



The Effect of Scramble Media on Improving the Ability to Compose Simple Sentences of Deaf Students

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Abstract: This study aims to determine the effect of Scramble media on improving the ability to compose simple sentences for deaf students in class IV B at Special School for the Deaf. This study used an experimental approach in the form of pre-post experimental design one group pre test-post test design. The subjects in this study were all deaf students totaling 6 students. This study uses a sampling technique that is non-probability sampling. The technique used in data collection is a written test in the form of multiple choice objective tests. Data analysis technique used is non-parametric statistics with Wilcoxon Sign Rank Test. The results of descriptive analysis obtained the average value of the post test is greater than the pre-test value, namely 57.80 to 88.33. Furthermore, the results of the analysis of the Wilcoxon Sign Rank Test showed that the Zhitung value was -2.214 and the Asymp- Sig (2-tailed) was 0.027 with a significance level (α) of 0.05 or 5%. It can be concluded that Asymp-Sig (2-tailed) is smaller than the significance level or $0.027 < 0.05$ (α).

Keywords: *Effect, scramble, simple sentences, deaf students*

I. Introduction

Education is a conscious effort made by someone who is characterized by changes in attitude and behavior towards a better direction. Education is not only for normal children but children with special needs (ABK) also need education like normal children as explained in Law Number 20 Article 5 Paragraphs 1 to 5 concerning National Education. Children with disabilities are students who require special handling according to their obstacles and characteristics. One of the children with disabilities who need special handling is the deaf. Deafness is a condition of individuals who experience obstacles in the sense of hearing so that they experience obstacles in receiving sound stimuli and other stimuli related to hearing (Hasibuan et.al, 2020)

Deaf children have hearing impairments. The hearing impediment also has an impact on the difficulty of communicating verbally both in text and orally. The use of correct sentence structure also needs to be owned by deaf students so that communication with others is more effective (Fauziah et al, 2018). Considering that deaf children have difficulties in communicating verbally, writing skills are needed to facilitate communication. Research conducted by Sari (2015) found that the problems of deaf children include difficulty composing sentences, writing sentences that are remembered, and writing sentences that are not in accordance with the sentence structure. This causes the sentences written by deaf children to tend to be contradictory. In line with that, meadow states that deaf children communicate using short and simple sentences. One of the media that can be used to help deaf children construct sentences with the correct structure is Scramble media. Through Scramble media, deaf children can be trained to compose simple sentences, so that they will be accustomed to expressing their thoughts and feelings in the form of sentences (Sintya & Sopingi, 2017). Used to express thoughts and feelings in the form of sentences.

Some studies reveal that Scramble media affects the ability to compose simple sentences. Sari's (2015) research revealed that using Scramble media can improve the ability to compose simple sentences for deaf students. The study used quantitative research media experimental design one group pre-test post-test design. The results showed that the Z value obtained (2.05) was greater than the 5% critical value of 1.96.

Based on the initial observations that have been made on deaf students in class IV B at Sekolah Khusus Tunarungu Surakarta in Indonesian language subjects, researchers found a problem that deaf

students in class IV B at Sekolah Khusus Tunarungu Surakarta have not been able to compose simple sentences. This is shown when students compose the sentence "Mom went to the market to buy vegetables" deaf students compose the sentence into "mother bought vegetables to the market" Student motivation to compose simple sentences with S-P-O-K sequence is not yet high. In addition, teachers have not implemented media that makes students interested in learning so that students are easily bored. Teachers also have not created innovative learning media strategies used in teaching Subjek-Predikat-Objek-Keterangan (S-P-O-K) material.

II. Method

The research design used in this study was Pre Experimental Design with the form of One Group Pretest-Posttest Design. This study only uses one group of subjects. This research design is giving Pretest to the subject, giving treatment to the subject, and giving post test to the subject. The data collection technique that will be used in this research is a written test (objective). The test form that will be used by researchers is a multiple choice test. The tests that will be used by researchers have been prepared in accordance with the indicators of compiling sentences. The multiple choice tests used by researchers amounted to 20 items. This research uses data analysis techniques with the Wilcoxon Sign Rank Test calculation method, because this test can be used to determine the difference between before and after treatment

III. Results and Discussion

A. Result

The research was conducted at the Surakarta Special School for the Deaf with the research subject being deaf students in class IV B totaling 6 students consisting of 2 boys and 4 girls. Students' initial ability in composing simple sentences can be measured by conducting a pretest before treatment. Indonesian language subjects at the Special School for the Deaf and Hard of Hearing in Surakarta have a Kriteria Ketuntasan Minimal (KKM) limit of 65.

