

Knowledge of Specific Learning Disabilities among Teacher Educators in Puducherry, Union Territory in India

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Abstract

Though India has attained the literacy rate of 74 percent as per the 2011 Literacy Census Data, it still far behind to provide individual attention in Formal Education as well as Non-Formal Education. The effort initiated by the Ministry of Human Resource Development, India strengthens the education quantitatively in the 10th & 11th Five Year Plan through inclusion of the Special Needs Children. In the present, 12th Five Year Plan India concentrates on Inclusive Growth in the education. Specific Learning Disabilities (SpLD) is one among the categories under inclusion in the mainstream and requires attaining inclusive growth. When we talk about inclusion of SpLD, lot of question arises: Are the teachers prepared to handle the SpLD? Does the teachers trained to teach SpLD? Do the teachers have the conception of the SpLD? The present study investigated the Knowledge of the SpLD exists among the Teacher Educators in Puducherry, a Union Territory of India. The study found that the teachers in the inclusive classroom require skill training to impart education to the SpLD. The data shows that the knowledge about the SpLD in an inclusive education set-up is average and recommends the Government of India to implement intensive and rigorous training to fulfill the educational needs of the Special Needs Children.

Keywords: Specific Learning Disabilities; Knowledge; Teacher Educators; Inclusive Education.

Introduction

Specific Learning Disability (SpLD) still remains as an under recognized disability in a developing country like India. Unfortunately, in India, many children with SpLD often remain undiagnosed because of a general lack of awareness leading to chronic poor school

performance, class detention and even dropping out of school (Karande and Kulkarni, 2005; Karande, 2008). There is no general agreed definition for the term the Specific Learning Disabilities, definition of the term varies from one country to another country. Specific learning disabilities (SpLD) is a generic term that refers to a heterogeneous group of neurobehavioral disorders manifested by significant unexpected, specific and persistent difficulties in the acquisition and use of efficient reading (dyslexia), writing (dysgraphia) or mathematical (dyscalculia) abilities despite conventional instruction, intact senses, normal intelligence, proper motivation and adequate socio-cultural Opportunity (Shapiro and Gallico, 1993; Shaywitz, 1998). There is no exact statistics available about the percentage of school going children affected with the Specific Learning Disability. Information about SpLD occurring in Indian children is scanty because of a general lack of awareness about this invisible handicap (Karande, Mehta, & Kulkarni, 2007). This is mainly due to the problem in the process of identification of this disability in the multilingual context because of the unavailability of standardized diagnosis tools in different languages.

At present many children with SpLD studying in non-English (vernacular) medium schools, and especially in rural areas, are going undetected for non-availability of standardized psychological and educational tests (Karande, 2008). In the recent years, people from various fields have begun to take interest in researching in the field of Specific Learning Disability. Psychologists, Physicians, Scientists started exploring in this area; neurological system of the Specific Learning Disability people, the structure of their brain, and identification process. Educationists and teachers conducting research in the field is still in its infancy level perhaps this situation prevails because of the inadequate knowledge in the area and lack of training. Disorders like ADHD and SpLD are prevalent in India; however, one of the major obstacles is lack of awareness of these disorders (Crawford, 2007). Ultimately these Specific Learning Disability students are left in the hands of the teachers, the educational needs of these students must be fulfilled by the teachers. The cornerstone of treatment of SpLD is remedial education, which should ideally begin early, when the child is in primary school (Shapiro and Gallico, 1993; Shaywitz, 1998). In contrast, a few handful of research has been carried out in this field by the teachers and educationalists. Therefore, it is of paramount important to acquire knowledge about the SpLD, not only for teachers but also the general public too; in order to understand the needs of these students and to provide appropriate accommodations in schools and employment opportunities.

In this new era, there has been a constant increase in the awareness about the hidden disability, Specific Learning Disability. The recent Hindi movie *Taare Zameen Par* (“Stars on the Earth”) has sensitively and accurately depicted the plight of an 8-yearold boy battling SpLD (Karande, 2008). The movie has brought out the plights of the Specific Learning Disability child in a mainstream school without getting proper recognition and accommodations into the lime light. The movie has sensitized the problems of the SpLD students to the public. But still the knowledge about this hidden disability is in the lower level only. First, there is a need to improve the knowledge of classroom teachers, parents and the general public about SpLD. Therefore, the present study is an attempt to ascertain the level of knowledge about the Specific Learning Disability among the teacher educators working in Puducherry region (one of the Union Territories in India).

