



## REVIEW ARTICLE

### EFFICACY OF SELF INSTRUCTIONAL MODULE [SIM] ON PRIMARY SCHOOL TEACHER'S KNOWLEDGE REGARDING IDENTIFICATION OF LEARNING DISABILITY IN SCHOOL CHILDREN

1,\*Jubin Varghese and 2Saniya Susan Issac

1Department of Child Health Nursing, L. N Nursing College, Bhopal, Madhya Pradesh, India

2Department of Mental Health Nursing, Sri Sai institute of Nursing Sciences, Bhopal, Madhya Pradesh, India

#### ARTICLE INFO

##### Article History:

Received 19<sup>th</sup> February, 2018  
Received in revised form  
29<sup>th</sup> March, 2018  
Accepted 20<sup>th</sup> April, 2018  
Published online 30<sup>th</sup> May, 2018

##### Keywords:

Learning disability; knowledge,  
Self-instructional module.

#### ABSTRACT

Learning disabilities is a genetic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical ability. The study was planned to assess the effectiveness of SIM on knowledge regarding identification of learning disability in school children among primary school teachers in selected schools of Bhopal. Pre-experimental approach with one group pretest posttest design was used for 30 school teachers. All participants are female teachers, 50% did not attend any classes related to identification of learning disability previously. The knowledge score gained by the respondents in the results shows that mean value of knowledge in pretest was 7.6 and a posttest was 20.9. Paired "t" test result shows that obtained "t" value is greater than table value shows SIM was highly effective to improve the knowledge of primary school teachers regarding identification of learning disability.

Copyright © 2018, Jubin Varghese and Saniya Susan Issac. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

#### INTRODUCTION

45 percent constitutes the young children of total world's population. The future of our country depends on the health of young people. However one in 10 children and adolescents have medical problems, below average intelligence, specific learning disorders, attention deficit hyperactivity disorder, emotional problems, poor socio cultural home environment and psychiatric disorders. Learning disabilities is a genetic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical ability (National joint committee on learning disabilities, January 30, 1981). According to the National Center for Learning Disabilities, LD is a neurological disorder that affects the brain's ability to receive, process, store and respond to information. The term learning disability is used to describe the seeming unexplained difficulty a person of at least average intelligence has in acquiring basic academic skills. These skills are essential for success at school and at workplace and for coping with life in general. LD is not a single disorder. It is a term that refers to a group of disorders in listening, speaking, reading, writing and mathematics.

\*Corresponding author: Jubin Varghese,  
Department of Child health nursing, L. N nursing college, Bhopal,  
Madhya Pradesh, India.

School is one of the most organized and powerful systems in society which presents opportunity to work through it and to influence the health and well-being of those who come in contact with it. Individuals with learning disorder can face unique challenges that are often pervasive throughout the lifespan (<http://www.merineews.com/article/learning-disability-in-india/15781618.shtml&cp>).

#### Need for the study

The LD movement in India is of a recent origin and is today comparable with that of its Western counterpart. Students have experienced academic problems associated with learning disorders for a long time, but those problems were ignored in the crowded classrooms (<http://www.merineews.com/article/learning-disability-in-india/15781618.shtml&cp>). Lack of awareness about 'learning disorder' is one of the reasons for not identifying great talent and potential in primary school children. A study conducted on Prevalence of specific learning disabilities among primary school children in a South Indian city. This study suggests that the prevalence of Sp LDs is at the higher side of previous estimations in India (Mogasale et al., 2012). In India around 13 to 14% of all primary school children suffer from learning disorders. Unfortunately, most schools fail to lend a sympathetic ear to their problems. As a result, these children are branded as failures. It is estimated that India has five students with learning disorders in every average-sized

class. The Nalanda Institute report has highlighted that in India during the last two-decade or so, there has been an increasing awareness and identification of children with LD. Despite this growing interest, India still does not have a clear idea about the incidence and prevalence of LD (<http://www.merineews.com/article/learning-disability-in-india/15781618.shtml&cp>). The first step in this strategy should be early detection, acceptance by parents and broad awareness among the academic community and above all a mature handling of the problem (<http://www.merineews.com/article/learning-disability-in-india/15781618.shtml&cp>). Despite the fact that learning disability is a known classroom disorder, it has not reached its optimum awareness levels in the schools in the country. Teachers either ignore the deficiency or blame it on the child's personality branding it as laziness, attitude or aggression. The child continues to graduate from one class to the other totally inept at handling the pressure of the higher classes. This leads to behavioural problems (<http://www.merineews.com/article/learning-disability-in-india/15781618.shtml&cp>). Teachers and parents will be a part of the intervention in terms of how they aid the individual in successfully completing different tasks. School psychologists quite often help to design the intervention, and coordinate the execution of the intervention with teachers and parents. With the right support and intervention, people with learning disorder can succeed in school and go on to be successful later in life. A teacher becomes a diagnostician for children with learning disabilities when she notices every child in her class room who struggles with these problems. Based on this class room diagnosis a teacher can determine if the child suspect to have a learning disability needs to go on to a more comprehensive assessment. Many teacher's lacking in the appropriate training and experience to identify a young child who is at risk. Although they should assess a child's problem every two to three months, they often delay frequent evaluation of a young child with learning disability until third or fourth class because they think that the problems are just temporary and that will be outgrown. Early intervention is a universal remedy it can result in more effective educational planning.

