



# EFFECT OF STRUCTURED TEACHING PROGRAM ON KNOWLEDGE REGARDING LEARNING DISABILITIES IN PRIMARY SCHOOL CHILDREN AMONG PRIMARY SCHOOL TEACHERS

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## Abstract:

**Introduction:** The ability of the brain to transmit, receive, and process information is impacted by learning disability, which is a neurodevelopmental disorder. A child with a learning disability may experience trouble reading, writing, articulating, hearing, understanding mathematical concepts, and with general cognizance. **Objectives:** 1) To assess the pre-test and post-test level of Knowledge Regarding Learning Disabilities in Primary School Children among Primary School Teachers in Selected Schools of Guwahati, Assam. 2) To assess the effect of Structured Teaching Program on Knowledge Regarding Learning Disabilities in Primary School Children among Primary School Teachers in Selected Schools of Guwahati, Assam. 3) To determine the association between the pre-test level of Knowledge Regarding Learning Disabilities in Primary School Children among Primary School Teachers in Selected Schools of Guwahati, Assam with the selected demographic variables. **Material & Methods:** The research approach and design adopted for this study is quantitative pre-experimental one group pre-test post - test design. The study was conducted at Shankardev Vidya Niketan, Narengi; Bonda Anchalik High School, Bonda; Adarsha Jatiya Vidyalaya, Narengi, Guwahati, Assam. 60 nos of primary school teachers were selected by using non - probability convenience sampling technique. The tools used in the study were demographic variables to collect the baseline demographic information and the Structured knowledge questionnaire (Total no. of items were 30) were used to find out the knowledge regarding Learning Disabilities in primary school children. Descriptive and Inferential statistics were used to analyse the data. The frequency and percentage was calculated to assess the knowledge of the students **Results:** Results revealed that 31(52%) primary school teachers pre-test had moderately adequate knowledge and 29(48%) had inadequate knowledge whereas in the post-test after the Structured Teaching Program, 55(92%) had adequate knowledge and 5(8%) had moderately adequate knowledge regarding Learning Disabilities in primary school children. Pre-test mean with standard deviation was  $9.2 \pm 2.61$  and post-test mean and standard deviation was  $23.5 \pm 1.88$  using paired 't' test ( $t=33.11$  at  $p < 0.0001$ ). **Conclusion:** Structured Teaching Program was effective in improving the knowledge of students regarding Learning Disabilities in primary school children. It also reveals that there is a significant association between pre-test knowledge score with the selected demographic variable of qualification. Thus, STP must be regularly included as a part of teaching learning for the primary school teachers.

**Keywords:** Effect, Structured Teaching Program, Learning Disabilities, Primary School Students, Primary School Teachers.

## Introduction

The prevalence of SLDs in India varies from 6% to 16.9% across various studies. Dyslexia (or specific reading disorder) is the most common SLDs. The prevalence of dyslexia, dysgraphia, and dyscalculia was found to be 11.2%, 12.5%, and 10.5% and that of combined learning disorder was 7.5% in school children in studies done in South India.[1] Children who have learning disabilities often encounter issues including self-doubt, worry,

frustration, social isolation, and shame In 2021, India is thought to have approximately 90 million people with varying degrees of learning disabilities (LDs). 26% of the primary school students are at risk of developing selected LDs in.[2] 1 in 5 children, or 20%, have learning and attention issues. US kids receiving special education services for a learning disability number more than 2.5 to 2.8 million. 2.5 to 2.8 million children in special education for learning disability make up 47% of all children receive special education services.[3] Children may have difficulty comprehending as it is not due to lack of intelligence. Many of the children with learning disability are just as intelligent as the children who do not have the issue. However, there is difference in how they receive and process information. Learning disabilities can be detected early on and the right action can be taken to help the child if the teacher or parent is aware of the warning indicators.

