



## REVIEW ARTICLE

### A STUDY TO ASSESS THE EFFECTIVENESS OF SELF INSTRUCTIONAL MODULES (SIM) ON KNOWLEDGE REGARDING LEARNING DISABILITIES OF PRIMARY SCHOOL CHILDREN AMONG PRIMARY SCHOOL TEACHERS OF SELECTED SCHOOLS, AT LUCKNOW, U.P

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#### ABSTRACT

**Background of the study:** Learning disabilities or learning disorders is an (Elephant) term for a wide ratio of learning problem. Learning is a most complex of brain function of understanding, recalling and utilization of knowledge in future. The capacity to learn multiple from individual to individual even among the children of the same age and intellectual ability. Kids with learning disabilities are not lazy and dumb. In fact most are just as smart as everyone else. Without proper knowledge and perception regarding this reality, all parents and teachers force the children to come out with first rank. "The quality of children's life solely depends on the type of family environment school and neighbourhood."-Dr. R. Partha sarthy, unhealthy social surrounding can put them into stress and can increase their vulnerability to develop emotional disorders. **Objectives:** To evaluate the effectiveness of self instructional module (SIM) on knowledge regarding learning disabilities in primary school children among primary school teachers. **Methodology:** A Quantitative evaluative research approach pre-experimental one group pre- test & post- test design was used. 30 samples were selected by non-probability convenient sampling technique through survey. The written consent was obtained from the samples. The tool used is self Instructional Module. Firstly sample were selected then pre-test was taken by administrating self Instructional Module after that structured teaching program was given to primary School teachers then on 4th week of data collection period post- test was conducted. **Results:** The post-test mean knowledge score of Primary school teachers regarding learning disabilities has revealed that score was found higher mean (20.633) and S.D (4.27).

## INTRODUCTION

### Gordon Neufeld

A teacher is responsible to reiterate all round development of child. Like a gardener, they provide all suitable condition for student's best growth. According to Mahatma Gandhi, Education means an all round drawing out of the best in child and men-body, mind and spirit only an efficient and understanding teacher can identify the capacities, strength and weakness of each student. Children are the Nation's supremely important asset. Today's children are tomorrow's citizens. They are in a continuous process of growth and development. Any alteration in its course lead to development disorders of learning disability plays a significant role as a silent handicap among children.

It is estimated that 4-5% of students in school have learning disability. Previous studies have proved that teacher's towards such children have great influence towards their recovery. They determine the Future of the nation. Any input into the health of the today's children will be an investment since they are the adults of next decade. One of the avenues for development is through achieving a high level of education which transforms a traditional backward society in to a civilized one. Banicoo PK (et.al.), (2016), some factors are known to influence the academic performance of children with sickle cell anaemia (SCA) . Information on their effects in these children is limited in Nigeria. The factors which influences academic performance of children with SCA in Enugu, Nigeria are determined in this study. Consecutive children with SCA aged 5 – 11 yrs were recruited at the weekly sickle cell clinic of the university of Nigeria Teaching Hospital Enugu, Nigeria.

Their age and sex matched normal classmates were recruited as controls. The total number of days of school absence 2009/2010 academic session was obtained for each pair of pupils from the class attendance register. The prevalence of learning disabilities in different regions of the world is estimated from 3 to 12 percent and teachers, who have classes of 20-25 students in each, may have at least one, two, or more students with learning disability (Hallahan et.al.). As the executive of educational programs at schools, teachers have two important roles : firstly, they play the most outstanding and important role in children's learning and secondly ,they are the providers and makers of an educational environment for student's learning. (Niknami, 1999). Due to the importance of learning the significant role of teachers and educating students with learning disabilities and also teachers' awareness of this issue, timely diagnosis of this problem and employing correct educational and psychological strategies. The memory related studies have been enriched and scrutinized in the last decades and have included a considerable volume of scientific and experimental researches related to cognitive psychology.

## OBJECTIVES

- To assess the existing knowledge level through pre test regarding learning disabilities in primary school age children among primary school teachers.
- To evaluate the effectiveness of self instructional module (SIM) on knowledge regarding learning disabilities in primary school children among primary school teachers.
- To associate the pre-test knowledge score with selected demographic variables.

