EUROPEAN JOURNAL OF BIOMEDICAL AND PHARMACEUTICAL SCIENCES
http://www.ejbps.com

ISSN 2349-8870
Volume: 12
Issue: 3
Year: 2025

EFFECTIVENESS OF INSTRUCTIONAL PROGRAMME ON KNOWLEDGE REGARDING SELECTED LEARNING DISABILITIES OF CHILDREN AMONG LOWER PRIMARY SCHOOL TEACHERS IN SELECTED SCHOOLS, KOLLAM

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Article Received on 07/01/2024 **Article Revised on 28/01/2025** **Article Published on 17/02/2025**

ABSTRACT

A quantitative study to assess the effectiveness of instructional programme on knowledge regarding selected learning disabilities of children among lower primary school teachers in selected schools, Kollam. The objectives of the study were, to assess the knowledge regarding selected learning disabilities of children among lower primary school teachers, to assess the effectiveness of instructional programme on knowledge regarding selected learning disabilities of children among lower primary school teachers and to determine the association between pre-test knowledge score regarding selected learning disabilities among lower primary school teachers with their selected demographic variables. Imogene King's goal attainment theory was used as conceptual framework. A pre-experimental one group pre-test post-test design was used. Hundred sample were selected by using non probability purposive sampling technique. The tool used was self-structured knowledge questionnaire, which consisted of Demographic Proforma and Structured knowledge questionnaire. Instructional programme, which included interactive teaching session, informational module and learning disability assessment chart on selected learning disabilities were given to sample on the first day after pre-test. Post-test was conducted on tenth day of pre-test. The result showed that mean pre-test and post-test score were 16.57 and 24.47 respectively. The calculated 't' value was 21.39 which was greater than the table value at 0.05 level of significance. The study concluded that there was significant difference between mean pre-test and post-test knowledge score of lower primary school teachers regarding selected learning disabilities. The findings of the study revealed that instructional programme was effective in improving knowledge regarding selected learning disabilities of children among lower primary school teachers. The study also revealed that there was significant association between knowledge score and education and no association with age in years, gender, years of experience in teaching and any previous experience in identification of children with learning disabilities. Hence the research hypothesis H_2 - there will be significant association between pre-test knowledge score regarding selected learning disabilities of children among lower primary school teachers with their selected demographic variables such as age in years, gender, education, years of experience in teaching and any previous experience in identification of children with learning disabilities was partially accepted.

KEYWORDS: Instructional programme; knowledge; selected learning disabilities; lower primary school teachers.

INTRDUCTION

Background of the study

Healthy children are the future healthy citizens of the country. So, every attempt should be made towards better tomorrow for better survival of this precious group and to help them grow into healthy adult.[1] Today's society is complex and ever changing. Children are expected to grow and learn to their fullest potential. Learning is the primary activity of childhood and represents the principle developmental task for school age children.[2]

According to Mahatma Gandhi, education means all round drawing out of the best in child and man's body, mind and spirit. Teaching is an integral part of education. Gage defined teaching as a form of interpersonal influence aimed at changing behavior of another person.[3]

According to National Centre for Learning Disabilities, 2.4 million American public school students (approximately 5% of total public school enrolment) are

identified with learning disabilities under the Individuals with Disabilities Education Act (IDEA).[4]

UNESCO released "State of the Education Report for India: Children with Disabilities" states that there are 78,64,636 children with disability in India constituting 1.7% of the total child population. Three-fourths of the children with disabilities at the age of five years and one-fourth between 5-19 years do not go to any educational institution. In schools, disabilities were few in girls compared to boys. Large number of children with disabilities do not go to regular schools but are enrolled at open schools.[5]

Learning disability refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical skills.[6] Dr. Samuel Kirk, a psychologist was first coined the term learning disability (LD) in 1963. He had experience in working with many students who were repeatedly failing in their examinations but were clearly not retarded. He observed that specific methods of teaching will help this type of scholastically backward students.[7]

A child with learning disability might also show the type of cognitive delay. A child with a disability will typically need long term assistance and will have the disability throughout his or her life. With assistance, a child with learning disability might catch up with peers, but the condition will persist throughout his or her life.[8]

Teacher is an artist who moulds and shapes the physical, intellectual and moral power of children. In normal school, one or two children in every classroom may be found with learning disabilities. Normally the children with severe learning problems are admitted in special schools designed for them. But many students with LD are admitted in normal schools without understanding the problem and they fail to succeed in their education and eventually results in school dropouts.[9]

The children with learning disabilities should be helped and supported at early stage. Early identification and appropriate treatment will reduce complications. School children spend more time in a day with their teachers. Teachers are the person who play a crucial role in diagnosing health problems. The proper guidance and training will enhance the wellbeing of students. For that purpose, teachers must have adequate knowledge in identifying learning disabilities in children.