## MATERIALS AND METHODS

### Research approach and design

- The research approach in the study was a quantitative approach.
- The Research design used for this study is pre-experimental one group pretest posttest design.

**Setting of the study:** The study was conducted in selected Schools of Bhopal.

**Study duration:** 2 weeks.

**Study population:** consisted of the primary school teachers at selected schools in Bhopal.

**Sample size:** A total of 30 primary school teachers

### Inclusion criteria

- The school teachers who are available during the period of data collection.

- School teachers who are willing to participate in the study.

### Exclusion criteria

- School teachers who are not present at the time of data collection.
- School teachers who are not willing to participate.

### Data collection procedure

The formal permission was obtained from the the principal of selected schools in Bhopal. A total of 30 school teachers were selected for the study as per the inclusion criteria of study. Self-introduction was given to the teachers. The purpose of the study was explained to them and questionnaire for assessment of knowledge regarding identification of learning disability was given and then provided self-instructional module [SIM] on identification of learning disability given to them and on fifth day post test conducted by giving questionnaire.

### Statistical analysis

Analysis of data was done in accordance with the objectives. The data was analyzed using frequencies and percentage for baseline characteristics. Mean, mean-percentage, standard deviation was used to describe the level of knowledge score. Paired "t" test was also done to find out the effectiveness of the self-instructional module in terms of knowledge. Chi-square was used to describe the association between the pretest score of knowledge with the selected baseline characteristics.

## RESULTS

A total of 30 primary school teachers of selected schools in Bhopal participated in the study. The baseline characteristics of the study subjects were analyzed using descriptive statistics and were presented in terms of frequency and percentage as shown in Table 1.

**Table 1. Distribution of subjects based on baseline characteristics**

S.no	Baseline characteristics	Frequency (F)	Percentage (%)
1.	Teaching experience		
	a. ≤ 1 year	07	23.33
	b. 2 year	09	30
	c. 3 year	05	16.66
	d. ≥ 4 year	09	30
2.	Number of classes related to learning disability attended		
	a. 0	15	50
	b. 1	09	30
	c. 2	06	20
	d. 3	00	00
3.	Sex		
	a. Male	00	00
	b. female	30	100
4.	Previous knowledge regarding learning disability		
	a. yes	21	70
	b. no	09	30

In the present study, majority of school teachers(30%) have ≥ 4 years of teaching experience or 2 year teaching experience, 50% didn't attended any classes related to identification of learning disability

**Table 2. Distribution of overall knowledge score**

s.no	Knowledge score	pretest		posttest	
		frequency	percentage	frequency	percentage
1	Poor	18	60	00	00
2	Average	12	40	01	03
3	Good	00	00	29	97

**Table 3. Paired “t” test for the knowledge score**

Sl.no	Observations	mean	Mean difference	Standard deviation	“t” value	df	“p”
1	Pre test	7.6	13.3	3.02	20.19	29	0.05

**Table 4. Association between pretest knowledge score of primary school teacher and selected baseline characteristics**

Sl.no	characteristics	Below mean	Above mean	df	Chi square value	S, NS
1.	Teaching experience	4	3	3	1.64	NS
	a.≤1 year	4	5			
	b.2 year	1	4			
	c.3 year	4	5			
2.	Number of classes related to learning disability attended	5	10	3	1.24	NS
	a.0	5	4			
	b.1	3	3			
	c.2	0	0			
3.	Sex	0	0	1	0	NS
	a.Male	13	17			
4.p	Previous knowledge regarding learning disability	9	12	1	0	NS
	a.Yes	4	5			
	b.No					

All subjects are female, 70% subjects had previous knowledge regarding learning disability. In the pretest assessment 60%(18) samples had poor knowledge (0-10), 40%(12) samples had average knowledge (11-20) and none of the samples had good knowledge (21-30) regarding identification of learning disability. Whereas, post test knowledge of the subject received the score between 21-30 (good) score the maximum 96.66% (29) and 3.33% (01) of the sample received the score 11-20 (average), no sample got the poor score in the study group as shown in table 2. The knowledge score gained by respondents in results shows that the mean value of knowledge in pretest was 7.6 and at post-test was 20.9. since the “p” value for the test is 0.05. the calculated “t” value was 20.19 which shows that there was a significant difference between mean pretest and mean post-test knowledge score. This shows that the obtained mean difference of post test.