**Ghimire S. (2017)** conducted a quantitative study with descriptive cross-sectional design to assess the Knowledge of Primary School Teacher Regarding Learning Disabilities in School Children. The study was carried out on 150 primary school teachers selected by convenience sampling. Structured knowledge questionnaire was used to collect needed data on knowledge of primary school teachers. The findings showed that 79 (52.67%) of the primary school teachers had moderately adequate knowledge and 71 (47.33%) had inadequate knowledge regarding learning disabilities. None of primary school teachers had adequate knowledge on diagnosis of learning disability. It recommended that appropriate training should be provided to the teachers regarding identification, diagnosing and managing the child with learning problems so that child can succeed in school and go on successful careers later in life. [4]

### Objectives of the study

1. To assess the pre-test and post-test level of Knowledge Regarding Learning Disabilities in Primary School Children among Primary School Teachers in Selected Schools of Guwahati, Assam.
2. To assess the effect of Structured Teaching Program on Knowledge Regarding Learning Disabilities in Primary School Children among Primary School Teachers in Selected Schools of Guwahati, Assam.
3. To determine the association between the pre-test level of Knowledge Regarding Learning Disabilities in Primary School Children among Primary School Teachers in Selected Schools of Guwahati, Assam with the selected demographic variables.

### Materials and Methods

A pre-experimental one-group pre-test post-test design was used for the study to accomplish the objectives. 60 nos (sixty) primary school teachers teaching in Shankardev Vidya Niketan, Narengi; Bonda Anchalik High School, Bonda; Adarsha Jatiya Vidyalaya, Narengi, Guwahati, Assam participated in the study from 20<sup>th</sup> February 2023 to 18<sup>th</sup> March 2023. Formal consent and permission from the authorities of Assam down town University was taken before the data collection procedure. The tools used in the study was a demographic variables and the Structured knowledge questionnaire (Total no. of items were 30) to collect the information regarding Learning Disabilities in primary school teachers. Descriptive and Inferential statistics were used to analyse the data. The frequency and percentage was calculated to assess the knowledge of the primary school teachers.

### Result and Discussion

#### Section A: Description of the demographic variables of the primary school teachers

Table 1: Distribution of demographic variables of the primary school teachers

n=60

S. No.	Variables	Frequency (f)	Percentage (%)
1.	<b>Age in years</b>		
	25 years and below	4	7
	26-30 years	8	13
	31-35 years	7	12
	36 years and above	41	68
2.	<b>Gender</b>		
	Male	9	15
	Female	51	85
	<b>Marital status</b>		

3.	Married	51	85
	Unmarried	9	15
4.	<b>Number of children</b>		
	None	18	30
	1	23	38
	2	15	25
	3 and above	4	7
5.	<b>Type of family</b>		
	Nuclear family	47	78
	Joint family	13	22
6.	<b>Religion</b>		
	Hinduism	54	90
	Islam	4	7
	Christianity	2	3
7.	<b>Qualification</b>		
	Graduate with D. El. Ed	40	66
	Graduate with B. Ed	10	17
	Post-Graduate with B. Ed	10	17
8.	<b>Experience in teaching</b>		
	<1 year	7	12
	1-3 years	5	8
	>3-5 years	7	12
	>5 years	41	68
9.	<b>Any exposure to training regarding Learning Disabilities</b>		
	Yes	6	10
	No	54	90

The table 1 shows that with regard to age, 41(68%) were of the age of 36 years and above, 7 (12%) were of the age of 31-35 years, 8(13%) were of the age of 26-30 years and 4(7%) were of the age of 25 years and below. Out of 60 primary school teachers, 9 (15%) were males and 51(85%) were females. 51(85%) were married and 9(15%) were unmarried. 18(30%) had no children, 23(38%) had one child, 15(25%) had two children and 4(7%) have three and above children. 47(78%) of the primary school teachers were from nuclear family and 13(22%) were from joint family. 54(90%) were Hindus, 4(7%) were Islam, 2(3%) were Christians. 40 (66%) had qualification of Graduate with D. El. Ed, 10(17%) were Graduate with B. Ed and 10 (17%) were Post-Graduate with B. Ed. 41 (68%) of the primary school teachers had more than 5 years of experience in teaching, 7(12%) had >3-5 years, 5(8%) 1-3 years and 7(12%) had <1 year of experience in teaching. With regards to any exposure to training regarding learning disabilities, 6(10%) had exposure whereas 54(90%) had no exposure to training regarding learning disabilities.

**Section B**

**Description of knowledge of primary school teachers regarding Learning Disabilities in primary school children**

Table 2: Distribution of respondents based on pre-test and post-test knowledge scores regarding Learning Disabilities in primary school children

Level of Knowledge	Pre-test		Post-Test	
	f	%	f	%
Inadequate knowledge (0-10)	29	48	-	-
Moderately adequate knowledge (11 – 20)	31	52	5	8
Adequate knowledge (21 – 30)	-	-	55	92

The table 2 depicts that in the pre-test, 31(52%) had moderately adequate knowledge and 29(48%) had inadequate knowledge whereas in the post-test after the Structured Teaching Program, 55(92%) had adequate knowledge and 5(8%) had moderately adequate knowledge regarding Learning Disabilities in primary school children.