If the special needs of children with learning disabilities are not attended to, it will result in scholastic backwardness and related psycho-social problems. Thus, early identification and intervention are very important. The investigator found that most of the primary teachers do not have an adequate knowledge regarding learning disabilities of children. So, the researcher pursued this study. It is hoped that this study may help the teachers to acquire adequate knowledge regarding learning disabilities and it will help them early identification and correction of learning disabilities.

Statement of the problem

"A study to assess the effectiveness of instructional programme on knowledge regarding selected learning disabilities of children among lower primary school teachers in selected schools, Kollam."

OBJECTIVES OF THE STUDY

- To assess the knowledge regarding selected learning disabilities of children among lower primary school teachers.
- To assess the effectiveness of instructional programme on knowledge regarding selected learning disabilities of children among lower primary school teachers.
- To determine the association between pre-test knowledge score regarding selected learning disabilities among lower primary school teachers with their selected demographic variables such as age in years, gender, education, years of experience in teaching and any previous experience in identification of children with learning disabilities.

Operational definitions Effectiveness

Effectiveness means the degree to which something is successful in producing a desired result.[10] In this study, it refers to the change in level of knowledge among lower primary teachers regarding selected learning disabilities of children after giving instructional programme and it is measured in terms of significant difference in the mean pre and post scores on knowledge.

Instructional programme

In this study, it refers to a package of activities to improve knowledge of lower primary school teachers regarding selected learning disabilities of children which included interactive teaching session, informational module and learning disability assessment chart on selected learning disabilities.

Knowledge

Knowledge is a familiarity, awareness of someone or something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering or learning.[10] In this study, it refers to the awareness regarding selected learning disabilities reflected by the score obtained by the respondents to the items in the structured knowledge questionnaire.

Learning disabilities of children

Learning disabilities is a neurological disorder that affects the brain's ability to receive, process, store and respond to information. Learning disabilities can affect the child's ability to listen, speak, read, write and perform mathematics.[11]

In this study, it refers to heterogenous group of disorders among children of age group 6 to 10 years manifested by significant difficulties in speaking, reading, writing, motor skills, and mathematical abilities.

Lower Primary school teachers
In this study, it refers to teachers who are teaching in lower primary classes (1st to 4th standard) in selected schools.

MATERIALS AND METHODS

Research Approach: Quantitative research approach
Research design: Pre-experimental one group pre-test post-test research design.

Research Variables
Dependent variable: Knowledge regarding selected learning disabilities of children among lower primary school teachers.
Independent variable: Instructional programme regarding selected learning disabilities among lower primary school teachers.
Demographic variables: Age in years, gender, education, years of experience in teaching and any previous experience in identification of children with learning disabilities.
Setting of the study: Trinity Lyceum, Infant Jesus Anglo Indian School, Mount Carmel Convent Anglo Indian School and Vimala Hridaya ISC School, Kollam. The reason for selecting these schools was due to the feasibility and practicability.
Population: Lower primary school teachers in selected schools, Kollam.

Sample: Lower primary school teachers from Trinity Lyceum, Infant Jesus Anglo Indian School, Mount Carmel Convent Anglo Indian School and Vimala Hridaya ISC School, Kollam.
Sample size: 100 lower primary school teachers from selected schools.

Sampling technique: Purposive sampling technique.

Criteria for selection of the sample: - Inclusion criteria

- Teachers who are teaching in lower primary classes (1st to 4th standard).
- Teachers willing to participate in the study.

Exclusion criteria

- Teachers who have already attended teaching sessions on learning disabilities in the past 6 months.

Description of Tool
Section A: Demographic Proforma to collect the baseline information regarding the sample.
Section B: Self-structured knowledge questionnaire regarding learning disabilities of children among lower primary school teachers.

Development of Intervention Instructional Programme
Instructional programme was developed based on the objectives and review of literature. It consisted of Interactive teaching session, informational module and learning disability assessment chart on selected learning disabilities.

