

IMPACT OF A STRUCTURED TEACHING PROGRAM ON PRIMARY SCHOOL TEACHERS' UNDERSTANDING OF LEARNING DISABILITIES IN STUDENTS

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Abstract:-

Background: A pre-experimental study was carried out to evaluate the impact of a structured teaching program on primary school teachers' understanding of learning difficulties in students at particular schools in the Jhunjhunu area of Rajasthan. Using a non-probability purposive sampling technique, 60 primary school teachers made up the sample. In order to ascertain the efficiency of a planned teaching program about learning difficulties in schoolchildren, the study set out to ascertain the degree of information that primary school teachers have about these issues. The ultimate goal was to determine the relationship between their chosen demographic characteristics and their pre-test level of awareness of learning impairments. **Materials and Methods:** The study employed a one-group pre-test post-test design. Using a non-probability purposive sampling technique, 60 primary school teachers were included in the sample. Ludwig Von Bertalanffy's General System Model served as the foundation for the study's conceptual framework. Structured knowledge questionnaires and demographic performance assessments were the instruments utilized to gather data. **Results:** Both descriptive and inferential statistics were used in the data analysis. In comparison to the mean pre-test knowledge score of 15.55 ± 2.05 ($p < 0.05$), the study's mean post-test knowledge score was significantly higher at 24.92 ± 1.41 . At $p < 0.01$, the paired *t* value calculated at 33.67^{**} was statistically significant. **Conclusion:** The study's conclusions demonstrated that the organized teaching program greatly increased primary school teachers' understanding of learning difficulties in students.

Keyword:- Structured teaching programme, Knowledge, Learning disabilities, school children, primary school teachers.

INTRODUCTION

Learning disability (LD) denotes a diverse

array of disorders characterized by considerable challenges in acquiring and utilizing skills such as listening, speaking, reading, reasoning, writing, or mathematical proficiency. These illnesses are believed to result from central nervous system malfunction. A youngster with a learning disability cannot exert greater effort, enhance focus, or boost motivation alone; they require assistance to acquire these skills. Learning impairments differ among individuals. A single individual with learning disabilities may exhibit different learning challenges compared to another individual with the same condition. Individuals with learning disabilities possess average intelligence yet encounter difficulties in academic domains such as reading, writing, and arithmetic. Gifted children frequently exhibit atypical learning patterns, and despite their high intelligence, they may also experience learning difficulties. In India, approximately 13% to 14% of all schoolchildren experience learning difficulties. Dyslexia affects 80% of students classified as learning handicapped. The prevalence of dyslexia among primary school children in India is believed to be between 2% and 18%, dysgraphia at 14%, and dyscalculia at 5.5%.² There exists a widespread deficiency in awareness of Specific Learning Disabilities (SpLD) in India. In major cities such as Mumbai, Chennai,

Bangalore, New Delhi, and Kolkata, there are limited clinics for psychoeducational testing to diagnose Specific Learning Disabilities (SpLD), and a scarcity of remedial educators. Initially, knowledge of this concealed impairment must be heightened, and the subject of Specific Learning Disabilities (SpLD) should be mandatorily incorporated into the curricula of medical professionals, educators, counselors, and the general populace during their undergraduate education. A supportive environment is recognized as a significant element that can positively influence the outcomes of Specific Learning Disabilities (SpLD) in school-aged children. Secondly, an assessment for Specific Learning Disabilities (SpLD) should be contemplated for all children exhibiting learning difficulties in preschool or school settings.³

A survey was administered to assess the awareness of learning disabilities (LD) among 144 teachers from two regular high schools, 38 teachers from two special schools, and 165 pre-service teachers from a teacher education institution in a metropolitan area of a southern Indian state. One-way analysis of variance (ANOVA) indicated a statistically significant difference in the knowledge level of learning difficulties among teachers in ordinary schools. The study determined that teaching experience and acquaintance with individuals with learning disabilities did not influence the knowledge levels of the three participant groups.

