

The Effect of Realia Media on Speaking Ability in Down Syndrome Children in SLB Negeri Singkawang

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ABSTRACT

This study aims to determine the effect of realia media on speaking ability in children with Down syndrome in SLB Negeri Singkawang. The problem is that six subjects with Down syndrome have poorly developed speaking skills (articulation, intonation, duration, word selection). The realia media used in the treatment stage are paper dolls made in the form of puppets with pictures of students and puppets with images of teachers. The use of realia media is applied with the concept of playing puppets, which aims to build two-way communication and stimulate the development of the speaking ability of children with Down syndrome. This research uses a quantitative approach with a Pre-Experimental method and a one-group pretest-posttest research design. The sampling technique in this study used the population, namely all students with Down syndrome in SLB Negeri Singkawang. Data collection techniques were carried out using pre-test, treatment, and post-test. Data analysis in this study used non-parametric statistical methods, which were analyzed descriptively to test the hypothesis using the Wilcoxon test. Based on the results obtained, there is a difference between the results of the pre-test and post-test scores indicated by an increase in the average value index, so it can be concluded that there is an influence on the ability to speak in children with Down syndrome in SLB Negeri Singkawang.

Keywords: Down Syndrome, Speaking Ability, Realia Media

INTRODUCTION

Speaking ability is a form of individual skill in pronouncing words, or language sounds oral to convey intent and purpose, ideas, ideas, contents of mind, and feelings. This speaking ability is a primary need for everyone to become a social link (Nilawati, 2019). However, the ability to speak is also a challenge for some groups of individuals, especially people with disabilities who have disorders in their speech development, one of which is Down syndrome. Down syndrome itself is classified as a condition that inhibits physical, mental, and intellectual development (Irwanto et al., 2019); this is due to abnormalities in the development of chromosome 21 arrays, which number three, while there should normally be two (Rohmadheny, 2016). Based on the obstacles that people with Down syndrome have it is enough to make them also face obstacles in the aspect of language or their ability to speak. Etymologically, the word psycholinguistics is formed from the words psychology and linguistics. Both words are in different fields of science, where psychology examines speaking behavior or speaking processes, and linguistics examines language structures (Abdul, 2015).

Stimulation in overcoming obstacles to the ability to speak in children with Down syndrome can be by utilizing daily activities in basic communication through play therapy. The play therapy in question is to prepare and arrange several activities to stimulate children's speech development gradually. Play therapy can be done by utilizing media or simple objects around the child, which are also easy to find. Several objects that can be utilized as much as possible are real media that can essentially be seen, held, and touched by children, also called realia media. Realia media itself, if defined, is any object in real form that can be seen and touched directly. There are several classifications of realia media, including realia media that does not involve a modification process; in other words, it has its original form, which can be taken as an example in the form of surrounding objects such as wood, rocks, leaves, and so on. Next is realia media, which has undergone a modification process; in this case, realia media can be divided into several types, such as miniatures, crafts, artificial models, and the like (Novita, 2018). A person's speaking ability can also be seen from several aspects: Accuracy of speech, placement of appropriate pressure, tone and duration, choice of words, and accuracy of target talks (Sujinah, 2017).

Various problems obtained during the initial observation period led to the researcher's suspicion that the six students experienced obstacles in the speaking ability of the six students with Down syndrome due to natural factors barriers they had. Researchers chose realia media as the media to be used in this study, where this realia media will only focus on the use of real objects, which are expected to bridge the two-way communication that exists between learners and researchers balanced with direction slowly on improving their speaking skills in the accuracy of articulation, intonation, pressure, tone, duration and target of speech.

METHOD

This research uses a quantitative approach with a pre-experimental research method and a one-group pretest-posttest research design. The choice of method in this study is based on the objective of the research, which is to determine the effect of realia media on the speaking ability of children with Down syndrome in SLB Negeri Singkawang, who are sampled. The experimental method is a research method carried out by experiment. This experimental method is used to determine the effect of certain independent variables (treatment) on dependent variables (results) (Sugiyono, 2019).

The population in this study consisted of six Down syndrome students of SLB Negeri Singkawang, with the sampling technique being a saturated sample. The data collection techniques used were observation, questionnaires, and documentation. In the next stage, the research instrument was tested using the validity test, namely the Spearman test; based on the validity test results, 30 valid questionnaire statements were obtained. After the validity test is carried out, the reliability test is carried out to determine the extent to which the instrument or measuring instrument in the research is reliable and consistent using Cronbach's Alpha.