Based on the results of the pretest, it is known that one student obtained a score of 80 as the highest score and there were two students who had reached the KKM for Indonesian language subjects, including one student obtained a score of 80 and the next student obtained a score of 70. Then there were four students who had not reached the KKM, including one student obtained a score of 60, the next student obtained a score of 55 and two students obtained a score of 40

Students' ability to compose simple sentences after treatment or treatment can be measured by holding a posttest, so that the results can be compared with the initial ability of students before getting treatment. Where from the posttest results it can be concluded that all subjects as many as six students, all obtained scores above the Indonesian Language KKM, namely one student obtained a score of 100 as the highest score, two students obtained a score of 90 then two more students obtained a score of 85 and one student got a score of 80. The effect of using Scramble media on improving the ability to compose simple sentences of deaf students in class IV B at Surakarta Sekolah Khusus Tunarungu can be seen by comparing the pretest and posttest data. The increase in the average value (mean) between the pretest and posttest can be seen from table 1. The average value of the pretest was 57.50 then increased in the posttest of 88.33.

Hypothesis testing was carried out by comparing pretest and posttest data using the Wilcoxon Signed Rank Test calculation. Hypothesis testing with these calculations aims to determine whether there is a difference between the two samples or to determine the effect that appears before or after treatment with Scramble media on improving the ability to compose simple sentences of deaf students in class IV B. The basis for making decisions on whether the hypothesis test is rejected or accepted depends on the comparison of Asymp.Sig (2-tailed) with the significance level (α).

Table 1. Descriptive Statistical Data of Pretest and Posttest Values

Descriptive Statistics					
N	Minimu	Maximu	Mean	Std. Deviation	
Pretest	6	40	80	57.50	16.047
Posttest	6	80	100	88.33	6.831
Valid N (listwise)	6				

Table 2. Statistical Test Results

Test Statistics ^a	
Posttest- Pretest	
Z	-2.214 ^b
Asymp. Sig. (2-tailed)	.027
Wilcoxon Signed Ranks Test ^c	
^b Based on negative ranks	

Based on table 2, it can be seen that Zhitung is -2.214 and Asymp-Sig (2-tailed) is 0.027 with a significance level (α) of 0.05. It is known that Asymp-Sig (2-tailed) is smaller than the significance level or $0.027 < 0.05$ (α) then H_0 is rejected and H_a is accepted, meaning the difference between pretest and posttest results, so it can also be concluded that H_a which reads “There is an effect of using Scramble media on improving the ability to compose simple sentences of deaf students in class IV B at Surakarta Sekolah Khusus Tunarungu in the 2022/2023 school year” can be accepted. In addition, the results of descriptive analysis showed an increase of 53.6% from the average pretest score of 57.50 to 88.33 for the posttest score.

B. Discussion

This study was conducted to determine the effect of using Scramble media on improving the ability to compose simple sentences for deaf students in class IV B at Sekolah Khusus Tunarungu Surakarta in the 2022/2023 school year. The dependent variable in this study is the ability to compose simple sentences for deaf students in class IV B at Sekolah Khusus Tunarungu Surakarta and the independent variable is Scramble media.

A deaf student is someone who has lost the ability to hear which includes all levels of hearing loss. Deaf students experience obstacles in language development, difficulties in mastering their vocabulary, so that the language used by deaf students in writing sentences is irregular sentence structure (Sintya & Sopingi, 2018).

Revealing that the obstacles experienced by deaf children are in their syntactic abilities. Syntax is a branch of linguistics that concerns the arrangement of words in sentences (Dewantoro et al, 2020). The problem of deaf students in composing sentences needs to be given a solution to solve it. One of them is by giving treatment using Scramble media. Revealed that to train children to express thoughts and feelings through oral and written language, they need to be trained to compose simple sentences using scramble media.

Scramble media is a media used to help the syntactic ability of deaf students through the help of picture cards, sentence cards and word cards. With the cards that have been scrambled, it is expected that children can arrange the cards according to the correct sentence structure. An effective sentence structure includes a sentence structure consisting of Subject, Predicate, Object, Description (S-P-O-K). To apply Scramble media in this research, it is necessary several stages, namely the pretest, treatment, posttest stages.