Objectives of the study

- To determine the level of knowledge regarding learning disabilities in school children among primary school teachers
- To find the effectiveness of structured teaching programme regarding learning

disabilities in school children among primary school teachers.

- To find the association between pre-test level of knowledge regarding learning disabilities and their selected demographic variables.

Hypothesis

- H1: There will be significant difference between pre-test and post-test level of knowledge of primary school teachers regarding learning disabilities.
- H2: There will be significant association between pre-test level of knowledge and selected demographic variables among primary school teachers.

MATERIAL AND METHODS

- Research Approach: Pre experimental approach.
- Research Design: One group pre-test – post-test design.
- Population: Primary school teachers
- Settings: Selected schools of Jhunjhunu district, Rajasthan.
- Sampling Technique: Non –probability purposive sampling technique.
- Sample size: 60 primary school teachers.

TOOLS AND TECHNIQUE

- **Demographic Performa** was employed to gather socio-demographic data like age, gender, religion, qualifications, years of experience, prior exposure, and previous sources of information.
- **Structured Knowledge Questionnaire** was used to assess the level of knowledge regarding learning disabilities in school children which consisted of 30 items divided in to seven areas (Introduction & definition, Incidence, Causes, Types, Diagnosis and testing, treatment and intervention)
- **Structured teaching programme (STP)** was administered for a duration of

45 minutes for 60 samples Lecture cum discussion was used as a teaching methodology along with a variety of AV aids including LCD/PowerPoint presentation, Charts, Flash Cards, OHP sheets and video assisted modules.

• Inclusion criteria:

- ✓ Primary school teachers who were willing to participate in the study.
- ✓ Primary school teachers who were available at the time of data collection.

• Exclusion criteria:

- ✓ Primary school teachers who were sensitized to any research study on learning disabilities for three months.
- ✓ Primary school teachers who were psychologically and physically unfit during the time of data collection.

• Statistical analysis: Descriptive and Inferential statistics were employed to analyze the data with SPSS version 20 (SPSS Inc., Chicago, IL). Descriptive statistics, including frequency distribution and percentage, were employed to characterize the socio-demographic data, while inferential statistics, namely the paired t-test, were utilized to assess the difference in mean knowledge scores before and after the intervention. A Chi-square analysis was conducted to determine the association between knowledge and specific demographic characteristics. The threshold $P < 0.05$ was deemed the minimum acceptable level of significance.

RESULTS

A. Section-I: Frequency distribution and Percentage of Sample characteristics

Table 1: Frequency distribution and percentage of primary school teachers according on selected demographic variables.

(N=60)

Demographic variables	Frequency (f)	Percentage (%)
Agein years		
21-30 Yrs.	12	20
31-40Yrs.	24	40
41-50Yrs.	17	28.33
51-60Yrs.	07	11.67
Religion		
Hindu	22	36.67
Muslim	09	15
		48.33
Christian	29	

Gender		13.4
Male	8	86.6
Female	52	
Qualification		
D.Ed/Tch	55	91.7
BA; BEd	4	6.7
Bsc; Bed	1	1.6
MA;M.Ed	-	-
Msc;Med	-	-
Teaching experience		10
Less than five years	6	13.33
5-10 years	8	23.33
11-15 years	14	53.34
More than 15 years	32	
Previous knowledge		63.33
Yes	38	36.67
No	22	
If yes, source of information		13.16
Teacher training programme	5	15.79
Continuing education programme/inservice programme	6	42.1118.42
Mass media	16	10.52
Friends and family	7	
Others	4	
Have you come across any child with learning disabilities?		70
Yes	42	30
No	18	

B. Section-II: Pre-test and post-test level of knowledge among primary school teachers

Table 2: Frequency distribution and percentage of samples according to their pre-test and post-test level of knowledge regarding learning disabilities in school children

(N=60)