The value of “t” was calculated to analysis the difference between mean pre-test and post-test knowledge scores was a true difference and not by chance. So it can be concluded that SIM is effective for identification of learning disability in children among primary school teachers. Chi-square is used to find out the association between pre test score of knowledge with baseline characteristics. On computing it was found that there was no significant association between pretest knowledge score with baseline characteristics such as teaching experience, source of information, number of classes related to learning disability attended, sex, previous knowledge regarding learning disability at 0.05 level of significance. This shows that these baseline characteristics did not have significant association with knowledge score and were not dependent on each other.

## DISCUSSION

Majority primary of school teachers 30% have  $\geq 4$  years of teaching experience or 2 year teaching experience, 50% didn't attended any classes related to identification of learning disability, all subjects are female, 70% subjects had previous knowledge regarding learning disability. Level of knowledge of primary school teachers about identification of learning disability before self-instructional module. The knowledge questionnaire consists of 30 questions regarding identification of learning disability in school children. The knowledge score gained by the respondents in the result shows that the mean value of knowledge in pretest was 7.6.

The effectiveness of self-instructional module on the level of knowledge about identification of learning disability in school children among primary school teacher's as a part of the present study. Pretest statistically proved that the study subject had poor knowledge about identification of learning disability in school children. Indicated the various level of knowledge from poor, average and good, based on these findings, the intensity, content, and teaching aid was decided. The SIM administered. On the 5<sup>th</sup> day, posttest was carried out by re-administering the knowledge questionnaire. Comparison of pretest score with post-test score was analyzed and found that there was statistically significant gain in the knowledge score obtained by subject towards identification of learning disability in school children. The knowledge score gained by the respondents in the results shows that the mean value of knowledge in pretest was 7.6 and at post-test was 20.9, the “p” value for the test is 0.05, paired ‘t’ test revealed that subjects

had significant knowledge gain after administration of SIM. Thus it is stated that the study is effective.

### Conclusion

Intervention of SIM regarding identification of learning disability in school children were effective in pre-experimental group (primary school teachers).

### Nursing Implications

The study has several implications in nursing education, nursing administration and nursing research.

### Nursing education

The study has an important implication for nursing education. It is the student life where a young student can be shaped or molded and helped to develop sense of responsibility towards the society. Student can be taught about holistic care. In nursing curriculum evidence based practice session should be included to identify learning disability among school children so that nursing students when they go for school health program they can find out the children who has learning disability and report to the higher authority.

### Nursing administration

The administrator should facilitate the implementation of various programs related to identification of learning disability in school children in schools and also document the activities for better implementation. The nursing administrators should implement the outreach programmed to make the public aware about identification of learning disability in primary school children. Primary school teacher's knowledge deficit indicates the need for organizing identification and rehabilitation, education for teacher education session regarding identification of learning disability in primary school children and practice and management by the teachers in school level.

### Nursing research

There must be a constant research to develop its body of knowledge. Instructional materials can be developed in order to increase the awareness among parents and teachers on identification of learning disability in children.

Researcher should be motivated to conduct surveys in schools to identify the learning disability children in order to rule out the problem of learning disability in primary school children. The researcher found that no enough studies have been conducted in the aspect to identify learning disability in school children. So nurses must take up research in this area so that quality tools for identification process develop and take measures to tackle learning disability.

### Limitations

#### The limitations of the study were

- The duration of the study is limited for two weeks only. This limits the generalization of the study findings.
- Sample size is limited to 30 only.

### Recommendation

On the basis of the findings of the study, the following recommendations were made.

- The study can be done at community level to assess the parents knowledge regarding identification of learning disability in children.
- A similar study can be done to assess the attitude and practice of teachers regarding identification of learning disability in school children.

### REFERENCES

- National joint committee on learning disabilities January 30, 1981, LD definition, learning disability quarterly, volume 10 (2)1987, page no 136-138  
<http://journals.sagepub.com/doi/pdf/10.2307/1510220>.
- Mogasale VV<sup>1</sup>, Patil, VD., Patil, NM. and Mogasale, V. 2012 Prevalence of specific learning disabilities among primary school children in a South Indian city. *Indian J Pediatr.*, Mar;79(3):342-7. doi: 10.1007/s12098-011-0553-3. Epub 2011 Sep2 <https://www.ncbi.nlm.nih.gov/pubmed/21887581>
- Sadaket malik bhalessa doda. Learning disability in India, <http://www.merineews.com/article/learning-disability-in-india/15781618.shtml> & cp.

\*\*\*\*\*