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Implementation of the Total Communication Method in Improving the Storytelling Ability of Deaf Students in SLB B YRTRW Surakarta

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ABSTRACT

This study aims to determine the effect of total communication implementation in improving the storytelling ability of deaf students in SLB B YRTRW Surakarta. The type of research used in this study is experimental research with a research design, "one group pretest-posttest design." The validity test used is content validity, and the reliability test uses the Intraclass Correlation Coefficient (ICC), which is obtained at 0.831. The data collection technique used in this study was through a test in the form of an action test. The data analysis technique was carried out using Wilcoxon Sign Rank Test analysis. The results of this study are known from Zcount, which is -2.371, and Asymp-Sig (2-tailed), which is 0.018, with a significance level (α) of 0.05. Based on the average pretest score and post-test score show that the storytelling ability of deaf students has increased. This study concludes that the total communication method affects improving the storytelling ability of deaf students at SLB B YRTRW Surakarta in the academic year 2023/2024.

Keywords: Total Communication Method, Storytelling Skills, Deaf Learners

INTRODUCTION

Law No. 8/2016 on Persons with Disabilities states that persons with disabilities are everyone who has physical, intellectual, mental, and sensory limitations for an extended period and who, in their interaction with the environment, can experience obstacles and difficulties to participate fully and effectively with citizens and based on equal rights. When compared to individuals in general, people with disabilities experience abnormalities in the growth and development of one or more aspects, namely physical, mental, emotional, and social, so special assistance needs to be provided (Sambira, 2020). One of the disabilities in question is deafness. Deafness is the loss of hearing ability experienced by a person due to damage or malfunction of the hearing device, either in whole or in part, which has an impact on the language aspect, which becomes inhibited (Somantri, 2018).

Language barriers in deaf people occur due to limited understanding and vocabulary. This also causes deaf people to have difficulty in composing or stringing words. Andari (2014) explains that the need for more ability in composing words is also influenced by limited vocabulary. This obstacle certainly affects daily life, especially in terms of communication. Language is a means of communication with the environment (both small environments in space and time, as well as large environments in space and time (Wibowo, 2021). Communication problems result in deaf people having difficulty understanding and conveying the content of a message. This problem is in line with the preliminary study at SLB BC Karya Bhakti Surabaya (Firdausy, 2016). The problem experienced by people who

are deaf or hard of hearing is low language and speech skills in terms of conveying the content of the message, understanding the content of the message, and how to express it, causing a lack of communication skills and social interaction with the surrounding environment. Good language and speech skills allow deaf people to communicate by conveying messages or information and expressing expressions.

One of the skills that can be used to improve language skills is storytelling. As Tampubolon (Agustinah, 2020) said, storytelling has a significant effect on the development of language skills. However, based on the results of field studies, it was found that deaf learners often experience difficulties in storytelling skills. Deaf learners are less able to retell the content of the story according to the plot, so they ignore essential elements in the story. Learners are also less able to express their feelings based on the content of the story and have limitations on language forms or communication methods. Therefore, deaf learners need to be able to improve storytelling skills related to language and speech development through total communication methods.

The total communication method was chosen because it includes various forms of communication, such as sign language, spoken language, facial expressions, and visuals that allow deaf people with different storytelling abilities and levels of loss to fulfill their individual needs. An example of one form of communication is sign language. Deviyanti et al. (Murti & Noormiyanto, 2023) mentioned that deaf people feel comfortable sharing using Indonesian sign language because of the use of hands and expressions to communicate. Thus, the use of the total communication method is expected to help deaf learners improve their storytelling ability, especially in aspects of language ability and effective communication from all spectrums of language as part of communication (Kholis et al., 2020). In addition, learners are expected to be able to express stories better.

Based on the description above, this study is designed to determine the effect of total communication on improving the storytelling ability of deaf children. Through total communication, it is hoped that deaf learners can develop their storytelling ability, which, of course, also impacts their language and communication skills.

METHOD

The method used in this research is a quantitative method with an experimental research type. Experimental research with a research design "one group pretest-posttest design." The population in this study were deaf students in SLB B YRTRW Surakarta with research subjects totaling six deaf students in class V-b with an age range of 6-12 years. Data collection techniques using tests in the form of action tests conducted on pretest and posttest. The data validity technique in this study uses content validity by analyzing the results of instrument assessment using Aiken's V formula and Microsoft Excel assistance. The reliability test used is the Intraclass Correlation Coefficient (ICC). The data obtained from the test results were then analyzed using the Wilcoxon Sign Rank Test analysis.