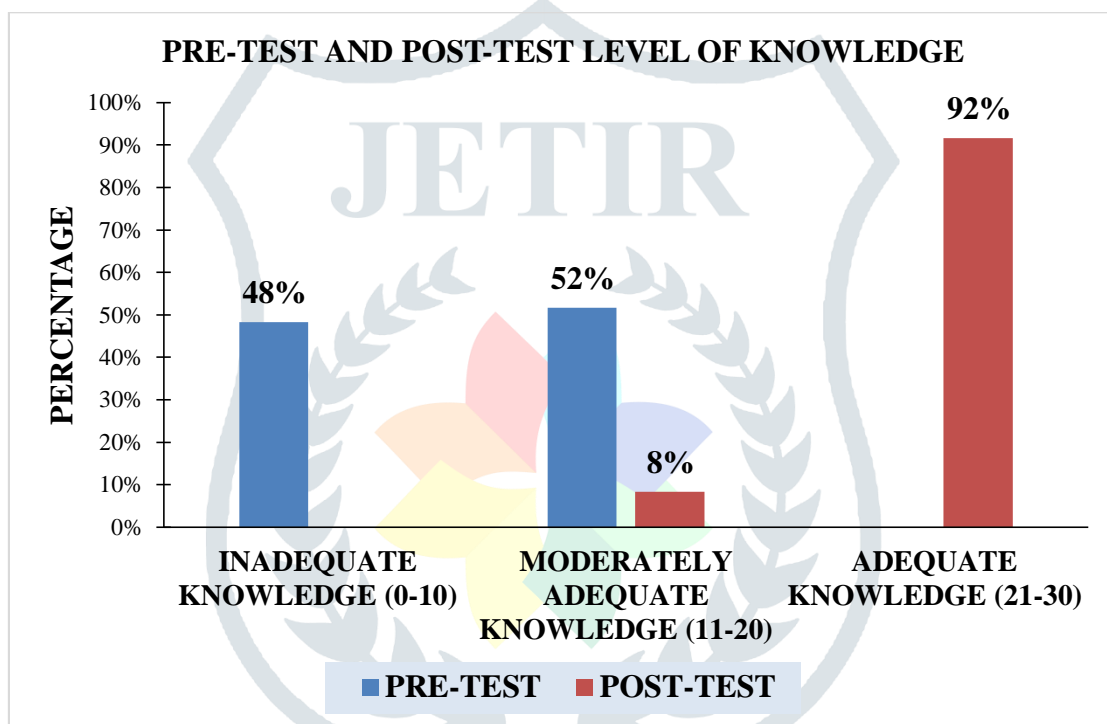


Fig.1: Distribution of respondents based on pre-test and post-test knowledge scores regarding Learning Disabilities in primary school children.

**Section C**

Table 3: Effect of Structured Teaching Program on knowledge regarding Learning Disabilities in primary school children (n = 60)

Comparison knowledge score	Mean	SD	Mean difference	't' test value	df	'p' value	Inference
Pre-test	9.2	±2.61	14.3	33.11	59	0.00001*	S*
Post-test	23.5	±1.88					

S\*=Significant at  $p < 0.05$

The table 3 shows that the pre-test mean score of knowledge of primary school teachers was  $9.2 \pm 2.61$  and the post-test mean score of knowledge was  $23.5 \pm 1.88$ . The mean difference score was 14.3. The calculated paired 't' test value of  $t = 33.11$  was found to be statistically significant at  $p < 0.00001$  level.

