

## Effectiveness Of Using Extension Method On Syntax Ability Of Children With Language Disorders In Slb C Kerten Surakarta

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### Abstract

*Syntactic ability is an important ability in the process of communicating in everyday life. Mastery of grammar is needed so that information can be conveyed and received well. Each child has different varieties from one another. Some children may also experience delays or even problems with their language. The results of mapping speech delay cases show that 16 Inclusive Elementary Schools with state status in Surakarta City have students with special needs who experience speech delay problems. Language disorders have many characteristics, including the inability to form sentences (syntax). Based on this, the researcher wants to know how effective extension methods are on the syntactic abilities of children with language disorders. The method one group pre-test and post-test design used a purposive sampling technique. The mean syntactic proficiency rose from 39.35% before therapy to 54.88% after treatment. The syntax proficiency of children improved by 15.53%. Conclusion The extension method effectively improves children's syntax with language disorders in SLB C Kerten Surakarta..*

**Keywords:** Extension method, language disorder, syntax

### BACKGROUNDS

Mastery of grammar, or syntax, is essential in everyday communication. Mastery of grammar is needed so that information can be conveyed and received correctly. Based on its scope, syntax is divided into phrases, clauses, and sentences. A phrase is a grammatical unit in a combination of words that performs one of the syntactic functions in the sentence structure (Gani & Arsyad, 2018). Each child's language acquisition has a distinctive characteristic according to their development. Judging from the aspects of their development, each child has different varieties from one another. Some children may also experience delays or even problems with their language. Child language disorders have the highest prevalence in speech therapy compared to other abilities. WHO (World Health Organization), in 2019, language development disorders worldwide had a reasonably high incidence, as much as 27.5% or equivalent to three million children experiencing disorders. The prevalence of developmental disorders, including motor, linguistic, behavioral, autism, and hyperactivity delays, is rising across Asia and Africa. The prevalence of developmental delays is 12-16% in the United States, 24% in Thailand, 22% in Argentina, and 13-18% in Indonesia. Data from the Indonesian Ministry of Health in 2020 indicated that the toddler population in Indonesia was 23,475,758, comprising 11,980,204 males and 11,495,554

females. The Indonesian Ministry of Health reported that 0.4 million (16%) of Indonesian toddlers experienced developmental disorders in gross motor skills, fine motor skills, hearing disorders, and language development (Irna Munasirah et al., 2024). Based on research conducted by (Wiliyanto and Husadani, 2023), findings can be seen in speech delay cases at the Surakarta City Inclusive Elementary School. The results of speech delay case mapping show that 16 public inclusive elementary schools in Surakarta City have special needs students who experience speech delay problems. Language disorders have many characteristics, including the inability to form sentences (syntax). Several methods can deal with syntactic disorders, including the extension, expansion, and linguistic approach (Pratomo, 2022).

### METHOD

This research design uses experimental research using a one-group pretest-posttest design as a data collection approach. The population used is children with intellectual disabilities at SLB C Kerten Surakarta. The sample in this study were children with intellectual disabilities, totaling at least 20 people. This study employed purposive sampling as its technique. Purposive sampling is a sampling method characterized by specified criteria. The criteria for admission and exclusion

are as follows: a. Eligibility Criteria This study's inclusion criteria comprise: 1) Respondents have intellectual disabilities. 2) Respondents are aged 3-8 years. 3) Parents of respondents are willing for their children to be samples. b. Exclusion Criteria The exclusion criteria are eliminating or removing subjects who are inclusion criteria from the study for various reasons. The exclusion criteria in this study are students who are sick or have died during the study.

**RESULT AND DISCUSSION**

This study was conducted at SLB C Kerten Surakarta at Jl. A. Yani No. 374A, Kerten, Laweyan District, Surakarta City, Central Java 57143. SLB C Kerten Surakarta is specifically intended for people with mental retardation. Mental retardation is a condition where a child experiences mental retardation.

Table 1. Frequency Distribution of Respondent Characteristics Based on Gender

Gender	Frequency	Percentage
Male	14	70%
Female	6	30%
<b>Total</b>	<b>20</b>	<b>100%</b>

Source: SPSS 2024

Based on Table 1. above, the results show that there are 14 male respondents with a percentage of 70% and six female respondents with a percentage of 30%. It shows that there are more male respondents than female respondents.

Table 2. Frequency Distribution of Respondent Characteristics Based on Age

Age	Frequency	Percentage
5	2	10%
7	9	45%
8	9	45%
<b>Total</b>	<b>20</b>	<b>100%</b>

Source: SPSS 2024

Based on Table 2. above, the results show that two students aged 5 had a percentage of 10%, nine students aged 7 had a percentage of 45%, and nine students aged 8 had a percentage of 45%.

Table 3. Frequency Distribution of Receptive Language Ability before and after treatment

Treat	N	Mean	SD	95% CI	
				Lower	Upper
Pre-test	20	39.35	22.249	28.93	49.76
Post-Test	20	54.88	22.626	44.29	65.47

Source: SPSS 2024

According to Table 3, the mean value prior to therapy is 39.35%, with a minimum of 10% and a maximum of 77.5%. The mean value post-treatment is 54.88%, with a minimum of 22.50% and a high of 95%. Consequently, receptive language ability has risen before and after treatment.