RESULT AND DISCUSSION

Experimental research with a "one group pretest-posttest design" research design can be carried out with three stages, namely giving a pretest to measure the dependent variable before treatment is carried out, giving experimental treatment to the subjects, and giving another test to measure the dependent variable after treatment or posttest (Hikmawati, 2020). Before the research took place, several stages were carried out, including the validity

test and instrument reliability test. The instrument validity test was carried out to measure whether the instrument used was valid before data collection. The validity test was carried out with an expert validation test, which aims to provide an assessment of the instrument based on the specified criteria, including aspects of content, construction, and language on each instrument item. The validity test used in this study is Aiken's V formula. Aiken formulated Aiken's V formula to calculate the content-validity coefficient based on the results of the assessment of experts on items in terms of how well the system represents the construct being measured (Hendryadi, 2015). The following are the results of the validity test calculation with Aiken's V formula.

Table 1. Aiken's V Validity Test Calculation Results

Item	Score			s	s	s	∑s	n(c-1)	V	Description
	I (K)	II (S)	III (B)	1	2	3				
1	5	4	5	4	3	4	11	12	0,917	VALID
2	4	5	5	3	4	4	11	12	0,917	VALID
3	5	5	4	4	4	3	11	12	0,917	VALID
4	5	4	4	4	3	3	10	12	0,833	VALID
5	4	5	4	3	4	3	10	12	0,833	VALID
6	4	4	5	3	3	4	10	12	0,833	VALID
7	5	4	4	4	3	3	10	12	0,833	VALID
8	5	4	4	4	3	3	10	12	0,833	VALID
9	5	4	4	4	3	3	10	12	0,833	VALID
10	5	4	4	4	3	3	10	12	0,833	VALID

A reliability test is carried out to measure the extent to which the measurement results using the same object will produce consistent data. Reliability test. A test can be said to have high reliability if the test can provide results that remain the same (consistent, steady) (Khairunnisa, 2023, p. 60). The reliability test in this study was carried out by involving three assessors or raters and using the Intraclass Correlation Coefficient (ICC). The following are the results of the ICC Reliability Test calculation.

Table 2. Intraclass Correlation Coefficient

	Intraclass Correlation	**95% Confidence Interval**		**F Test with True Value 0**			
		Lower Bound	Upper Bound	Value	df1	df2	Sig.
Single Measures	.923	.720	.988	36.899	5	10	.000
Average Measures	.973	.885	.996	36.899	5	10	.000

This research was conducted by using an action test twice, namely a pretest (before treatment) and a posttest (after treatment). A pretest was conducted to find out and collect data on the initial ability of deaf learners in terms of storytelling ability. When doing the pretest, learners were asked to be able to retell the contents of the story according to the plot. Based on the pretest results from 6 deaf learners, the total score was 233.32, with an average score of 38.88. From the data, it is known that the lowest score obtained is 31.66,

and the highest score is 50. The results of the pretest score data of deaf learners are presented in the histogram as follows.

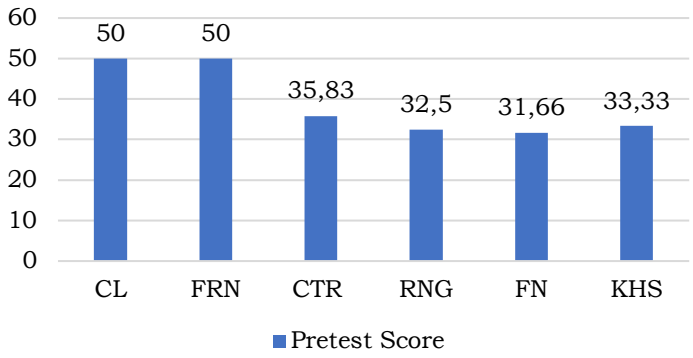

Figure 1. Histogram of Pretest Score

After obtaining data on the initial ability of deaf students, the next stage of research is the provision of treatment using the total communication method. This treatment is done to improve the storytelling ability of deaf students in SLB B YRTRW Surakarta. The steps of applying the total communication method are speech and articulation coaching, speech reading exercises, speech teaching, passive language teaching, and active language (Rusyani, 2019). The stage carried out after giving the treatment is to conduct a posttest. A post-test is undertaken to find out and collect data on the ability of deaf students after being given treatment. Based on the post-test results, the overall total score obtained was 579.97, with an average score of 96.66. In addition, the posttest results also show that the lowest score is 91.66, and the highest score is 99.16. The following is the result of the posttest value in the form of a histogram

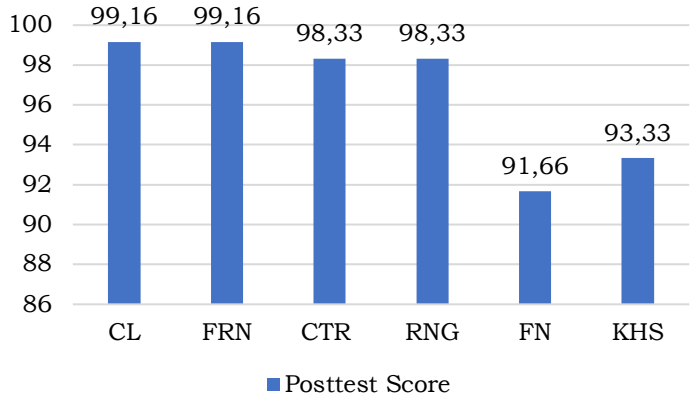

Figure 2. Histogram of Posttest Score

Based on the histogram of pretest scores and posttest scores, if the two scores are compared in a histogram, the results of the deaf learners' score data will show the following comparison.