Research Questions

1. What is the current level of knowledge about the Specific Learning Disability among the teacher educators?
2. Is there any difference in the level of knowledge about the Specific Learning Disability among the teacher educators based on their teaching experiences?

Review of the Literature

In India, it is estimated that at least five students in every average-sized class has Learning Disabilities (Thomas, Bhanutej, & John, 2003). But these students are often unrecognized in the crowded schools due to the invisible nature of the disability unlike other visible disabilities. Students with Learning Disabilities have problems in academic areas for a long time, but those problems are often unnoticed by the teachers in the crowded classrooms (Karanth, 1998). From the literature it is found that approximately 10-14% of the 416 million children in India have LD (Krishnan, 2007; Krishnakumar, 1999; Mehta, 2003). Dyslexia is one of the most common SpLDs (Specific Learning Disabilities), affecting 80% of all those identified as Learning Disabled (Karande, Sawant, Kulkarni, Galvankar, & Sholapurwala, 2005, p. 96). According to a study conducted in South India, the incidence of dyscalculia was reported to encompass 6% of all school-aged children (Ramaa & Gowramma, 2002). There is a limited awareness of LD among parents, teachers, and educational administrators, and the lack of teacher training in this area.

Saludes and Dante (2009) conducted a “Study on The knowledge and perceptions on learning disabilities in the cities of Region XI of the Philippines and a region in New York City, U.S. A”. The objective of the study was to find out the knowledge and awareness on learning disabilities, and the level of perceptions on remediation program and treatment services given to them. The findings of the study reveals that the majority of parents, educators and the members of the local school board have low knowledge and awareness on learning disabilities. Khatib (2007) studied the General Education Teachers' Knowledge of Learning Disabilities in Jordan. Four hundred and five regular classroom teachers were taken as sample for the study who was teaching 1st to 6th grade students in 30 schools in 3 Jordanian districts. The findings of the study reveal that the teachers had a moderate level of knowledge of learning disabilities.

Methods and Materials

Ten colleges of education were selected from the available twenty two colleges of education located in Puducherry region, one of the Union Territories in India. Teacher educators serving in the colleges of education, who were selected on the basis of stratified random sampling technique; the samples were classified through the years of teaching experience and gender. The sample consists of 94 teacher educators, of which 50 male teacher educators and 44 female teacher educators. Having teaching experiences ranging from one year to ten years in the college of education. The questionnaire was administered to the respondents after obtaining prior permission from the Principal of the college through explaining the purpose of the study.

Instrument

The investigators developed a closed ended questionnaire which consists of 35- items. Four dimensions were taken namely Dyslexia, Dysgraphia, Dyscalculia, and Behavioural problems of Specific Learning Disabled Students based on the review of literature. Each item has four options. In the total 35 items, each 10 items were meant to ascertain the knowledge of dyslexia, dyscalculia, and dysgraphia, and the remaining 5 items were designed to check the knowledge about the behavioural problems exhibited by the Specific Learning Disabled Students. The content validity was established for the questionnaire by giving it to the subject experts in the field. A pilot survey was conducted with a sample of 30 teacher educators, who were not part of the sample. Items on the instrument were modified based on feedback from the pilot study. Reliability of this test was established using the test-retest method. Pearson's Correlation Coefficient was (0.84). The scoring procedure adopted for the questionnaire was zero for wrong answers and one mark for the right answers. The maximum score for the

questionnaire is 35. The norm for classifying the level of knowledge about SpLD was determined by using Mean (\bar{X}) and Standard Deviation (SD) as follows:

Above ($\bar{X} + 1SD$) = Above Average level of Knowledge about SpLD; (15-35)

Between ($\bar{X} - 1SD$) to ($\bar{X} + 1SD$) = Average level of Knowledge about SpLD; (9-14)

Below ($\bar{X} - 1SD$) = Below level of Knowledge about SpLD; (0-8)

Procedure

Prior permission from the college authorities was taken for the data collection to administer the Knowledge of Specific Learning Disability Questionnaire which was developed by the authors. The author explained about the purpose of the survey and appropriate instruction was given to the participants. The participants were assured of the anonymity of their responses. Hence, no information leading to the personal identity of the participant was collected. The survey was administered in a quiet environment where the participants were not talking or sharing answers.