## MATERIAL AND METHODS

**Research Approach:** A quantitative research approach.

**Research Design:** The study is pre experimental one group pre-test and post- test design.

**Population:** Target population-The study is targeted to the primary school teachers working in various schools at Lucknow district, U.P.

**Accessible Population:** The accessible population of the study was the primary school teachers working at various schools of Lucknow district, U.P.

**Research Setting:** The site of the study was selected schools at Lucknow and the setting was the teacher's staff room. The setting was selected according to the convenience of the samples and easy accessibilities to each sample by the researcher.

**Sample and Sample Size:** In this study the samples were Teachers working in selected schools of Lucknow District. 30 primary school teachers were participated as study participants.

**Sample Technique:** For the present study, sampling is done by the Probability sampling technique adapting simple Random type.

## VARIABLES

- **Independent variable:** Self Instructional Module (SIM).

- **Dependent variable:** Knowledge of primary school teachers regarding learning disabilities.
- **Other Variables:** Demographical variables :- In this study it includes –age, gender, marital status, religion, education, experience, income, language, mode of communication area of living and source of information regarding learning disabilities

## DESCRIPTION OF DATA COLLECTION TOOL

### Part 1: Demographic characteristics:

**Tool – 1:** demographical profile of the primary school teachers. It included 10 items like age, gender, marital status, religion, education, experience, income, and language, mode of communication and area of living.

**Part - 2: Self instructional module Based Questionnaire.** A test with 30 questions was used; the components of questions were taken from introduction of learning disabilities of primary school children among primary school teacher, definition, the period of teaching, type of teaching, place and techniques of teaching, teaching of children during classes hours, and common teachers related problems, that occurs during teaching.

## RESULTS AND DISCUSSION

Table 1. Frequency and percentage distribution of demographic variables

S.NO.	Demographic variables	Frequency	Percentage
1	Age		
a	<30	12	40.00 %
b	31-40	5	16.66%
c	41-50	8	26.66%
d	>50	5	16.66%
2	Gender		
a	Female	20	66.66%
b	Male	10	33.33%
3	Religion		
a	Hindu	24	80.00%
b	Muslim	5	16.66%
c	Christian	1	3.33%
d	Sikh	0	0.00%
4	Marital status		
a	Unmarried	10	33.33%
b	Married	18	60.00%
c	Widow	2	6.66%
d	Separated	0	0.00%
5	Education		
a	Diploma	4	13.33%
b	Bachelor	13	43.33%
c	Masters	13	43.33%
d	Doctoral	0	0.00%
6	Experience		
a	<5 yrs	13	43.33%
b	5 – 10 yrs	5	16.66%
c	11-115 yrs	2	6.66%
d	16-20	10	33.33%
7	Income		
a	<15000	16	53.33%
b	15001-30,000	3	10.00%
c	30001- 45000	6	20.00%
d	>45,000	5	16.66%
8	Language		
a	English	4	13.33%
b	Hindi	14	46.66.%
c	both a and b	12	40.00.%
d	others	0	0.00%
9	Mode of communication		
a	Verbal	6	20.00.%
b	Visual	0	0.00%
c	Written	1	3.33.%
d	All	23	76.66.%
10	Area of living		
a	Rural	8	26.66.%
b	Urban	22	73.33.%