The data analysis techniques were descriptive statistical analysis, pre-requisite tests, and hypothesis testing. Descriptive statistical analysis was carried out by presenting data in a frequency distribution table, calculating respondents' average value, total score, and level of achievement, and interpreting it. The normality test used in this study is the normality test with the Shapiro-Wilk method. This Shapiro-Wilk test is used in data capacity with a small range of numbers because it will be difficult if the data is too excessive

(Muliani & Widana, 2020). This Shapiro-Wilk data test uses the SPSS 26 application. Hypothesis testing in this study used a non-pre-tactic test with the Wilcoxon test. The Wilcoxon test can be used in paired observation conditions to determine the similarity of media before and after observation as a result of a behavior (pretest-posttest).

RESULT AND DISCUSSION

Presentation of research data obtained from each variable using the SPSS 26 application. Researchers collected the results of student scores before and after being given treatment in the form of play therapy using realia media (paper dolls). At the implementation stage, the researcher is assisted and supervised by the homeroom teacher in the Down syndrome class of SLB Negeri Singkawang, conducting an initial testing stage using an instrument in the form of a questionnaire that has been prepared beforehand on the next day the students are given treatment using realia media in the form of paper dolls which have also been prepared beforehand, at this stage students carry out various learning activities while playing by demonstrating paper dolls (in the form of students) demonstrated by each and paper dolls (in the form of teachers) demonstrated by researchers. Activities carried out include singing alphabet songs, The activities carried out include: singing alphabet songs with a repetition system, learning to introduce themselves, telling stories or storytelling simply based on their daily activities both individually and in pairs where several series of activities do not escape the attention of researchers in spelling, articulation, intonation, duration, and accuracy of interlocutors in their implementation

In the final stage, the researcher, assisted and supervised by the homeroom teacher in the Down syndrome class of SLB Negeri Singkawang, again conducted a test with an instrument in the form of the same questionnaire to compare the results of data before and after being given treatment through the use of realia media (paper dolls) by researchers in the speaking skills of Down syndrome students at SLB Negeri Singkawang.

The following table contains the results of the pre-test and post-test scores of students with Down syndrome in SLB Negeri Singkawang:

Table 1. Pre-test Score

No	Student's	Pre-Test Score
1.	L	88
2.	N	50
3.	VF	76
4.	SA	80
5.	D	78
6.	FY	77

Table 2. Pre-test Score

No	Student's	Pre-Test Score
1.	L	102
2.	N	77
3.	VF	100
4.	SA	101
5.	D	100
6.	FY	97

Based on the results of the pre-test and post-test data above, it can be described about the average, maximum value, minimum value, and standard deviation calculated using the SPSS version 26 application. The results of the descriptive statistical analysis of the pre-test and post-test data above can be seen in the table below:

Table 3. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Pre-test	6	50	88	69.00	8.972
Post-test	6	77	102	89.50	9.870
<i>Valid N (listwise)</i>	6				

Based on the table above, it can be concluded that the average result from the data (pre-test) with six research samples is 69, the maximum value is 88, the minimum value is 50, and the standard deviation is 8.972. From the data (post-test), the average result is 89, the maximum value is 102, the minimum value is 77, and the standard deviation is 9.870.

Table 4. Normality Test

	Kolmogorov-Smirnov^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-test	.369	6	.010	.790	6	.047
Post-test	.368	6	.011	.650	6	.002

Based on the results in the table above, the pre-test value is 0.046, and the post-test value is 0.002. Based on decision-making, if the significance value < 0.05 , then the data is not normal; if the significance value > 0.05 , then the data can be normal. Based on the decision-making above, the data in this study are not normally distributed because the results of the two pre-test and post-test values above are less than 0.05.

Table 5. Wilcoxon Signed Rank Test

	Test Statistics^a
	Score_posttest - Score_pretest
Z	-2.201 ^b
Asymp. Sig. (2-tailed)	.028

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

The statistical test table above shows that the value of Asymp. Sig. (2-tailed) of 0.028 < 0.05 , then H_0 is rejected and H_1 is accepted. Decision-making can also be determined through Zcount which, based on the results of the table above, the value of Zcount is -2.201, and the known value of Ztable with an alpha of 5% or 0.05 is -1.645 which means that the value of Zscore is $-2.201 > -1.645$ (Ztable), then H_0 is rejected and H_1 is accepted.



Figure 1. Realia Media

CONCLUSION

Based on the study's results, it can be concluded that realia media affects the speaking ability of children with Down syndrome in SLB Negeri Singkawang. This is indicated by an increase from the total score of the pre-test to the total score of the post-test after the treatment is given (treatment) and an increase in speaking ability covering aspects (articulation, intonation, duration, and word selection).

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