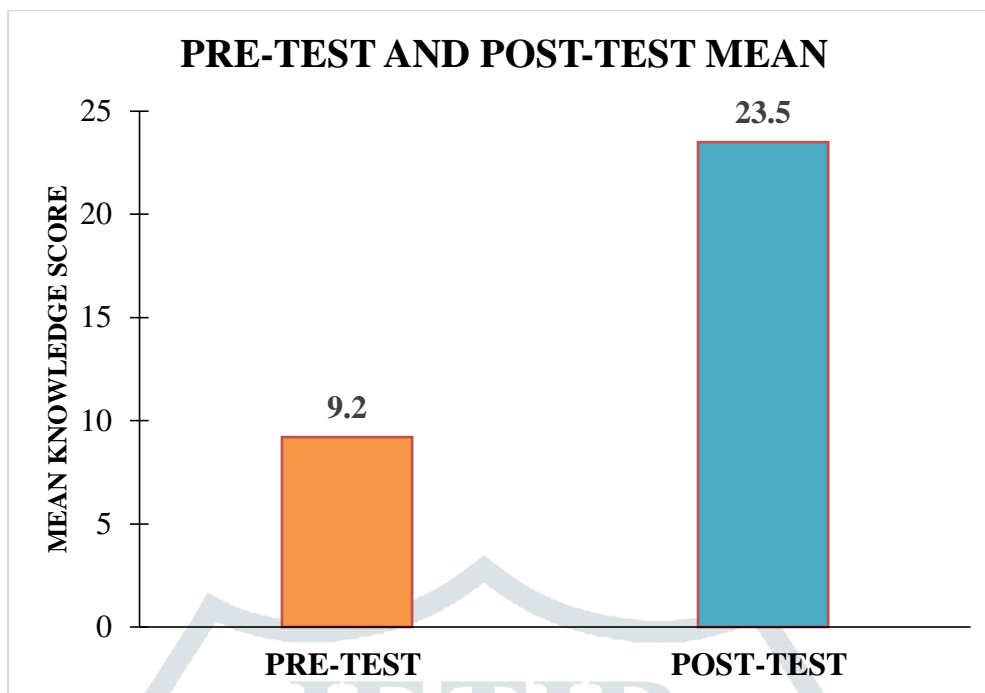


Fig 2: Bar diagram showing the Effect of Structured Teaching Program on knowledge regarding Learning Disabilities in primary school children.

#### Section D

Table 4: Association between selected demographic variables with pre-test knowledge regarding Learning Disabilities in primary school children.

Sl no.	Demographic variables	Pre-test knowledge		$\chi^2$	df	'p' value	Inference
		Inadequate	Moderately adequate				
1.	<b>AGE IN YEARS</b>						
	a. 25 years and below	1	3	1.101	3	0.776	NS
	b. 26-30 years	4	4				
	c. 31-35 years	4	3				
d. 36 years and above	20	21					
2.	<b>GENDER</b>			1.425	1	0.232	NS
	a. Male	6	3				
	b. Female	23	28				
3.	<b>MARITAL STATUS</b>			0.064	1	0.800	NS
	a. Married	25	26				
	b. Unmarried	4	5				
4.	<b>NUMBER OF CHILDREN</b>						
	a. None	8	10				

	b. 1 c. 2 d. 3 and above	10 8 3	13 7 1	1.615	3	0.655	NS
5.	<b>TYPE OF FAMILY</b> a. Nuclear family b. Joint family	23 6	24 7	0.031	1	0.512	NS
6.	<b>RELIGION</b> a. Hinduism b. Islam c. Christianity	26 2 1	28 2 1	0.007	2	0.996	NS
7.	<b>QUALIFICATION</b> a. Graduate with D. Ed b. Graduate with B. Ed c. Post-Graduate with B. Ed	14 8 7	26 2 3	8.74	2	0.012	S*
8.	<b>EXPERIENCE IN TEACHING</b> a. <1 year b. 1-3 years c. >3-5 years d. >5 years	4 3 4 18	3 2 3 23	1.029	3	0.794	NS
9.	<b>ANY EXPOSURE TO TRAINING REGARDING LEARNING DISABILITIES</b> a. Yes b. No	3 26	3 28	0.007	1	0.933	NS

S\*=Significant at  $p < 0.05$  level of significance

NS= Non significant

The table 4 depicts the association of pre-test level of knowledge regarding Learning Disabilities in primary school children with the selected demographic variables.

- 1) The mean pre - test and post - test knowledge scores of respondents was 9.2 and 23.5 respectively.
- 2) Comparison of the mean pre - test and post - test knowledge scores the 't' value 33.11 significant at 0.05 level which indicate that there is a significant difference between the knowledge level of the primary school teachers before and after the implementation of the Structured Teaching Program.
- 3) There is an association between the pre- test knowledge regarding Learning Disabilities in primary school children with the qualification of primary school teachers.