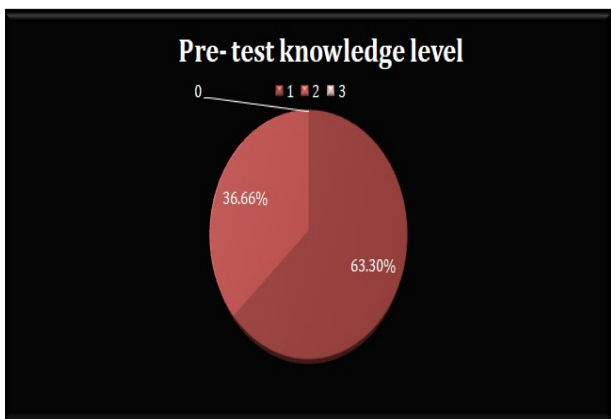
The above table 1: shows that the majority of the samples were in the age group of <30 years 12 (40%), followed by 41-50 years (8 (26.6%) and in age group of 31-40 years and >50 were only 5, (16.6%). In case of gender, majority 20, (66.66%) of primary school teachers are female, and rest 10 (33.33%) of primary teachers are male. On the basis of religion, majority of samples belongs to Hindu religion 24, (80%), followed by Muslim 5 (16.66%), and the least in Christian 1 (3.33%) and there are no samples found in Sikh religion. Based on Marital status, majority of 18 (60%) primary teachers are married, followed by unmarried 10 (33.33%) and the least of 2 (6.66%) were widow and while there are no samples were present in case of separation.

With respect to qualification, majority of 13 (43.33%) of primary school teachers completed their bachelors and masters degree, followed by diploma 4 (13.33%) and not a single samples was completed doctoral degree. According to experience, majority of the samples 13 (43.33%) had <5 yrs experience followed by 10 (33.33%) had 16-20 yrs experience, 5 (16.66%) had 5-10 yrs experience and least of 2 (6.66%) had 11-15 yrs. Based on Monthly income, majority of samples 16 (53.3%) were falls under <15000, followed by 6(20%) 30,001-45000, followed by 5(16.6%) >45,000 and least 3 (10%) have 15001-30,000. On the basis of language, mostly of 14, (46.66%) primary teachers prefer Hindi, followed by 12 (40%) used both English and Hindi, with least 4(13.33%) prefer English only. Based on mode of communication, majority of 23(76.6%) samples used all mode of communication, followed by 6 (20%) used verbal and least had used 1, (3.3%) only written mode of communication.

**Table 2. Frequency and percentage distribution of sample according to their pre- test level of knowledge**

S.NO.	Knowledge	Frequency	Percentage
1	Inadequate	19	63.33%
2	Moderate	11	36.66%
3	Adequate	0	0
	Total	30	100.0%

With regard to area of living, mostly 22 (73.33%) lives in urban area and least 8, (26.66%) belongs to rural area. Table.2: shows that, none of the respondents had adequate level of knowledge regarding learning disability. Majority of the respondents, 19,(63.33%) had inadequate level of knowledge and 11,(36.66%) had moderate level of knowledge regarding learning disabilities.

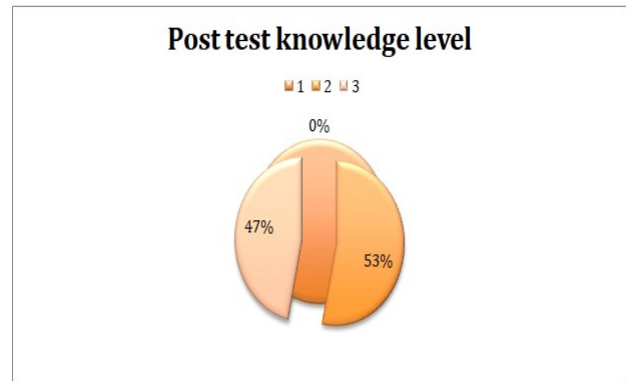


**Pie diagram representing percentage distribution of sample according to their pre-test level of knowledge**

**Table 3. Frequency and Percentage distribution of samples according to their post – test level of knowledge**

S.NO.	Knowledge	Frequency	Percentage
1	Inadequate	0	0.00%
2	Moderate	16	53.33%
3	Adequate	14	46.66%
	Total	30	100.00%

Table 3: represents that, after the implementation of self instructional module the level of adequate knowledge has increased to 14 (46.6%). Where as in pre-test no one has adequate level of knowledge. There is a slight improvement in moderate level of knowledge 16(53.3%) of primary teachers. Luckily there is no one has inadequate knowledge level.