SL.No	Level of Knowledge	Pre-Test %	Post-Test %
01.	Inadequate	31.7	0%
02.	Modelyadequate	68.3	0
03.	Adequate	0%	60

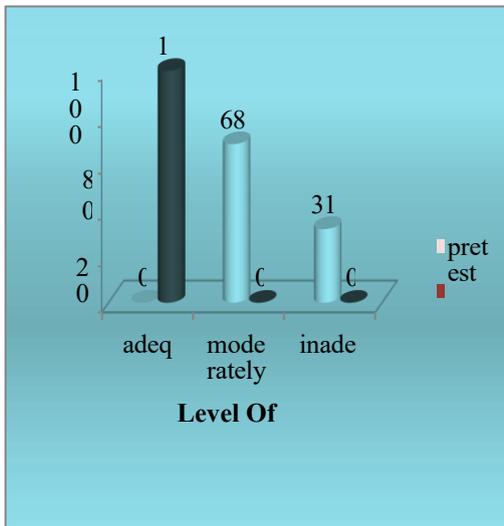


Fig. 1: Cylindrical Diagram showing the percentage distribution of samples according to their pre-test and post test level of knowledge regarding learning disabilities in school children.

C. Section-III: Effectiveness of structured teaching programme on knowledge regarding learning disabilities in school children among primary school teachers.

Table 3: Overall Mean, SD, mean percentage and 't' value of level of knowledge among primary school teachers before and after the intervention.

(N=60)

Pre-test			Post test			t value
Me	SD	Mea	Mea	SD	Mea	

an	n %	n	n%
15.	2.05	51.8	24.9
55	3	2	

**Significantat0.01 level.

The table indicates that the mean pre-test knowledge score was 15.55 ± 2.05 . Subsequent to the Intervention (organized training course), the average knowledge score rose to 24.92 ± 1.41 . The enhancement in knowledge score post-intervention was statistically significant (paired t-value 33.67**, df 59, $p < 0.01$). Consequently, the research hypothesis (H1) was affirmed.

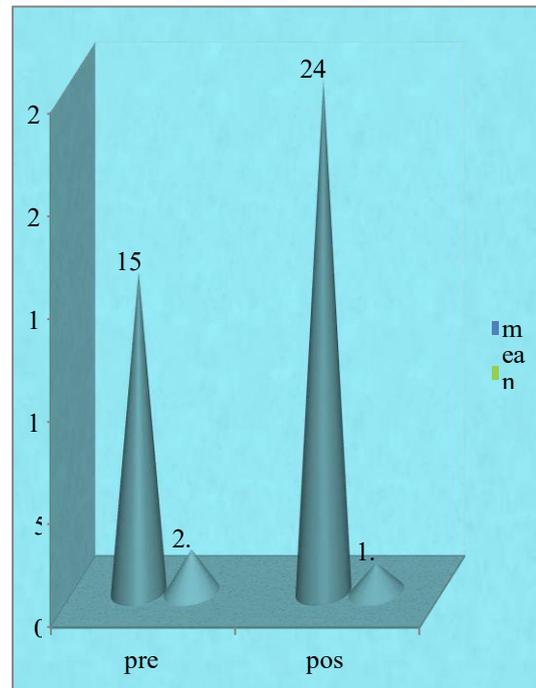


Fig. 2: 3D pyramidal diagram showing difference between mean pre tests and post test knowledge score

Table 4: Area Wise Mean, SD, Mean Difference and 'Paired t value' of level of knowledge among hypertensive patients before and after the intervention

(N=60)

SL No	Area	Stag e	Mean ± SD	Mean Difference	df	Paired t value	P value

01	Causes, incidence	Pre-test	2.75 ±0.91	1.57	59	13.35**	P<0.01
		Post-test	4.32 ±0.60				
02	Signs and symptoms	Pre-test	7.25 ±1.46	3.98	59	23.58**	P<0.01
		Post-test	11.23 ±1.84				
03	Diagnosis and management	Pre-test	9.37 ±1.23	3.82	59	17.67**	P<0.01
		Post-test	5.55 ±1.28				

