

Knowledge of Primary School Teachers in Identifying Children with Learning Disabilities

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ABSTRACT

Purpose: *This study explores the knowledge of primary school teachers in identifying children with learning disabilities.*

Method: *The study sample consisted of 200 primary school teachers from 16 schools in Bangalore, India. The teachers' knowledge about learning disabilities was assessed using Knowledge Questionnaire on Learning Disabilities.*

Results: *The results revealed statistically significant differences in overall knowledge and various domains across gender, type of school, education, class being taught and years of experience.*

Conclusion: *The need to improve the knowledge of primary school teachers for the identification of children with learning disabilities was highlighted. Based on the findings of the study, the "Manual for Primary School Teachers on Learning Disabilities" was developed.*

Key words: *knowledge, teachers, learning disabilities*

INTRODUCTION

Learning disorders are one of the issues that need special attention. India is thought to have approximately 90 million people with varying degrees of learning disabilities and an average class in school has about 5 students with learning disabilities (Thomas et al, 2003). In a review of studies on the subject of learning disability in India, the prevalence of various types of deficits of scholastic skills was reported to be 3% -10% among the student population (Ramaa, 2000). In this country, many classroom teachers in regular mainstream schools have limited knowledge of Specific Learning Disability (Karande, 2008). Since teachers have the task of identifying students' difficulties, the provision of support is influenced

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by their knowledge of learning disabilities and how well they understand their students. In one report, administrators from at least 5 cities stated that education and professional development for teachers was necessary because many teachers were unsure whether their students had learning disabilities (Ministry of Education, Culture, Sports, Science and Technology, 2002).

In other countries, various studies on the subject found that teachers had low to moderate knowledge and awareness about learning disabilities (Khatib, 2007; Saludes and Dante, 2009; Adebowale and Moye, 2013). Few Indian studies have revealed that the teachers had an average level of knowledge about specific learning disabilities, irrespective of their gender and teaching experience (Kamala and Ramganes, 2003; Lingeswaran, 2013). Furthermore, the teachers' age, years of teaching experience and the nature of the school were not related to knowledge and awareness about learning disabilities among them (Sarojini, 2000; Gandhimathi and Eljo, 2010). However, teachers with higher education qualifications exhibited better awareness (Dharmaraj, 2000).

The earlier works all point to the importance of conducting an up-to-date study on the knowledge of primary school teachers with regard to learning disabilities. 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 ultimate focus of this study was to help teachers by developing a manual that could contribute towards the process of identifying children with learning disabilities.

METHOD

Study Sample

The convenient sampling method was adopted. The study sample consisted of 200 primary school teachers from 16 schools in Bangalore city in southern India.

A pilot study was first conducted among 10 primary school teachers to examine the feasibility of the study and to measure the appropriateness and suitability of the research tools.

Permission to collect data was taken from the relevant Block Education Officer and from the Principal and Headmaster/Headmistress of each school. An informed consent form was used by the researcher.

Data Collection

The questionnaire method was adopted for data collection. Both English and Kannada (local language) versions of the questionnaire were used.

Measures used

Socio-demographic profile of Primary School Teachers

The socio-demographic variables for the purpose of this study included age, sex, marital status, religion, education qualification, years of experience, type of school, class in which they were currently teaching, prior special training undergone in the field of learning disability, past identification of children with learning disability, special provisions for such children in their school, and availability of counsellors in the school. The socio-demographic profile had a total of 12 items.

Knowledge Questionnaire on Learning Disabilities (Padmavathy and Lalitha, 2009)

The primary school teachers' knowledge about learning disabilities was assessed through the administration of a 40-item Knowledge Questionnaire on Learning Disabilities. The tool contains 40 multiple choice questions with only 1 correct answer for each. The questionnaire is divided into 7 dimensions, such as concept and definition, incidence and prevalence, causes and classification, clinical manifestations, investigations, treatment and outcome. Each correct response carries one mark (1) and a wrong answer carries zero (0). Maximum score is 40 and minimum score is zero (0). The tool was validated (content validation by experts) and adequate reliability was also established (0.74 - Guttman split-half method). A sample of items from the scale is as follows:

Item 1. Learning disability belongs to the category of: a) Major mental illness b) Developmental disorder c) Minor mental illness d) Physical disorder.

Item 2. Writing disorder includes: a) Concentration on beautiful handwriting b) Making spelling errors repeatedly c) Competition in handwriting speed d) Criticising others' writing.

Item 3. Word building is used as an exercise in: a) Hyperactive disorder b) Mental disorder c) Medical disorder d) Spelling disorder.

Item 4. Problems related to spelling can be improved by: a) Reading stories b) Negative reinforcement c) Word card game d) Listening to children.