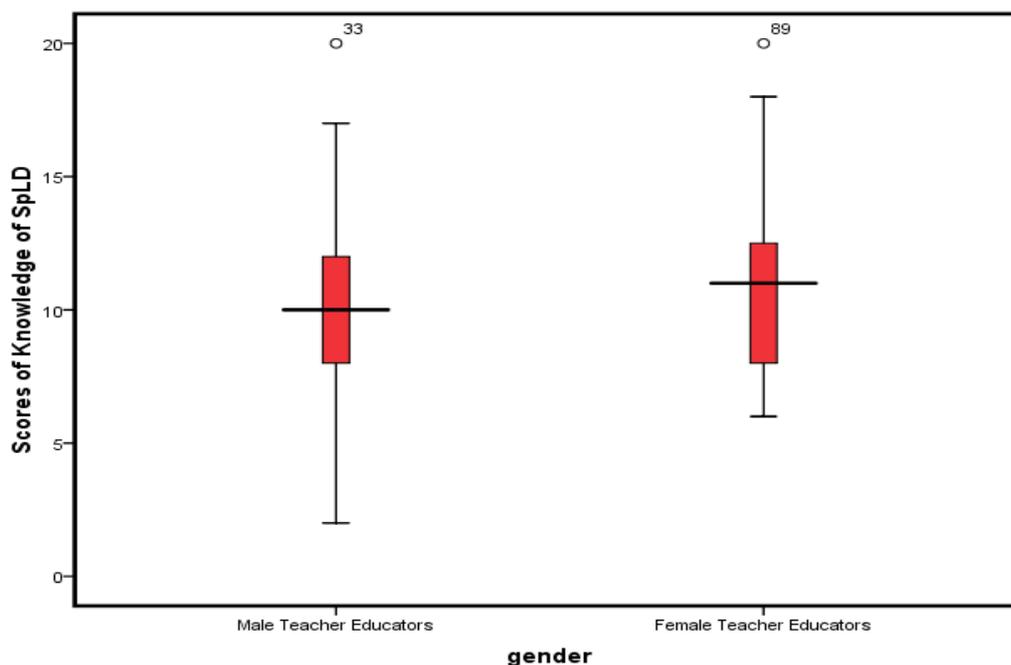
Results

The results are given in Table 1 and 2. In order to find out the statistical difference the t test was performed with gender and years of teaching experience as the grouping variables. From the table 1, it shows that the Mean and Standard Deviation of the Female and Male Teacher Educators on Knowledge of SpLD (N=94) is found as 10.39 and 3.24 respectively. The mean score of the entire group falls within the range of 9 to 14. It indicates that the entire group has average level of knowledge about the Specific Learning Disability. The null hypothesis is retained because the calculated t value, 0.23, is less than the critical value of t with $df = 92$, at 0.05 level of significance. Hence, the male and female teacher educators do not statistically differ in their level of knowledge about the Specific Learning Disability.

Table-1: Performance of Female and Male Teacher Educators on Knowledge of SpLD Questionnaire

Female Teacher Educators (N= 44)		Male Teacher Educators (N= 50)		Female and Male Teacher Educators (N= 94)		't'- value	Level of Significance (0.05)
Mean	SD*	Mean	SD	Mean	SD*		
10.86	3.16	9.96	3.29	10.39	3.24	0.23	0.18 $P > 0.05$ n.s*

* SD- Standard Deviation; n.s*- Not Significant

Figure-1: Shows the Male and Female Teacher Educators scores in Knowledge of SpLD

It can be seen from the table – 2 that the Mean and Standard Deviation of the knowledge of SpLD of teacher educators based on their teaching experience is found as 10.32 and 3.20 respectively. The null hypothesis is retained because the calculated t value, 0.53, is less than the critical value of t with $df = 92$, at 0.05 level of significance. Hence, the levels of knowledge about the Specific Learning Disability of teacher educators with 1 to 5 years of teaching experience do not differ from their counterparts.