Table 4. Normality Test

	Shapiro-Wilk		
	Statistic	df	Sig.
Pre-test	0.932	20	0.172
Post-test	0.942	20	0.257

Source: SPSS 2024

According to Table 4, the significance p-value for the pre-test is 0.172, while the significance p-value for the post-test is 0.257. The P-value exceeds 0.05, indicating that the data can be regularly distributed.

Table 5. Paired T-test

Paired T-test		Signifikansi	Koefisien
		(p)	Korelasi
	Pre-Test	0.000	0.865
	Post-Test		

Source: SPSS 2024

According to Table 5 above, the findings indicate significance. The P-value equals 0.000. Significance  $p < 0.05$  indicates that the extension strategy is beneficial in enhancing the syntactic

abilities of children with language difficulties. This study aims to determine the profile of syntactic abilities before being given treatment to children with language disorders; when the study was conducted, the respondents gave a good response, and the researcher conducted a test of the children's syntactic abilities using the Northwestern Syntax Screening Test. The results showed that the children's abilities before treatment had various results; out of 20 children, there was a lowest value of 10% and a highest value of 77.5%, with an average value of syntactic abilities before treatment of 39.35%. This means that the average ability of 20 children is less than the norm for the Northwestern Syntax Screening Test.

This research aligns with the investigation of Nikolas et al. (2024) titled *Varying Syntax to Enhance Verb-Focused Intervention for 30-Month-Olds With Language Delay*. This study examines the significance of variance in enhancing the syntactic capabilities of children with language impairments. This study corresponds with the research undertaken by scholars, namely by manipulating syntactic capabilities through the extension approach. This viewpoint is further corroborated by the research of Shhub et al. (2023) titled *A Synthesis of Reading Prosody: Evaluating Phrasing and Syntax Interventions*. The study concludes that prosody can influence syntactic abilities in children. It is related to the extension method to improve the syntactic abilities of children with language disorders because it uses sentence lengthening techniques so that children find it easier to add vocabulary and form correct sentences.

This study aims to determine the profile of syntactic abilities after being given treatment to children with language disorders; when the study was conducted, the respondents gave a good response, and the clients were enthusiastic and interested in the research process, so an increase in the results of the children's syntactic abilities was obtained. The results showed that the children's abilities before treatment had diverse results; out of 20 children, there was the lowest value of 22.5% and the highest value of 95%, with an average value of syntactic abilities after treatment of 54.88%. Children's syntactic

abilities increased by 15.53%. This study is successful because there was an increase in children's syntactic abilities, according to research conducted by Wisman Weil et al. (2019) entitled *Complex Syntax Interventions for Young Children with Language Impairments*.

In this study, it was able to strengthen that the extension method can improve the syntactic abilities of children with language disorders because the intervention approach with models such as extension, role-playing, and inspirational storybook models can provide effective results on children's syntactic abilities. This study aims to provide an overview of the effectiveness of using the extension method on the syntactic abilities of children with language disorders.

Following the pre-test and post-test administration, a normality test was conducted to ascertain the normal distribution of the data. The Normality Test results indicated a pre-test Sig. A P-value of 0.172 and the post-test Sig. p-value of 0.257, both beyond 0.05. Therefore, it can be inferred that the data is usually distributed. Given the normal distribution of the data, a Paired T-test is conducted to assess the efficacy of the extension approach on the syntactic abilities of children with language impairments.

The Paired T-Test findings indicated a significance P-value of 0.000. The significance level  $p < 0.05$  indicates that the extension approach successfully enhances the syntactic abilities of children with language difficulties. Consequently, the findings of this study address the research hypothesis: The extension method has been demonstrated to help enhance the syntactic abilities of children with language difficulties. The findings of this study align with the research by Pebriyanti (2021) titled "The Effect of PECS on Enhancing Syntactic Ability in Children with Hearing Impairments at the Mutiara Rumah Pintar Foundation, Salatiga." This study seeks to assess the impact of employing PECS on enhancing syntax in children with hearing impairments.

The results of this study indicate a significant effect of the application of the Picture Exchange Communication System (PECS) in improving the syntactic abilities of children with hearing impairment, as indicated by the significance value of the Wilcoxon test of 0.000

<0.05 significance level. It is also evidenced by an increase in the syntactic ability scores of all children (100%) before and after PECS was applied. The research conducted by the researcher discusses the effectiveness of using the extension method on the syntactic abilities of children with language disorders. The extension method has been shown to improve the receptive language abilities of children with language disorders because, by using this method, children are more stimulated in forming sentences. Hence, children find it easier to make sentences correctly.

This result is consistent with the research conducted by Werfel et al. (2021) titled *The Production of Complex Syntax in Spontaneous Language by 4-Year-Old Children With Hearing Loss*. Syntactic abilities in youngsters with hearing impairments exhibit intricate delays, necessitating appropriate interventions, such as employing cards to enhance sentence construction. Pratomo (2022) supports this, elucidating that the extension approach involves augmenting a child's vocabulary semantic attributes.

## CONCLUSION

This extension method is recommended for improving children's language skills. Children are given the opportunity to learn new patterns in speech. Based on the research conducted, it was concluded that the extension method is effective for the syntactic abilities of children with language disorders at SLB C Kerten Surakarta.

## SUGGESTION

Although the extension method is effective for the syntactic abilities of children with language disorders, further research is needed on other variables related to children's syntactic abilities. For example, the age of the child. In this study, the ages used varied. It is hoped that further research will be able to examine the syntax of children at one age so that it can be used as a profile of syntactic abilities according to age.

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