RESULTS

Table 1: Socio-demographic details of Primary school Teachers

Variables	Attributes	Frequency	Percentage	Mean \pm SD
Age	20-35	93	46.5	37.96 \pm 10.03
	36-50	79	39.5	
	51-65	28	14	
Gender	Male	20	10	NA
	Female	180	90	
Years of Experience	\leq 10	99	49.5	12.56 \pm 8.92
	11-20	55	27.5	
	>20	46	23	
Marital Status	Single	33	16.5	NA
	Married	162	81	
	Divorced	4	2	
	Widowed	1	0.5	
Religion	Hindu	101	50.5	NA
	Muslim	43	21.5	
	Christian	55	27.5	
	Sikh	1	0.5	
Education Qualification	Diploma/Certificate	95	47.5	NA
	B El Ed/ B Ed	81	40.5	
	M Ed	1	0.5	
	Others	23	11.5	
Type of School	Government	21	10.5	NA
	Aided	38	19	
	Unaided	141	70.5	
Class being taught	Lower primary	75	37.5	NA
	Upper primary	125	62.5	
Working with Counsellors	Yes	73	36.5	NA
	No	127	63.5	

Table 1 shows that out of 200 respondents, a majority (46.5%) were between 20 - 35 years of age. 81% of them were married. Majority (50.5%) of them were Hindus. The analysis revealed that majority (47.5%) of the teachers had qualification of Diploma or Certificate courses in teaching, and 70.5% of them were teaching in

unaided schools. Also, the majority (62.5%) were upper primary teachers. The analysis also revealed that 63.5% of them were working in schools which had no counsellors to deal with difficulties among children.

Provision for Children with Learning Disabilities, prior training and past experience in identifying Learning Disabilities

Only 18% of the teachers reported that provision had been made for children with learning disabilities in their schools. Majority (85.5%) of the teachers did not undergo any special training programmes on learning disabilities. 69.5% of them had never come across any children with learning disabilities in their classrooms, and only 30.5% of the them were able to identify learning disabilities in their students.

Table 2: Percentage Scores of Primary School Teachers on Knowledge Questionnaire

Knowledge Domains/ Overall	Attribute			Percentage Mean \pm SD or *Median (IQR)
	Inadequate Knowledge	Moderately Adequate Knowledge	Adequate Knowledge	
Domain 1: Concept and definition	65 (32.5)	0	135 (67.5)	*100 (100)
Domain 2: Incidence and prevalence	184 (92)	14 (7)	2 (1)	*0 (33.33)
Domain 3: Causes and classification	101 (50.5)	87 (43.5)	12 (6)	*33.33 (16.67)
Domain 4: Clinical manifestations	61 (30.5)	107 (53.5)	32 (16)	58.59 % \pm 16.95
Domain 5: Investigations	20 (10)	119 (59.5)	61 (30.5)	64.33% \pm 16.54
Domain 6: Treatment	30 (15)	94 (47)	76 (38)	69.55% \pm 18.54
Domain 7: Outcome	33 (16.5)	74 (37)	93 (46.5)	*150 (50)
Overall	42 (21)	148 (74)	10 (5)	57.38 % \pm 10.79

Table 2 and Figure 1 depict the domain percentage score of knowledge among primary school teachers. Majority (67.5%) of the teachers had adequate knowledge about the concept and definition, but there was inadequate knowledge about

incidence and prevalence among 92%, and about causes and classification among 50.5%. Only 16% of them had adequate knowledge about clinical manifestation of learning disabilities. The majority of the respondents (59.5%) had moderately adequate knowledge about identification and treatment, and about treatment related aspects (47%). Also, the majority (46.5%) had adequate knowledge about the outcome. Only 5% of the respondents had adequate overall knowledge about learning disabilities. The mean percentage knowledge score was 57.38 % \pm 10.79.

