a syllable, pronouncing words and simple sentences. In the process of the exercise, it is carried out individually. Speech therapy is performed in the three cycles. At the beginning of assessment, the average of speaking learning performance of the child A, child B, child C, and child D is only 21.5%. The low ability to talk to each child is because the intervention has not been made. Soharso (1982) explained that there are problems that carried by *cerebral palsy* children, such as paralysis, mental developmental disorders and possibly impaired vision, auditory. At the first cycle, children are trained to recite vowel sounds, pronouncing the sound of consonants. The end of the second cycle of children's ability to speak is increased to 57.5%. This increase is because the children continue to be trained how to utter / pronounce vowel sounds and consonant sounds and syllables repeatedly. The speaking ability at the end of the second cycle, the average of children's ability to pronounce the sound of the word is increased to 63%. Then at the end of the third cycle, the average of pronouncing / saying a simple sentence is increased to 77.5%. This represents an increase from the end of the first cycle to the second cycle, and then headed to the third cycle. It means that the application of speech therapy can improve the speaking ability of children with *cerebral palsy*.

CONCLUSION

Based on the analysis of data, as already described in the results and discussion, it can be concluded that: 1) The speaking ability of a child can be improved through increased quality of speech therapy in saying / pronouncing vowels, consonants, syllables, words and simple sentences. The data of children's speaking ability show that the end of the first cycle analysis result is 57.5% (less), and the end of the second cycle analysis results is 63% (moderate) increased to 77.5% (good). The score data of children's speaking ability show that the children's ability to speak between cycles is increased. An increase in the children's speaking ability is reinforced by differences in the results of the initial assessment of 21.5% and the final results show (77.5%) it is significant; 2) Speech therapy, in addition to improve the ability to speak on the preschoolers with cerebral palsy, can also motivate children to learn, besides it also can create a learning atmosphere that is fun and not boring for the child; and 3) The efforts to improve the children's speaking ability during the study is to give an opportunity for each child to do the exercises, provide motivation, provide an opportunity for every child to exercise pronouncing letter sounds, syllables, words and simple sentences, and give an appreciation of the learning outcomes of children.

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