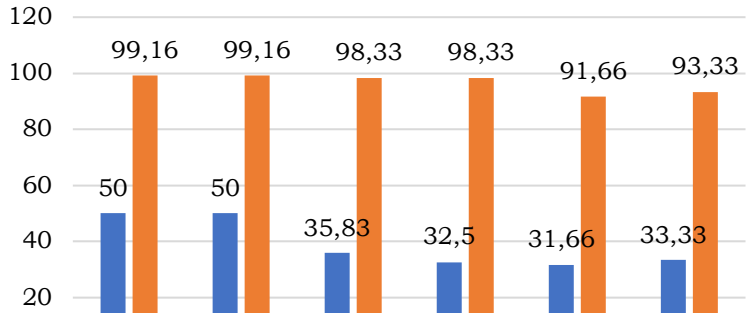

Figure 3. Comparison Histogram of Pretest and Posttest Score

Based on the histogram that has been presented shows that there are differences in results where deaf students experience an increase in scores in storytelling ability. Before data analysis is carried out, some stages must be carried out as a prerequisite test in research, namely the normality test. The normality test provisions used with the help of SPSS are if the Sig value. < 0.05, then the data is not normally distributed; and if Sig. > 0.05, then the data is normally distributed (Hidayat, 2023, p. 110). The results of the normality test calculation using the Shapiro-Wilk Test are as follows.

Table 3. Normality Test

	Kolmogorov-Smirnov			**Shapiro Wilk**		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
Pretest	.304	6	.088	.753	6	.021
Postest	.361	6	.014	.770	6	.031

In the normality test table, the results show that the pretest obtained a significance of 0.021, and the posttest obtained a significance of 0.031, which means that the significance value of the pretest and posttest is smaller or less than 0.05. So, the data is not normally distributed. After conducting the normality test, the next step is to test the hypothesis. The hypothesis proposed in this study is Ho. There is no effect of total communication implementation in improving the storytelling ability of deaf students in SLB B YRTRW Surakarta and Ha. Total communication implementation has an impact on improving the storytelling ability of deaf students in SLB B YRTRW Surakarta.

Hypothesis testing was conducted to determine whether the total communication method affects improving the storytelling ability of deaf students at SLB B YRTRW Surakarta. Analysis requirements are carried out by looking at and comparing Asymp-Sig (2-tailed) and the significance level (α). If the significance value is smaller than 0.05, it is said that the total communication method improves the storytelling ability of deaf students. Conversely, if the significance value is more significant than 0.05, it is said that the total communication method does not affect improving the storytelling ability of deaf students. This research uses the Wilcoxon Sign Rank Test. Wilcoxon Sign Rank Test is used to measure the significance between 2 groups of paired data with an ordinal or interval scale, but not normally distributed (Tiffany, Triwiyanti, & Rahajeng, 2019). The following are the results of hypothesis testing using the Wilcoxon Sign Rank Test.

Table 4. Statistic Test

	Posttest - pretest
Z	-2.214
Asymp. Sig (2 tailed)	.027

Based on the results of the Wilcoxon Sign Rank Test of the pretest and posttest scores, it can be seen that the Zcount is -2.214 and Asymp-Sig (2-tailed) is 0.027 with a significance level (α) of 0.05. This shows that the Asymp-Sig (2-tailed) value is smaller than the significance level (α) 0.05, so Ho is rejected, and Ha is accepted (0.027 < 0.05). So, it can be concluded that the implementation of total communication affects improving the storytelling ability of deaf students at SLB B YRTRW Surakarta.

CONCLUSION

The results of the pretest and post-test assessments show that the storytelling ability of deaf students in SLB B YRTRW Surakarta has increased after the implementation of the total communication method. This is also supported by the results of hypothesis testing using the Wilcoxon Sign Rank test, which shows the Asymp-Sig (2-tailed) value is smaller than the significance level (α) 0.05. Ho is rejected, and Ha is accepted (0.027 < 0.05), which means that the implementation of total communication affects improving the storytelling ability of deaf students. Based on the description above, it can be concluded that total communication implementation affects improving the storytelling ability of deaf students in SLB B YRTRW Surakarta.

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