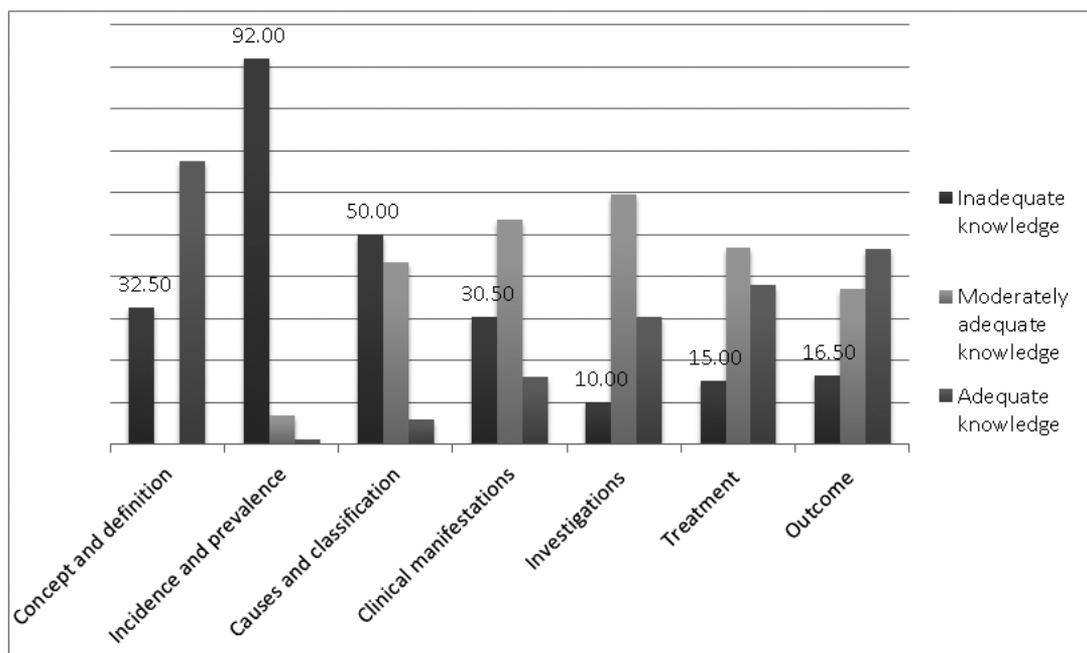


Figure 1: Domain percentage score of Knowledge among Primary School Teachers

Association between Background Variables and different Domains/Overall score of Knowledge Questionnaire

There were statistically significant differences in overall knowledge ($p < 0.05$); domain 3: causes and classification ($p < 0.05$), domain 4: clinical manifestation ($p < 0.05$), and domain 5: investigations ($p < 0.05$), across the 'gender' variable. Women had better knowledge than men across all those variables. Statistically significant differences were also found in overall knowledge ($p < 0.05$); domain 4: clinical manifestation ($p < 0.05$), and domain 1: concept and definition ($p < 0.05$),

across the 'type of school' variable. Primary school teachers from unaided schools had better knowledge than those from aided and government schools.

Other statistically significant differences were found across the 'education' variable, with regard to domain 1: concept and definition ($p < 0.05$), and domain 3: causes and classification ($p < 0.05$). Teachers with bachelor's degree in education had better knowledge than the others. There were also statistically significant differences present across the variable of 'class of teaching' and domain 3: causes and classification ($p < 0.05$). Upper primary teachers had better knowledge than their lower primary counterparts. Statistically significant differences were also found across the variable of 'years of experience' with regard to domain 4: clinical manifestation ($p < 0.05$). Primary school teachers with above 20 years of experience had better knowledge about the clinical manifestation.

There were no statistical differences in overall knowledge across the other socio-demographic variables - 'class', 'training', 'years of experience' and 'education'.

DISCUSSION AND CONCLUSION

The study revealed that only 5% of the primary school teachers had adequate knowledge about learning disabilities. Similar findings about teachers who had low levels of awareness were reported by earlier researchers (Gandhimathi and Eljo, 2010; Adebowale and Moye, 2012). The findings of the current study have certain implications, such as the need for intensive in-service training for primary school teachers, the importance of incorporating common childhood disorders in the professional teachers' education curriculum, the urgency of advocacy for protecting the rights of children with learning disabilities, the importance of sensitising teachers and parents through awareness programmes to deal with the myths and misconceptions related to learning disabilities, the urgency of implementing mechanisms at government level to ensure identification, management and facilitation of provisions, and the importance of appointing specially trained professionals like counsellors and special educators to work along with the teachers in schools.

To conclude, the study has shown that primary school teachers lack adequate knowledge about learning disabilities. Since teachers are the ones who first encounter academic difficulties of children, their knowledge is of utmost importance as it involves identification of learning disabilities at the initial stage.

Based on the research findings, a manual was developed that could help teachers in understanding how to identify such children. Referring to the available literature, the basic outline of the manual was formed. It consisted of the following sections: meaning of learning disability; common causes of learning disabilities; prevalence of learning disabilities; general misconceptions about children with learning disabilities; identification of learning disabilities; impact of learning disabilities on children; information about experts working in the field of learning disability; and, role of teachers in helping children with learning disabilities in schools. While developing the contents, the attitude components of the study were also referred to, such as 'general misconceptions about children with learning disabilities', 'role of teachers', and 'inclusion of children with learning disabilities'. In addition, 'provisions for children with learning disabilities' (with reference to teachers' responses on provisions in school) and famous personalities with learning disabilities (to set examples for these children) were also incorporated. For content validation, the manual was given to 4 experts in mental health of children and adolescents. Their suggestions and feedback were incorporated in the final version, which resulted in consensual validation of the manual entitled "Manual for Primary School Teachers on Learning Disabilities". This manual, developed by the researchers, may be useful in bringing about desired changes in the knowledge of primary school teachers to help children with learning disabilities.

Limitations

Due to time constraints, convenient sampling was adopted for data collection; hence the findings cannot be generalised.

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