Table-2: Performance of Teacher Educators on Knowledge of SpLD Questionnaire based on Teaching Experiences

Teacher educators with 1 – 5 years of teaching experiences (N= 55)		Teacher educators with 5 – 10 years of teaching experiences (N= 39)		Teacher educators with teaching experiences (N= 94)		't'-value	Level of Significance (0.05)
Mean	SD*	Mean	SD	Mean	SD*		
10.20	2.97	10.49	3.53	10.32	3.20	0.53	0.68 $P > 0.05$ n.s*

* SD- Standard Deviation; n.s*- Not Significant

Discussion

The results of the present study reveal that the teacher educators who participated in this study have the average level of knowledge about the specific learning disabilities in spite of their gender and teaching experiences perhaps the reason may be that they were not properly trained to teach the special needs children in an inclusive school particularly the invisible disability, Specific Learning Disabilities. The findings of the present study reinforce the findings of the other studies done in this area by the following persons: Saravanabhavan and

Saravanabhavan (2010) claim that the teachers have limited knowledge of Specific Learning Disabilities. The Bachelor of Education (B.Ed.) training programme for teachers in India does not have any special module to identify learning disabilities in children and address them (Chatterjee and Madhusree, 2009). Lack of trained personnel has consistently been one of the many obstacles to the provision of services to children with disabilities in India. (Saravanabhavan and Saravanabhavan, 2010).

In India, many classroom teachers in regular mainstream schools have limited knowledge of SpLD (Karande, 2008; Saravanabhavan and Saravanabhavan, 2010) and the majority of parents, educators and the members of the local school board have low knowledge and awareness on learning disabilities. (Saludes and Dante, 2009). One of the main barriers encountered by students with SpLD is the teacher's lack of knowledge about their disability and about the rationale of provisions (Karande, Mahajan, and Kulkarni, 2009). Inadequate knowledge leads to negative attitudes toward persons with disabilities (Saravanabhavan and Saravanabhavan, 2001).

The article from The Hindu, Indian English newspaper reported the struggles and plights of the dyslexic students and their family members how they get affected adversely due to lack of knowledge and understanding of the difficulty of these students among the teachers and school administrators. Yasmeen (2009) has reported the difficulties faced by the family in getting admission in a school to a dyslexic, states that "My granddaughter was denied admission to one of the schools which receives grants from the Government. In another school, children were given promotion and asked to leave the institution". The reasons behind all these issues are due to the insufficient knowledge about SpLD in India. There is still a general lack of awareness about SpLD in a large majority of Indian schools (Karande, 2008).

SpLD has still not been diagnosed as a disability by many state governments in India (Karande, 2008; Karande, Sawant, Kulkarni, Galvankar, & Sholapurwala, 2005). Perhaps the reason for this condition is mainly due to the teacher education curriculum adopted in India. In which the special education is included as an optional subject in general teacher education curriculum and not as a compulsory subject. But the problem with the system is that these Specific Learning Disabled students are found in the mainstream schools. Research has also shown that inadequate knowledge about disabilities leads to negative attitudes toward persons with disabilities (Saravanabhavan & Saravanabhavan, 2001). Therefore, it is the predominant need to train the general teachers to teach these students in an inclusive school setup. Teachers need training to address the special needs of children (Rajakumar et al., 2005). First of all, the teacher educators are need to be trained to identify SpLD students, adopt the new teaching strategies, and accommodate the SpLD students then only the prospective teachers can be trained by them.

Conclusion and Recommendations

There is a good deal of evidence indicating that the teachers, teacher educators and parents exhibit lack of awareness about the SpLD in India (Karande, 2008; Karande, Mahajan, Kulkarni, 2009; Crawford, 2007; Saravanabhavan, & Saravanabhavan, 2010). The findings of the present study reinforces the findings of the previous studies that there is a lack of knowledge about the SpLD even among the learned members of the society, especially the teacher educators those who are considered as teacher's of teachers who plays a crucial role in sensitizing the problems of students in the teaching learning process. If the situation continues, the students with SpLD tend to perform poor in academics and become drop outs which will turn into a hurdle to Universalization of Primary Education and Education For All (EFA). Knowledge about SpLD is inevitable for the teachers to teach the students the way they learn easily and provide proper accommodations in the general classroom settings. It's the bound duty of the teacher educators to train the prospective teachers to deal with the

differently abled students specifically the invisible disability like the SpLD. Knowledge of LD among teachers is also needed for another reason... the success of inclusive classrooms is related to teachers' knowledge of the unique needs of their students (Campbell, Gilmore, & Cuskelly, 2003).

Thus, the government of India should take measures to sensitize the problems of SpLD students among the teacher educators, teachers and general public. This can be possible through revamping the teacher education curriculum and introducing a paper on special education as a compulsory paper, providing in-service training programs in special education and remedial teaching strategies. Awareness programme about special needs children should be created through mass media to sensitize the problems of these children among parents.

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