Interactive teaching session: It is a systematically developed educational programme using instructional aids, for a duration of 30 minutes designed to provide information on selected learning disabilities, which included definition, etiology, identification and its management.

Informational Module: Based on interactive teaching session, a booklet was developed on selected learning disabilities which consisted of specifically speaking, reading, writing, motor skills, and mathematical disabilities.

Learning Disability Assessment Chart: It refers to a checklist designed to help lower primary school teachers to understand, interpret and categorize children with learning disabilities.

DATA COLLECTION PROCESS

Ethical consideration
A formal permission will be obtained from the administrators of selected schools before data collection. The researcher will introduce herself and provide a brief introduction about the purpose of research study and a written informed consent will be obtained from the participants in prior to the research study. Respondents will be assured the anonymity and confidentiality of the information provided by them. Privacy of the research participants will be maintained.

Collection of data
The data were collected after obtaining prior permission from the concerned administrative authority and informed consent from the teachers. The study was conducted in 4 ICSE schools situated in Kollam city. Subjects were selected according to the purposive sampling technique based on the inclusion and exclusion criteria. Before collecting data from sample, a brief introduction was given about the study and purpose of data collection was explained and consent was taken from the teachers. Pre-test was conducted and instructional programme as intervention was administered on the same day. Post-test was given on the 10th day of pre-test.

The main study was conducted through online platform. A total of hundred sample was taken by purposive sampling method based on inclusion criteria. Pre-test was administered through google form to participants followed by instructional programme. Interactive teaching session given through Zoom platform. Informational module and assessment chart were sent to all sample through e mail. On the tenth day, post-test was

done using the same knowledge questionnaire via google form. The teachers were very cooperative during data collection.

RESULTS AND DISCUSSIONS

Section A: Description of sample characteristics

This section describes the characteristics of sample in terms of age in years, gender, education, years of experience in teaching and any previous experience in identification of children with learning disabilities.

Graphical representation of demographic variables

N= 100

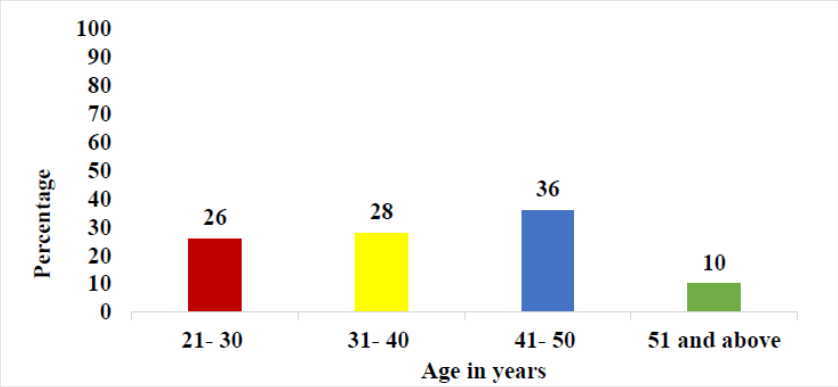

Figure 1: Percentage wise distribution of the sample according to age in years.

The data in the figure 1 showed that, 36% of sample belonged to 41- 50 years, 28% belonged to 31- 40 years, 26% belonged to 41- 50 years and 10% belonged to 51 years and above.

N= 100

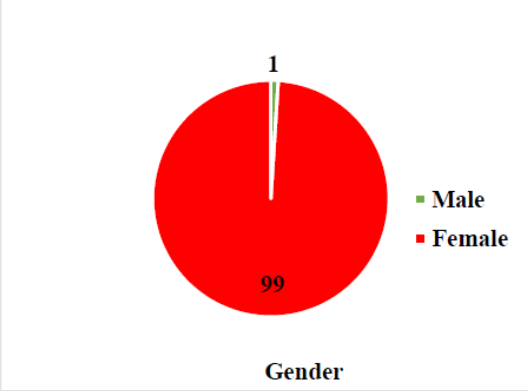

Figure 2: Percentage wise distribution of the sample according to gender.