**Significant at 0.01 level.

Data in Table 04 shows that the mean post test score is higher than the mean pre-test knowledge scores in the area related such as causes and incidence, signs and symptoms and diagnosis and management and is significant at p<0.01

D. Section-IV: Table 05 Association between the pre-test level of knowledge and selected demographic variables

(N=60)

SL. No	Demographic Variable	Total score		χ ²	Level of significance
		Inadequate	Moderately adequate		

1	Age (In years)			0.091	NS		
		A	20-30			3	9
		B	31-40			8	16
		C	41-50			5	11
		D	51-60			3	5
2	Religion			0.62	NS		
A	Hindu	9	13				
B	Muslim	8	21				
C	Christian	2	7				
3	Gender			0.711	NS		
A	Male	1	7				
B	Female	18	34				
4	Qualification			0.10	NS		
A	D.Ed/Tch	18	37				
B	BA; Bed	1	3				
C	Bsc; Bed	-	1				
D	MA;M.Ed	-	-				
5	Teaching experience	18		0.431	NS		
A	Less than five years	1	5				
B	5-10 years	-	11				
C	11-15 years	-	21				
D	More than 15 years						
6	Do you have knowledge regarding learning disabilities			0.08	NS		
A	Yes	8	30				
B	No	11	11				

7	If yes; source of information			0.31	NS
A	Teacher training programme	1	4		
B	Continuing education programme/in-service programme	1	5		
C	Mass media	4	12		
D	Friends and relatives	1	6		
E	Any other specify...	1	3		
8)	Have you come across any child with learning disabilities			0.61	NS
A	Yes	12	30		
B	No	7	11		

NS: Not significant, $p > 0.05$

Data in the table 05 shows that there is no significant association between pre-test knowledge score and demographic variables. Hence null hypothesis was accepted and research hypothesis was rejected i.e., there is no significant

association between the pre-test and demographic variables.

DISCUSSION

The results of the current study indicated that the mean post-test knowledge score of 24.92 ± 1.41 was considerably greater than the mean pre-test knowledge score of 15.55 ± 2.05 ($p < 0.01$). The estimated paired t value of 33.67^{**} was statistically significant at $p < 0.01$. The paired t value [33.67^{**} $df=59$] derived from the comparison of mean pre-test and post-test knowledge scores was statistically significant at the $P < 0.01$ level. Consequently, it is concluded that the structured teaching program significantly enhanced primary school teachers' understanding of learning difficulties in school students. A descriptive correlational study was undertaken in Mangalore to evaluate the awareness of learning disabilities and the coping methods employed by school instructors at selected institutions. The study sample consisted of 100 upper primary school teachers. The study revealed that 94% of the subjects exhibited a moderate level of awareness, whereas 6% shown a poor level of awareness about love and support. Concerning coping tactics, 81% exhibited highly favorable coping mechanisms, whereas 19% demonstrated less favorable coping methods. The study concluded that a negative correlation exists between awareness of learning difficulties and the coping techniques employed by school teachers.

A. Limitations

- The study was confined to specific geographical area, which imposed limits on generalization
- The limited sample size caused limit on

generalization of the study findings

- The findings could be generalized only to that population, which fulfilled the criteria in the study
- No follow-up was made to measure the retention of knowledge.

B. Recommendations

- A descriptive study can be conducted to identify the prevalence of learning disabilities
- The study can be repeated on a larger sample to generalize the findings
- A comparative study can be conducted to assess the knowledge of primary school teachers regarding learning disabilities in school children in urban and rural areas.

CONCLUSION

The study aimed to evaluate the efficacy of a structured education program on primary school teachers' understanding of learning difficulties in school students. The study results unequivocally demonstrate that the post-test knowledge score is substantially greater than the pre-test knowledge score. Consequently, it is determined that STP is markedly successful in improving primary school teachers' understanding of learning difficulties in school children.

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