**Pie diagram shows distribution of samples according to their post test level of knowledge score**

**Table 4. Comparison Between Mean standard deviation, Mean difference, and 't' value of pre – test And post – test knowledge score**

Test	Mean score	Standard deviation	Mean difference	t' value
Pre – test	9.93	2.75	10.7	11.79*
Post – test	20.63	4.27		

N=30

**Interpretation:** In this study 't' value is :  $T_{29} = 11.792$ ,  $P < 0.05$  and the pre test score ranges from 6 to 16 and post test score after intervention ranges from 14 to 28. The pre test score mean is 9.93 with standard deviation 2.75 and post test score mean is 20.63 with standard deviation 4.27. Due to the means of the pre test-post test score and the direction of the T-value, we can conclude that there was a statistically significant improvement in post test score following the experiment intervention from  $9.93 \pm 2.95$  score to  $20.63 \pm 4.27$  score ( $P < 0.05$ ); an improvement of  $10.70 \pm 4.96$ . Hence we can conclude by rejecting null hypothesis that, there is significant difference or change in pre test and post test score after experiment. Hence H1 hypothesis is accepted. This indicates that, self instructional module is effective in enhancing knowledge regarding learning disabilities among primary school teachers

**Significant at  $p < 0.05$  level:** The data presented in the above table shows that, there is association found between the pre-test knowledge score with the selected demographic variables like Age (6.96), income ( $X^2 = 9.57$ ), language ( $X^2 = 5.929$ ), mode of communication ( $X^2 = 10.264$ ), area of living ( $X^2 = 3.50$ ). Hence, calculated value of chi square was more than table value at 0.05 level. Hence research hypothesis ( $H_2$ ) was accepted in relation to income, language, mode of communication, area of living and age.

Table 5. Chi-square test showing of pre-test knowledge score with the selected demographic characteristics

S.NO.	Demographic variables	Levels of knowledge				Chi square	df	t value
		Excellent	Fair	Good	V. good			
1	<b>Age</b>							
	<30	3	1	6	2			
	31-40	0	1	1	3	6.96	9	6.41
	41-50	2	2	3	1			
	>51	1	1	1	2			
2	<b>Gender</b>							
	Male	0	0	2	2	2.85	3	4.14
	Female	6	5	9	6			
3	<b>Marital status</b>							
	Unmarried	1	1	4	4			
	Married	5	3	6	4	4.56	6	6.01
	Widowed/widower	0	1	1	0			
	Separated	0	0	0	0			
4	<b>Religion</b>							
	Hindu	6	4	8	6			
	Muslim	0	1	3	1	5.007	6	5.43
	Christian	0	0	0	1			
	Sikh	0	0	0	0			
5	<b>Education</b>							
	Diploma	1	0	2	1			
	Bachelor	2	2	6	3	2.567	6	8.61
	Masters	3	3	3	4			
	Doctoral	0	0	0	0			
6	<b>Experience</b>							
	<5	3	1	6	3			
	5- 10 yrs	0	1	2	2	6.183	9	7.21
	11-15 yrs	0	0	1	1			
	16-20 yrs	3	3	2	2			
7	<b>Income</b>							
	<15,000	2	1	9	4			
	15,001-30,000	1	1	0	1	9.575	9	3.86
	30,001-45,000	1	2	2	1			
	>45,001	2	1	0	2			
8	<b>Language</b>							
	English	0	0	3	1			
	Hindi	3	4	3	4	5.929	6	4.31
	Both a and b	3	1	5	3			
	Others	0	0	0	0			
9	<b>Mode of communication</b>							
	Verbal	3	0	0	3			
	Visual	0	0	0	0	10.264	6	1.14
	Written	0	0	1	0			
	All of the above	3	5	10	5			
10	<b>Area of living</b>							
	Urban	3	5	8	6	3.502	3	3.2
	Rural	3	0	3	2			

There is no association found between the pre test knowledge score and other demographic variables like age ( $X^2 = 6.96$ ), gender ( $X^2 = 2.85$ ), marital status ( $X^2 = 4.56$ ), religion ( $X^2 = 5.00$ ), education ( $X^2 = 2.56$ ), and experience ( $X^2 = 6.18$ ).

## CONCLUSION

This study concluded that the self instructional module is effective in enhancing the knowledge level of primary school teachers regarding learning disabilities among primary school children.

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