The data in the figure 2 described that, majority (99%) of the sample were females and only 1% was ma

N= 100

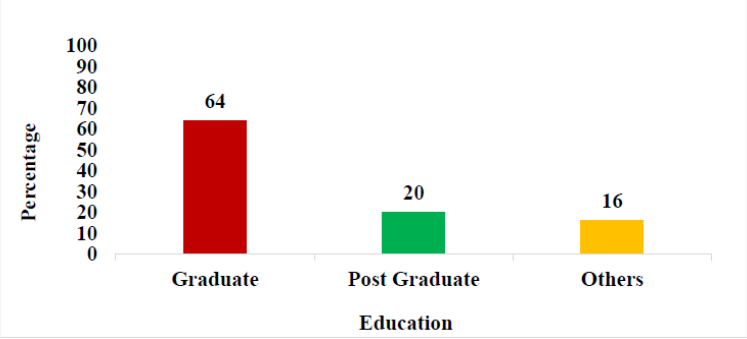

Figure 3: Percentage wise distribution of the sample according to education.

The data in the figure 3 elicited that, 64% of sample had degree qualification, 20% had PG qualification and 16% had other qualifications.

N= 100

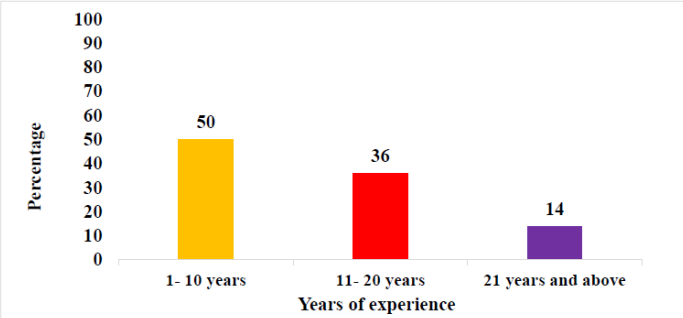

Figure 4: Percentage wise distribution of the sample according to years of experience in teaching.

The data in the figure 4 revealed that, 50% of sample had 1- 10 years of experience, 36% of sample had 11- 20 years of experience 14% of sample had 21 years and above experience.

N= 100

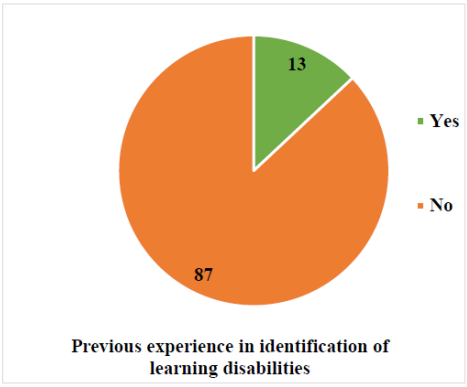

Figure 5: Percentage wise distribution of the sample according to previous experience of teachers in identification of children with learning disabilities.

The data in the figure 5 showed that majority (87%) of the sample had no previous experience in identification of children with learning disabilities, and 13%of sample had previous experience in identification of children with learning disabilities.

Section B: Evaluation of effectiveness of instructional programme on knowledge regarding selected learning disabilities of children among lower primary school teachers.

This section describes the effectiveness of instructional programme on knowledge regarding selected learning disabilities of children among lower primary school teachers. Structured questionnaire was used to assess the knowledge scores. The score range was categorized as poor (0- 10), average (11- 20) and good (21- 30).

Table 1: Description of knowledge scores of lower primary school teachers regarding selected learning disabilities of children.

N= 100

Level of Knowledge	Post-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Poor	10	10%	0	0
Average	72	72%	11	11%
Good	18	18%	89	89%

Table 1 shows that in pre-test, 10% of sample had poor level of knowledge, 72% had average level of knowledge and remaining 18% of sample had good level of knowledge. In post- test, majority of sample (89%) had good level of knowledge and 11% had average level of knowledge.

Table 2: Comparison of mean pre-test and post-test knowledge scores of lower primary school teachers regarding selected learning disabilities of children.

N= 100

Group	Mean	Standard Deviation	't' value	Level of Significance
Pre-test	16.57	4.06		
			21.39	S
Post-test	24.47	3.10		

S- significant at 0.05 level of significance

Table 2 shows that, the mean pre-test knowledge score was 16.57 with a standard deviation of 4.06 and mean post-test knowledge score was 24.47 with a standard deviation of 3.10. The calculated 't' value (21.39) was greater than table 't' value (1.98) at 0.05 level of significance.

Hence the research hypothesis H_1 - there will be significant difference between mean pre-test and post-test knowledge scores regarding selected learning disabilities of children among lower primary school teachers in selected schools was accepted.