The pretest stage is to determine the ability of students before being given treatment, giving treatment or treatment, and posttest to determine the ability of students after being given treatment. The research began by conducting a pretest on 6 deaf students in class IV B at Sekolah Khusus Tunarungu Surakarta as research subjects by working on 20 multiple choice questions. The results obtained from these activities are 2 students with the initials FNCS and M get scores above KKM

(Minimum Completeness Criteria) and 4 other students with the initials CRAW, F, FAF, K, M get scores below KKM. Of the four students who scored below the KKM, there were 2 students with the initials FAF and K who got the lowest score, namely getting a score of 40. According to the homeroom teacher IV B, FAF and K students have not really mastered the sentence structure besides that during teaching and learning activities FAF and K often joke so that they are less focused in participating in learning.

The next activity is the provision of treatment or treatment which is carried out for 3 times a week, namely Tuesday, Thursday and Friday. The first day of treatment was held on Tuesday by learning sentence elements in groups using picture cards with S-P-O-K information and random sentence cards. On the first day of treatment there was one student who was absent from class due to illness so, on Wednesday there was a treatment activity for one student with the initials M. The second day of treatment was held on Thursday with spelling accuracy material. The activity was still the same as the first day's activity, namely forming groups first before entering the material. On the second day treatment used random sentence card media accompanied by spelling accuracy questions in a sentence. The third day of treatment was held on Friday with fun material, namely the accuracy of word selection. In this treatment students are still divided into two groups, the media used are picture cards and sentence cards. The application is by matching pictures with sentence cards that have been scrambled and not forgetting the first and second day's treatment, namely by showing the order of sentence elements and proper spelling. Each student has the opportunity to compose the same sentence so that, it is hoped that each student can understand the concepts that have been learned so as to create memorable and meaningful learning.

The last activity of the research implementation stage is the posttest. Deaf students of class IV B totaling 6 worked on 20 multiple choice questions that were the same as the pretest. The results obtained from these activities are all students in class IV B at SEKOLAH KHUSUS B Surakarta obtained scores above the KKM. There is one student with the initials M who gets a score of 100 which is the maximum score. This is because M always pays more attention and often restudies after the material is given than other subjects. In addition, M is also the most diligent and disciplined student. The teacher of class IV B explained that in other subjects this M student is always focused and enthusiastic. For students with the initials FAF and K who previously received the lowest score during the pretest, but at the time of the posttest FAF and K students had reached the KKM, namely getting scores of 85 and 80. A significant increase in scores from 40 to 85 and from 40 to 80 can be observed in the treatment activities, FAF and K students are very active in asking what is not understood, more enthusiastic and enthusiastic in treatment activities. This is because the application of Scramble media uses fun games.

Based on the results of the pretest and posttest, it can be seen that the scores of all subjects have increased. This is because during the process of composing simple sentences, students look enthusiastic and interested in composing simple sentences using Scramble media so that it can be concluded that students are active in composing simple sentences with Scramble media. Students listened calmly and concentrated when the material was given. This Scramble game is the right learning media to help students master the ability to compose simple sentences and teach the value of cooperation if carried out in groups. The benefits of the Scramble game which can increase student creativity, can improve student memory, and teach about the value of cooperation in learning groups. It can be seen that by applying Scramble media in the Indonesian language learning process will help in improving the syntactic ability of deaf students, language skills, and the ability to work together in groups. The advantage of Scramble is that it can increase student activeness, encourage student courage in direct interaction. Through Scramble media students can learn to express their feelings, hearts, opinions and can improve students' reading skills.

The limitations in this study are media limitations. The card media used in this study is made from 350 gram ivory paper so that it can be damaged, folded and even lost if students use it carelessly. It would be better if the media is in the form of an application so that the media can minimize the existing limitations. However, if in the form of cards, it can use thicker paper. Another limitation lies in the question of spelling accuracy which is considered difficult by the subject, although the question is still able to be understood by the subject, the question should be adjusted to the material in the Indonesian language textbook. Although there are some limitations in this study, this study has proven that Scramble media can have an influence on improving the ability to compose simple sentences of fourth grade deaf students at YRTRW Surakarta Special School.