The present study was designed to assess the knowledge regarding Learning Disabilities. The research design adopted for the study was One Group Pre - test Post - test design. Non probability convenience sampling technique was used to select 60 primary school teachers for the study. The data collected for the study were analyzed statistically and discussed based on the objectives.

**The first objective of the study was to assess the level of pre-test and post-test knowledge regarding Learning Disabilities in primary school children among primary school teachers.**

The findings of the present study reveal that in pre-test, 31 (52%) has moderately adequate knowledge, 29 (48%) had inadequate knowledge whereas in post-test after administering Structured Teaching Program, 55 (92%) had adequate knowledge and 5 (8%) had moderately adequate knowledge.

The present study is supported by study conducted by **Kaur S, Tak G (2020)** on effectiveness of structured teaching programme regarding attention deficit hyperactivity disorder in children among teachers selected primary schools of District Sri Muktsar Sahib, Punjab. 60 school teachers were selected using non-probability convenience sampling technique. In the pre-test knowledge score, the result showed that 18 (60%) had average knowledge and 12 (40%) had below average knowledge whereas in the post-test, 17 (56.67%) had good knowledge, 9(30%) have average knowledge and 4 (13.33%) have below average knowledge. The result showed improvement in post-test knowledge and calculated chi square value 24.0915\*at  $p<0.05$  which was highly significant. The study concluded that the STP was effective in improving the knowledge regarding ADHD among teachers. [5]

**The second objective is to assess the effect of Structured Teaching Program on knowledge regarding Learning Disabilities in primary school children among primary school teachers.**

The pre-test mean score of knowledge among primary school teachers was  $9.2\pm 2.61$  and the post-test mean score of knowledge was  $23.5\pm 1.88$ . The mean difference score was 14.3. The calculated paired 't' test value of  $t = 33.11$  was found to be statistically significant at  $p<0.00001$  level. This clearly infers that administration of Structured Teaching Program on knowledge regarding Learning Disabilities in primary school children was found to be effective in increasing the level of knowledge among primary school teachers.

The present study is supported by a study conducted by **Deshmukh SP, Gautam A (2021)** to assess the attitude and effectiveness of structured teaching programme on knowledge of primary school teachers regarding learning disabilities in children in primary schools of Sangli, Miraj and Kupwad corporation area. Findings showed that 81% had average knowledge and 19% of primary school teachers had good knowledge. None of the study participants had excellent level of knowledge regarding learning disabilities before structured teaching program. However the post-test scores showed that 88% had good knowledge and 12% had excellent knowledge. Paired 't' test revealed that the pre-test mean score of knowledge was 9.71 with standard deviation  $\pm 1.16$  and the post-test mean score was 14.20 with standard deviation  $\pm 1.30$ . The mean difference was 4.49 and the calculated paired 't' value is  $t=35.43$  was found to be statistically significant at  $p<0.05$  level. So the researcher concluded that STP was effective in improving the knowledge regarding learning disabilities. [6]

**The third objective of the study was to determine the association between pre-test knowledge regarding Learning Disabilities in primary school children with the selected demographic variables.**

The demographic variable i.e qualification ( $\chi^2=8.74$ ,  $p=0.012$ ) has shown statistically significant association with pre-test level of knowledge regarding learning disabilities in primary school children at  $p<0.05$  level of significance and the other demographic variables has not shown statistically significant association with pre-test level of knowledge regarding learning disabilities in primary school children among primary school teachers.

A study conducted by **Alahmadi NA, Keshky MS (2019)** to assess primary school teachers' knowledge of specific learning disabilities in Saudi Arabia. The results showed that 582 (64.52%) had average knowledge and 320 (35.48%) had poor knowledge. There was significant association between knowledge and the selected demographic variable education with learning disabilities. The study concluded that primary school teachers have average knowledge regarding learning disabilities. [7]

## Conclusion

The present study was conducted to assess the effect of Structured Teaching Program on Knowledge Regarding Learning Disabilities in Primary School Children among Primary School Teachers. The findings of the study revealed that the mean post-test knowledge score is significantly higher than mean pre-test knowledge score as evidenced by 't'=33.11 which indicated that Structured Teaching Program is effective. It also reveals that there was a significant association between qualification and the pre-test level of Knowledge Regarding Learning Disabilities in Primary School Children among Primary School Teachers. Thus, STP must be regularly included as a part of teaching learning for the primary school teachers that will help them in gaining knowledge about Learning Disabilities and identification at early age.

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