Section C

Association between pre-test knowledge score regarding selected learning disabilities of children among lower primary school teachers with selected demographic variables.

Table 3: Association between knowledge score regarding selected learning disabilities of children with selected demographic variables.

N= 100

Sl.No	Demographic Variables	Knowledge level			df	Table value	Chi square	Signific-ance	
		Poor	Average	Good					
1.	Age								
	21- 30 years	2	13	3					
	31- 40 years	0	20	7	6	12.59	6.97	NS	
	41- 50 years	3	36	7					
	51 years and	2	5	2					
	above								
2.	Gender								
	Male	0	1	0	2	5.99	0.39	NS	
	Female	10	71	18					
3.	Education								
	Graduate	6	51	7					
	Post Graduate	2	4	6	4	9.49	12.4	S	
	Others	11	71	18					
4.	Years of Experience In teaching								
	1- 10 years		5	36	9				
	11- 20 years		3	28	5	4	9.49	1.02	NS
	21 years and above		2	9	3				
5.	Previous experience in identification of children with learning disabilities								
	Yes		1	7	5	2	5.99	4.25	NS
	No		9	65	13				

[S- Significant, NS- Non-Significant]

The data presented in table 3 showed that, calculated value was greater than table value for demographic variable 'education'. Hence research hypothesis H_2 - there will be significant association between pre-test knowledge score regarding selected learning disabilities of children among lower primary school teachers with their selected demographic variables such as age in years, gender, education, years of experience in teaching and any previous experience in identification of children with learning disabilities was accepted with regard to 'education'.

The data presented in table 3 showed that, calculated values were less than table value for demographic variables such as age in years, gender, years of experience in teaching and any previous experience in identification of children with learning disabilities. Hence research hypothesis H_2 - there will be significant association between pre-test knowledge score regarding

selected learning disabilities of children among lower primary school teachers with their selected demographic variables such as age in years, gender, education, years of experience in teaching and any previous experience in identification of children with learning disabilities was rejected with regard to demographic variables such as age in years, gender, years of experience in teaching and any previous experience in identification of children with learning disabilities. In short, research hypothesis H_2 was partially accepted.

CONCLUSION

The present study was aimed to assess the effectiveness of instructional programme on knowledge regarding selected learning disabilities of children among lower primary school teachers in selected schools, Kollam. The result of the study revealed that, pre-test knowledge score of selected sample was 16.57, post-test knowledge score was 24.47 and the calculated 't' value (21.39) was greater than the table 't' value (1.98) at 0.05 level of significance. Hence the research hypothesis H_1 - there will be significant difference between mean pre-test and post-test knowledge scores regarding selected learning disabilities of children among lower primary school teachers in selected schools was accepted. This showed that instructional programme was effective in improving knowledge regarding selected learning disabilities of children among lower primary school teachers in selected schools, Kollam.

The association of pre-test knowledge scores with selected demographic variables like age in years, gender, education, years of experience in teaching and any previous experience in identification of children with learning disabilities was computed using chi square test. The calculated chi square value for age (6.97), gender (0.39), education (12.4), years of experience in teaching (1.02) and any previous experience in identification of children with learning disabilities (4.25). The table values for the above mentioned variables were higher except for education. So, there was significant association between knowledge score and education and no association with age in years, gender, years of experience in teaching and any previous experience in identification of children with learning disabilities. Hence the research hypothesis H_2 - there will be significant association between pre-test knowledge score regarding selected learning disabilities of children among lower primary school teachers with their selected demographic variables such as age in years, gender, education, years of experience in teaching and any previous experience in identification of children with learning disabilities was partially accepted.

Recommendations

Keeping in view of present research findings, following recommendations are made:

- The study can be replicated in large sample. This would increase generalisation of findings
- A descriptive study can be done to assess the effectiveness of instructional programme on knowledge regarding selected learning disabilities of children among lower primary school teachers.
- A correlative study can be conducted to find out the correlation between knowledge of lower primary school teachers regarding selected learning disabilities of children and their practice.
- A study can be done on mothers of lower primary school children regarding knowledge on selected learning disabilities.
- The same study can be conducted using true experimental design.
- A comparative study can be done between teachers working in government and private schools to evaluate their level of knowledge regarding selected learning disabilities.
- A similar study can be done for assessing knowledge, attitude and practice of lower primary school teachers regarding selected learning disabilities of children.

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