Research from Sintya & Sopingi (2017) also found that Scramble media can affect the ability to compose simple sentences in deaf students. The results showed an increase in the ability to compose simple sentences after treatment with Scramble media from an average score of 51.67 to 88.33. Furthermore, research conducted by Fauziah et al (2018) also found the influence of Scramble media on the ability to compose sentences of grade VIII students at the National Level Pembina Special School. of course it gets harder to deal with. This has an impact on the child himself and his parents or anyone who lives with a child with ASD

IV. Conclusion

In conclusion, Based on the discussion of the results of the research that has been carried out, it can be concluded that Scramble media has an effect on improving the ability to compose simple sentences for students of class IV B at Surakarta Sekolah Khusus Tunarungu.

References

- Adiningsih, Yulia. 2019. "Analisis Variasi Struktur Kalimat Dalam Grup Whatsapp Tnarungu." Seminar Nasional Riksa Bahasa XIII.
- Ariyanto, Metta. 2018. "Peningkatan Hasil Belajar Ipa Materi Kenampakan Rupa Bumi Menggunakan Model Scramble." *Profesi Pendidikan Dasar* 3(2). doi: 10.23917/ppd.v3i2.3844.
- Atmaja. 2018. *Pendidikan Dan Bimbingan Siswa Berkebutuhan Khusus*. Bandung: PT Remaja Rosdakarya.
- Christine, Jelyna. 2019. "Pemerolehan Bahasa Anak Tunarungu." *Jurnal Penelitian Dan Pengembangan Pendidikan Anak Usia Dini* 3(2). doi: <http://dx.doi.org/10.30870/jpppaud.v3i2.4616>.
- Dewantoro, D. A., Yasin, M. H. M., & Irvan, M. (2020, October). Measurement of e-learning readiness for students with and without disabilities. In 2020 6th International Conference on Education and Technology (ICET) (pp. 152-159). IEEE.
- Fakhiratunnisa, Safira Aura, Asyharinur Ayuning Putriana Pitaloka, and Tika Kusuma Ningrum. 2022. "Konsep Dasar Anak Berkebutuhan Khusus." *MASALIQ* 2(1). doi: 10.58578/masaliq.v2i1.83.
- Fauziah, Ayu Yulistiyani, and Rizqi Fajar Pradipta. 2018. "Implementasi Metode Sosiodrama Dalam Mengasah Pelafalan Kalimat Anak Tunarungu Kelas XI." *Jurnal ORTOPELAGOGIA* 4(2). doi: 10.17977/um031v4i12018p082.
- Hasibuan, I. W., Ritonga, S., & Novri, N. (2020). Komunikasi Nonverbal Guru pada Murid Tunarungu dalam Meningkatkan Kemampuan Berinteraksi Sosial. *PERSPEKTIF*, 9(1), 19-26.
- Hilda Hadian, Latifah, Sugara Mochamad Hadad, and Ina Marlina. 2018. "Penggunaan Media Big Book Untuk Meningkatkan Keterampilan Membaca Kalimat Sederhana." *Didaktik: Jurnal Ilmiah PGSD STKIP Subang* 4(2). doi: 10.36989/didaktik.v4i2.73.
- Isnaini, M. 2015. "Pemikiran Pendidikan Anak."
- Khairun Nisa, Sambira Mambela, and Luthfi Isn'i Badiah. 2018. "Karakteristik Dan Kebutuhan Anak Berkebutuhan Khusus." *Jurnal Abadimas Adi Buana* 2(1). doi: 10.36456/abadimas.v2.i1.a1632.
- Khairunisa Rani, Ana Rafikayati, and Muhammad Nurrohman Jauhari. 2018. "Keterlibatan Orangtua Dalam Penanganan Anak Berkebutuhan Khusus." *Jurnal Abadimas Adi Buana* 2(1). doi: 10.36456/abadimas.v2.i1.a1636.
- Kurniawan. 2017. "Africa's Potential for the Ecological Intensification of Agriculture." 26(9):1689-99.
- Liza, Nurhaliza, Eko Kuntarto, and Ade Kusmana. 2020. "Pemerolehan Bahasa Anak Berkebutuhan Khusus (Tunarungu) Dalam Memahami Bahasa." *Jermal* 1(2). doi: 10.31629/jermal.v1i2.2214.
- Maros, Hikmah, and Sarah Juniar. 2017. "Seri Penyuluhan Bahasa Indonesia: Kalimat." Kementerian Pendidikan Nasional Republik Indonesia.
- Nugroho, Gregorius Bambang. 2022. "Asesmen Dan Intervensi Pendidikan Bagi Siswa Dengan Hambatan Pendengaran." *Psiko Edukasi* 20(1). doi: 10.25170/psikoedukasi.v20i1.3423.
- Rachmawati, Suhairiah, Imam Muchtar, and Umar H. M. Shaleh. 2014. "Peningkatan Aktivitas Dan Hasil Belajar Siswa Kelas VI Mata Pelajaran PKn Materi Pokok Demokrasi Melalui Penerapan Model Pembelajaran Scramble Di SD Negeri Kademangan 1 Bondowoso." *Jurnal Edukasi* 1(1).
- Rahmah, Siti, Lia Yuliati, and Edy Bambang Irawan. 2017. "Penguasaan Konsep Ipa Pada Siswa Sekolah Dasar." *Prosiding Seminar Nasional PS2DMP ULM* 3(1).

- Riana, Riana, and Lasman Gulo. 2022. "Peningkatan Kemampuan Mengidentifikasi Teks Ulasan Dengan Menggunakan Model Pembelajaran Scramble." *Educativo: Jurnal Pendidikan* 1(2). doi: 10.56248/educativo.v1i2.74.
- Ridha, Nikmatur. 2017. "Proses Penelitian, Masalah, Variabel Dan Paradigma Penelitian." *Jurnal Hikmah* 14(1).
- Sari, R. P. (2015). Peningkatan Kemampuan Menulis Karangan Deskripsi Melalui Teknik Peta Pikiran (Mind mapping) Pada Anak Tunarungu Kelas VII di Sekolah Luar Biasa Marsudi Putra I. *WIDIA ORTODIDAKTIKA*, 4(5).
- Scramble, M. 2015. "Pengaruh Penerapan Metode Scramble Terhadap Kemampuan Menyusun Kalimat Anak Tunarungu Kelas V SDLB-B Dharma Wanita Sidoarjo." Universitas Negeri Surabaya.
- Sintya, Aulia and Sopingi Sopingi. 2017. "Permainan Scramble Untuk Meningkatkan Kemampuan Menyusun Kalimat Sederhana Siswa Tunarungu." *Jurnal Ortopedagogia* 3.
- Solikhatun, Yanuar Umi. 2013. "Penyesuaian Sosial Pada Penyandang Tunarungu Di SEKOLAH KHUSUS Negeri Semarang." *Educational Psychology Journal* 1.
- Sudarmi, Sudarmi, and Burhanuddin Burhanuddin. 2017. "Keefektifan Model Pembelajaran Kooperatif Tipe Scramble Dalam Keterampilan Menulis Kalimat Bahasa Jerman Siswa KelaS XI SMA NEGERI 11 Makassar." *Eralingua: Jurnal Pendidikan Bahasa Asing Dan Sastra* 1(1). doi: 10.26858/eralingua.v1i1.2991.
- Sugono. 2013. *Mahir Berbahasa Indonesia Dengan Benar*. Jakarta: Gramedia Pustaka.
- Sumira, Dika Zuchdan, Deasyanti Deasyanti, and Tuti Herawati. 2018. "Pengaruh Metode Scramble Dan Minat Baca Terhadap Kemampuan Membaca Pemahaman Siswa Sekolah Dasar." *Indonesian Journal of Primary Education* 2(1). doi: 10.17509/ijpe.v2i1.11673.
- Tria, Aprianto, and Badawi Achmad. 2017. "Sistem Koreksi Kata Dan Pengenalan Struktur Kalimat Berbahasa Indonesia Dengan Pendekatan Kamus Berbasis Levenshtein Distance." *Jurnal SPIRIT* 9(1).
- Yeta, Riza Asri, and Mega Iswari. 2018. "Efektivitas Media Sentence Scramble Games Dalam Meningkatkan Kemampuan Sintaksis Bagi Anak Tunarungu." *Jurnal Penelitian Pendidikan Kebutuhan Khusus* 6.
- Yodeska, Yolla Karchia, and Nursaid Nursaid. 2020. "Struktur Kalimat Dan Diksi Teks Eksposisi Karya Siswa Kelas VIII SMP NEGERI 12 Padang." *Pendidikan Bahasa Indonesia* 8(3). doi: 10.24036/108242-019883.